AB 2588 HEALTH RISK ASSESSMENT

Bowman Plating / Compton, CA

Facility:

Bowman Plating Company, Inc.
2631 East 126th Street
Compton, CA 90222
SCAQMD ID No. 18989

Prepared By:

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Modified by **South Coast AQMD**
April 10, 2024

REQUIRED MODIFICATIONS MADE BY SOUTH COAST AQMD

Section/Page	Modifications	Reason for modification
Section 1.1	· Added language regarding Bowman's unapproved source test, Bowman's revised operating schedule claim, and use of Compton station meteorological data for air dispersion modeling · Removed language regarding Bowman's use of Hawthorne station meteorological data	Provided clarification for why South Coast AQMD staff did not accept Bowman's unapproved source test or Bowman's supporting documentation for revised operating hours. Also provided rationale for usage of Compton station meteorological data and removed confusing language about the Hawthorne station.
Section 1.4	Updated risk numbers, receptor identification, and contribution percentage language with results of modelling performed by South Coast AQMD staff	These changes were made to align the reported risk numbers, receptors, and contribution percentage language in the document with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Section 2.2	· Added language regarding Bowman's unapproved source test, Bowman's revised operating schedule claim, and use of Compton station meteorological data for air dispersion modeling · Removed language regarding Bowman's use of Hawthorne station meteorological data	Provided clarification for why South Coast AQMD staff did not accept Bowman's unapproved source test or Bowman's supporting documentation for revised operating hours. Also provided rationale for usage of Compton station meteorological data and removed confusing language about the Hawthorne station.
Section 3.1	Updated the language describing the facility's location	These changes were made to provide additional clarification for the location description.
Section 3.2	Updated a Figure reference and language describing the facility's processes	These changes were made to keep the references within the report consistent and to correct minor grammatical issues to improve readability of the report.
Section 4.1	Added language describing South Coast AQMD's preference for use of Compton station meteorological data	Reiterates the reasoning why use of the Compton station meterological data is more appropriate for air dispersion modeling.
Table in Section 4.2.4	Corrected Worker Adjustment Factor table	This change was made to align the table with OEHHA Guidelines.
Section 5.1	Updated language describing zone of impact	This change was made to align the document with OEHHA Guidelines.
Section 5.2	Updated risk/hazard index numbers and language with results of modelling performed by South Coast AQMD staff	These changes were made to align the reported risk numbers and language in the document with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Section 5.3	Updated hazard index numbers with results of modelling performed by South Coast AQMD staff	These changes were made to align the reported hazard index numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Section 5.4	Updated hazard index numbers and receptor identification with results of modelling performed by South Coast AQMD staff	These changes were made to align the reported hazard index numbers and receptors with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.

Section/Page	Modifications	Reason for modification
Section 5.5	Updated hazard index numbers with results of modelling performed by South Coast AQMD staff	These changes were made to align the reported hazard index numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table ES-1	· Updated the Maximum Cancer Risks to Offsite, Residence, and Worker Receptors	These changes were made to align the reported risk and hazard index numbers, cancer burden numbers, and public notification and risk reduction numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
	· Updated Cancer Burden numbers	
	· Updated Maximum Chronic, 8-Hour Chronic, and Acute Hazard Indices	
	· Updated estimated population exposed to risks > 10 in a million for a 30-year exposure, or an HI>1 for Public Notification and Risk Reduction	
Table 1	Updated Cancer Risk, Chronic Hazard Index, Acute Hazard Index, and 8-Hour Chronic Hazard Index numbers	These changes were made to align the reported health risk numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 2	Updated the Annual Average (lb/yr) and Annual Average (g/s) numbers for MIBK from Spray Booth 1, and MIBK and Xylenes from Spray Booth 3	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 5a	Updated the Census receptors, maximum cancer risks, and cancer burden numbers	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 5b	Updated the population numbers for cancer risks of 1.00E-06 and 1.00E-05	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 6b	Updated Cancer Risk numbers for Sensitive Receptors	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 6c	Updated Ground Level Concentration numbers for various toxic air contaminants at sensitive receptors	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 6d	Updated 8-Hour Ground Level Concentration numbers for various toxic air contaminants at sensitive receptors	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 6e	Updated Hourly Ground Level Concentration numbers for various toxic air contaminants at sensitive receptors	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 7a	Updated concentrations and exposure pathway risks for PMI Cancer Risk by substance	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 7b	Updated exposure pathway risks for PMI Cancer Risk by source	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.

Section/Page	Modifications	Reason for modification
Table 8a	Updated concentrations and exposure pathway risks for MEIR Cancer risk by substance	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 8b	Updated exposure pathway risks for MEIR Cancer Risk by source	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 9a	Updated concentrations and exposure pathway risks for MEIW Cancer risk by substance	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 9b	Updated exposure pathway risks for MEIW Cancer Risk by source	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 10a	Updated concentrations and exposure pathway risks for PMI Chronic Hazard by substance	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 10b	Updated exposure pathway risks for PMI Chronic Hazard by source	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 11a	Updated concentrations and exposure pathway risks for MEIR Chronic Hazard by substance	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 11b	Updated exposure pathway risks for MEIR Chronic Hazard by source	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 12a	Updated concentrations and exposure pathway risks for MEIW Chronic Hazard by substance	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 12b	Updated exposure pathway risks for MEIW Chronic Hazard by source	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 13a	Updated concentrations and exposure pathway risks for PMI Acute Hazard by substance	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 13b	Updated exposure pathway risks for PMI Acute Hazard by source	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 14a	Updated concentrations and exposure pathway risks for MEIR Acute Hazard by substance	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 14b	Updated exposure pathway risks for MEIR Acute Hazard by source	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 15a	Updated concentrations and exposure pathway risks for MEIW Acute Hazard by substance	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.

Section/Page	Modifications	Reason for modification
Table 15b	Updated exposure pathway risks for MEIW Acute Hazard by source	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 16a	Updated concentrations and exposure pathway risks for PMI 8-hour Chronic Hazard by substance	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 16b	Updated exposure pathway risks for PMI 8-Hour Chronic Hazard by source	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 17a	Updated concentrations and exposure pathway risks for MEIW 8-hour Chronic Hazard by substance	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Table 17b	Updated exposure pathway risks for MEIW 8-Hour Chronic Hazard by source	These changes were made to align the reported numbers with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.
Appendix B. Figures	Updated Cancer Risk Isopleths - Resident, Cancer Risk Isopleths - Worker, Chronic Hazard - Resident, Chronic Hazard - Worker, Chronic 8-Hour Hazard, and Acute Hazard maps	These changes were made to correct the isopleth maps to align with the modelling performed by South Coast AQMD to correct the emission rate of the Anodizing Room.

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LIST OF ABBREVIATIONS / ACRONYMS

AB2588	Air Toxics "Hot Spots" Information and Assessment Act
AERMOD	American Meteorological Society Regulatory Model
AMS	American Meteorological Society
AER	Annual Emissions Report
BPIPPRIME	Building Profile Input Program PRIME
CARB	California Air Resources Board
CAS	Chemical Abstract System
CPF	Cancer Potency Factors
DTSC	Department of Toxic Substances Control
GIS	Geographic Information System
HARP	Hot Spots Analysis and Reporting Program
HI	Hazard Index
HIA	Acute Hazard Index
HIC	Chronic Hazard Index
HRA	Health Risk Assessment
NED	National Elevation Datasets
MEIR	Maximally Exposed Individual Resident
MEIW	Maximally Exposed Individual Worker
MICR	Maximum Individual Cancer Risk
OEHHA	Office of Environmental Health Hazard Assessment
PM	Particulate Matter
PMI	Point of Maximum Impact
REL	Reference Exposure Level

RfD	Reference Dose
SCAQMD	South Coast Air Quality Management District
TAC	Toxic Air Contaminants
URF	Unit Risk Factor
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UTM	Universal Transverse Mercator
ZOI	Zone of Impact

LIST OF KEY DEFINITIONS

- Acute Health Impacts - An effect caused by initial exposure of a hazardous chemical on the body. The effects are generally severe, but are often reversible after exposure stops.

- Cancer burden - Cancer burden is the estimated number of theoretical cancer cases in a defined population resulting from lifetime exposure to pollutants emitted from a facility.

- Chronic Health Impacts - An effect caused by prolonged or repeated exposures over time. Symptoms may not be apparent immediately but develop over time and are often irreversible.

- 8-Hour Chronic Health Impacts - An effect caused by exposures that occur on a recurrent basis, but only during a portion of the day.

- Cancer Health Impacts - An exposure to a carcinogenic substance that causes an increase in the likelihood for cancer in the exposed individual.

- Dose-Response Assessment - The process of characterizing the relationship between the exposure to an agent and the incidence of an adverse health effect in exposed populations.

- Multipathway Substances - A substance or chemical that once airborne from an emission source can, under environmental conditions, be taken into a human receptor by inhalation and by other non-inhalation exposure routes, such as deposition on skin or ingestion of soil contaminated by the emission.

1. EXECUTIVE SUMMARY

Bowman Plating ("Bowman" or "the facility") is an industrial plant located at 2631 East 126th Street in the city of Compton, CA 90222. The facility operates spray booths, boilers, abrasive blasting, ovens, and process tanks with associated control equipment. The facility operates under the jurisdiction of the South Coast Air Quality Management District (SCAQMD) under Facility ID 18989.

Pursuant to applicable requirements, Bowman submits this Health Risk Assessment (HRA) per requirements of the AB 2588 "Hot Spots" program and SCAQMD Rule 1402. AB 2588 was adopted in order to collect emission data of routine predictable releases of toxic substances, evaluate air quality impacts from the current facility emissions, assess health risks from exposure to the emissions, and notify nearby residents of health risks. As required, this HRA includes an assessment for all regulated AB 2588 toxic air contaminants (TACs) listed in Appendix A-I. In addition, this HRA follows all current SCAQMD and OEHHA guidelines for the preparation of human health risk assessments, as stated herein. As required, this HRA provides a comprehensive risk assessment and includes a dispersion analysis of regulated TACs into the environment, potential for human exposure, and a quantitative assessment of both individual and population-wide cancer and non-cancer health risks associated with those levels of exposure.

1.1 Background

In its letter dated June 30, 2022, the SCAQMD conditionally approved Bowman's 2019 Air Toxics Inventory Report (2019 ATIR), which required the inclusion of certain report modifications as stated by the letter (refer to Appendix D). Further, the SCAQMD required the preparation of an HRA by August 1, 2022, based on the conditionally approved 2019 ATIR and stated report modifications. As required, Bowman submitted an HRA on August 1, 2022. In its letter dated September 16, 2022, SCAQMD rejected the HRA and required to re-submit the HRA with revisions by November 15, 2022. At the request of Bowman on November 10, 2022, the SCAQMD emailed its approval to extend the submittal deadline for the revised HRA until November 29, 2022. Among the stated revisions required by the SCAQMD in its rejection letter included corrections to worker adjustment factors, variable emission rates, use of unpublished meteorological data for Compton, and other revisions which materially impacted the modeling results presented in this report (refer to Appendix C for correspondence). As required, Bowman submits the enclosed HRA which incorporates the stated modifications as required by the SCAQMD in its rejection letter. For reference, prior relevant correspondence from the SCAQMD is provided in Appendix C.

Over the course of the prior two (2) years since approximately June 2020, Bowman and SCAQMD staff have held numerous technical discussions regarding the facility's 2019 ATIR. While many of the concerns regarding the 2019 ATIR were adequately addressed during this time, Bowman and SCAQMD had significant disagreement regarding the agency's original estimates of fugitive hexavalent chromium emissions from Bowman's operations and assumed capture efficiency of the air pollution control system venting Tanks 314/321. To resolve this, Bowman conducted internal source tests of its equipment which demonstrated actual hexavalent chromium emissions were significantly lower than the agency's original estimates, which the SCAQMD did not accept since the source test was not conducted in accordance to the required AB 2588 test methods and a protocol was not submitted and pre-approved by South Coast AQMD before conducting the source test as required under AB 2588 guidelines. After several months, Bowman and SCAQMD staff reached an agreement that included conducting an official source test to measure the hourly fugitive emissions from this equipment, which was administered by SCAQMD source testing staff. As required by the agency's letter dated March 3, 2022, the results of the SCAQMD source test (dated October 2021) were incorporated into the 2019 ATIR (and reflected in this HRA). However, Bowman and SCAQMD had further disagreement regarding the number of production hours which Tanks 314/321 operated during Calendar

Year 2019. In its letter dated May 24, 2022, Bowman provided supporting documentation that Tanks 314/321 operated less than 3,000 hours per year. Nevertheless, in its letter dated June 30, 2022, the SCAQMD did not accept Bowman's stated operating hours and conditionally approved Bowman's 2019 ATIR based on certain report modifications, including a requirement to assume 5,920 hours of operation for Tanks 314/321. Emissions from heated tanks is typically estimated based on 24 hours per day and 365 days per year, or 8,760 hours. However, Bowman requested to revise this calculation using 5,920 hours based on submitted electricity usage records in a letter dated February 5, 2021, which South Coast AQMD staff accepted. The supporting documentation Bowman submitted to reduce the operating hours of Tanks 314/321 further to 3,000 hours did not provide sufficient proof to supersede the electricity usage records that were already accepted. While Bowman has incorporated the agency's required modifications into this HRA, Bowman continues to disagree with the SCAQMD's assumed operating hours of 5,920 for Tanks 314/321. For this reason, Bowman anticipates the modeled health risk impacts presented in this HRA report are higher than otherwise expected for normal operations in Calendar Year 2019.

In addition, in its letter dated September 16, 2022, the SCAQMD required the use of meteorological data for air dispersion modeling from a station in the city of Compton instead of the nearby Hawthorne Airport station. This meteorological data was provided by SCAQMD upon request. As stated on the SCAQMD website regarding this meteorological data, *"The Compton (CMPT) station is not available for download as the station does not have 5 years of data that meets quality assurance procedures. "*[1] As a consequence, the Compton station is not identified on the list of publicly available meteorological data. Moreover, U.S. EPA guidance specifies the use of 5 years of adequately representative and quality assured meteorological data for AERMOD modeling applications.[2] However, South Coast AQMD staff views the available Compton station meteorological data as more -appropriate than the Hawthorne station data for the air dispersion modeling. South Coast AQMD staff noted that the Bowman facility is located over six miles away from the Hawthorne meteorological station, and approximately one and a half miles away from the Compton meteorological station. The Hawthorne station is also located at an airport. For these reasons, South Coast AQMD staff believes
the Compton meteorological data is more representative of the conditions at the Bowman facility than the Hawthorne meteorological data. The South Coast AQMD webpage does not "expressly (indicate) this station's data did not meet quality assurance requirements" but rather that 3 years of data that meet quality assurance procedures are available rather than 5, as per EPA's Appendix W Guideline. The Appendix W Guideline is intended for permitting purposes and not explicitly for the AB 2588 Program. All previous AB 2588 related work for the Bowman facility, including approved HRAs for the two prior inventory years and associated RRPs, used Compton meteorological data. Additionally, South Coast AQMD staff offered Bowman an opportunity to provide additional justification, such as a comparison of surface roughness, albedo, and Bowen ratio between the site and the Hawthorne and Compton stations, to justify using the Hawthorne station data, but received no supporting evidence.

Although the SCAQMD has required it for purposes of this HRA, Bowman continues to disagree with the use of this unpublished Compton meteorological data due to the concerns noted above, and that modeling results will be materially impacted.

While not reflected in the results of this HRA, Bowman has made additional investments into air pollution controls for its facility since Calendar Year 2019 that has significantly reduced air toxic emissions from its operations. Prior to Calendar Year 2019, Bowman had installed ultralow HEPA filtration for its spray booth operations which provided 99.999% control efficiency for particulates and metal emissions. In addition,

[1] https://www.aqmd.gov/home/air-quality/meteorological-data/aermod-table-1

[2] 40 CFR Part 51, Appendix W, Section 8.4, Revisions to the Guideline on Air Quality Models, United States Environmental Protection Agency

since Calendar Year 2019, Bowman has been proactive in reducing air toxic emissions from its facility and invested significant capital into additional air pollution controls for its Anodizing Room and Plating Room, which are not accounted in this HRA. As of the date of this HRA report, Bowman has constructed Permanent Total Enclosures (PTEs) to provide 100% capture of all emissions from its metal finishing tanks. Further, Bowman installed additional ultralow HEPA filtration systems providing 99.999% control efficiencies for all of its tank operations, including Tanks 314/321. As a result, the health risk impacts that are presented in this HRA report have already been significantly reduced since Calendar Year 2019, and current health risk impacts from the facility are anticipated to be less than Rule 1402 action risk levels.

1.2 Facility Location

While Bowman's postal address indicates the City of Compton, the facility is located within an unincorporated area of Los Angeles County known as Willowbrook. Located at approximately 70 feet above sea level, the area of Willowbrook is located adjacent to the city limits of Compton (refer to Figure 1). As shown by Figure 2 – Vicinity Map, the facility boundary is located on 126th Street and East Alameda Street. In general, the local topography around the facility is flat terrain within a highly urbanized environmental setting, however with non-conforming land uses as described further below. Other pertinent facility information for Bowman's operations is summarized below.

Facility Name	Bowman Plating
Address	2631 East 126th Street, Compton, CA 90222
SIC	3471
County	Los Angeles County
Air Basin	South Coast Air Basin
Air District	South Coast Air Quality Management District
Contact Person	Dan Cunningham
Contact Phone Number	310-639-4343

For reference, the appendices provide a site plot of the facility including, boundaries, building heights and emission sources and stack locations, which are identified on Figure 3a, 3b, and 4. In addition, Figure 5a shows the immediate areas surrounding the facility has been zoned for M-1, which extends north to 124th Street and south to 127th Street. Per Los Angeles County Zoning Maps (and Los Angeles County Green Zones Program), the neighborhood surrounding Bowman is currently zoned for light manufacturing only, which prohibits residential and school uses. However, despite these zoning and land use restrictions, much of the immediate surrounding neighborhoods include residential homes, which do not conform with the designated county zoning (refer to Figure 5b).

1.3 Health Risk Modeling

The HRA analysis included in this report is prepared according to OEHHA developed *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments* (OEHHA HRA Guidance Manual)[3] and SCAQMD Guidelines. HARP, a software tool that assists with the programmatic requirements of AB

[3] Office of Environmental Health Hazard Assessment (OEHHA), Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments, February 2015, California Environmental Protection Agency.

2588, is utilized in conducting this HRA. This HRA analysis uses HARP Version 2.0 (the most recent version based on air dispersion modeling output from U.S. EPA's AERMOD software) to perform the dispersion modeling and exposure/risk assessment. The results obtained from HARP provide the necessary information to generate the zones of impact and identify the potentially exposed populations. In addition, potential health effects were evaluated for the maximum exposed individual resident (MEIR) and the maximum exposed individual worker (MEIW) for both noncancer and carcinogenic health impacts. Data projections were based on WGS 1984 Datum.

In this HRA, there were thirty-four (34) AB 2588 chemicals that were modeled based on the facility's emissions for CY 2019. The primary exposure pathway for affected populations is inhalation for all receptors. Table 3a identifies other exposure pathways modeled for residential receptors, which are home grown produce, dermal absorption, soil ingestion, and mother's milk. For worker receptors, non-inhalation exposure pathways included dermal absorption and soil ingestion. For those receptors that are impacted by noncancer health hazards, these chemicals may potentially affect the cardiovascular system, central nervous system, immune system, gastrointestinal tract & liver or alimentary tract, kidneys, reproductive system & developmental, respiratory system, skin, eyes, bone/teeth, endocrine system, hematological system (blood), and others as identified in Table 3b.

1.4 Summary of Results

1.4.1 Potential Carcinogenic Risks

Table 1 summarizes the results of this HRA for cancer risk. Inhalation, soil ingestion, dermal, mother's milk, and homegrown produce exposure pathways were evaluated. The PMI (Receptor #3837, UTM E 386749.6 N 3753792.1) for carcinogenic health effects is located on the facility fence line (northern side of property) with a predicted excess cancer risk of 8.54×10^{-4} (or 854 chances in-one-million). The MEIR (Receptor #2229, UTM E 386756 N 3753797) for carcinogenic health risk is located to the north of the facility boundary with a predicted excess cancer risk of 6.73×10^{-4} (or 673 chances in-one-million). The MEIW (Receptor #2228, UTM E 386751 N 3753797) for carcinogenic health effects is located to the north of the facility boundary with an estimated excess cancer risk of 4.42×10^{-5} (or 44.2 chances in-one-million). Figure 6a through Figure 10 identifies the location of the PMI, MEIR and MEIW for cancer and noncancer risks. Predicted off-site concentrations decrease rapidly with distance from the facility. For the MEIR and MEIW, emissions of chromium make up 98% and 97% of the contribution to excess cancer risk, respectively. For the MEIR and MEIW, the Anodizing Room contributes approximately 92% and 88% of cancer risk, respectively. Refer to Tables 7 through 9 for a breakdown of cancer risk by substance and by source. Cancer risk isopleths for residential and worker are shown on Figures 6a through 7.

Both the MEIR and MEIW value are above the level (1×10^{-5} or ten-in-one million), at which the SCAQMD requires the distribution of public notices. Note that with respect to the MEIW, the land is zoned for M-1 light manufacturing with permitted uses for light manufacturing and prohibitions for residential and school use. The location of the MEIR is also zoned for M-1 light manufacturing but is currently occupied by residential use which does not conform with the designated county zoning. 199 census tracts were found in the zone of impact (ZOI) in which the lifetime (70-year) cancer risk is greater than 1×10^{-6}. The total cancer burden is estimated to be 0.14 as shown in Table 5a. Per Table 5b, approximately 36,241 residents are within the 10^{-6} isopleth, 1,463 residents are within the 10^{-5} isopleth, and 121 residents are within the 10^{-4} isopleth.

There are a number of sensitive receptor areas near the facility. The Ralph J Bunche Middle School approximately at 170 meter distance from the facility is the closest sensitive receptor with an predicted excess cancer risk of 1.40×10^{-5} (or 14.0 chances in-one-million).

1.4.2 Chronic Noncarcinogenic Health Hazards

Table 1 summarizes the results of this HRA for chronic noncancer health hazards. The location for PMI (Receptor #3837, UTM E 386749.6 N 3753792.1) for chronic noncancer health effects, is located on the facility fence line (northern side of property) with a predicted excess chronic hazard of 1.01. The MEIR (Receptor #2229, UTM E 386756 N 3753797) for chronic noncancer health effects is located to the north of the facility boundary with a predicted excess chronic hazard of 0.80. The MEIW (Receptor #2228, UTM E 386751 N 3753797) for chronic noncancer health effects is located to the north of the facility boundary with a predicted excess chronic risk of 0.79. Figure 8 identifies the location of the PMI, MEIR, and MEIW. Predicted off-site concentrations decrease rapidly with distance from the facility. For the MEIR, Nickel and Sulfuric Acid make up approximately 70% and 13% of the total contribution to the hazard index for worst affected target organ (respiratory). For the MEIW, Nickel and Sulfuric Acid make up approximately 70% and 13% respectively of the total contribution to the hazard index for worst affected target organ (respiratory). For the MEIR and MEIW, the Anodizing Room contributes approximately 84% and 86% of chronic risk, respectively.

Note that the values for the MEIW and MEIR do not exceed the level (HIC > 1.0) for which the SCAQMD requires individuals in the area to be notified. With respect to the MEIW, the land is zoned for M-1 uses with permitted uses for light manufacturing and prohibitions for residential and school use. The location of the MEIR is also zoned for M-1 uses but is currently occupied by residential use which does not conform with the designated county zoning. No sensitive receptors exist in the zone of impact for chronic noncancer risks.

1.4.3 8-Hour Chronic Noncarcinogenic Health Hazards

Table 1 summarizes the results of this HRA for 8-hour chronic noncancer health hazards. The location for PMI (Receptor #3837, UTM E 386749.6 N 3753792.1) for 8-hour chronic noncancer health effects is on the north side of the facility fence line with a predicted excess chronic hazard of 0.23. The MEIW (Receptor #2228, UTM E 386751 N 3753797) 8-hour chronic noncancer health effects is located to the north of the facility boundary with a predicted excess chronic risk of 0.18. Figure 9 identifies the location of the PMI and MEIW. Predicted off-site concentrations decrease rapidly with distance from the facility. For the MEIW, nickel makes up approximately 99% of the total contribution to the hazard index for worst affected target organ, which was respiratory. For the MEIW, the Anodizing Room contributes 91% of 8-hour chronic risk.

The value for the MEIW 8-hour chronic noncancer risk does not exceed the level (1.0) for which the SCAQMD requires individuals in the area to be notified. With respect to the MEIW, the land is zoned for M-1 uses with permitted uses for light manufacturing and prohibitions for residential and school use. The location of the MEIR is also zoned for M-1 light manufacturing but is currently occupied by residential use which does not conform with the designated county zoning. No sensitive receptors exist in the zone of impact for 8-hour chronic noncancer risk. Per Table 5b, note that no residents reside within an area with HIC greater than 0.5.

1.4.4 Acute Noncarcinogenic Health Hazards

Table 1 summarizes the results of this HRA for acute noncancer health hazards. The PMI (Receptor #3836, UTM E 386769.6 N 3753792.1) for acute noncancer health effects is located on the northern side of the facility boundary with a predicted excess acute hazard risk of 2.89. The MEIR (Receptor #2231, UTM E 386766 N 3753797) for acute noncancer health effects is located north of the facility boundary line with a predicted excess acute hazard risk of 2.34. The location for MEIW (Receptor #2228, UTM E 386751 N 3753797) acute noncancer health effects receptor is located to the north of the facility boundary with a predicted excess acute hazard risk of 1.57. Figure 10 identifies the locations of the PMI, MEIW and MEIR.

Predicted off-site concentrations decrease rapidly with distance from the facility. For the MEIR and MEIW, nickel makes up approximately 100% of the total contribution to the hazard index for worst affected target organ (immune system). For the MEIR, the Plating Room contributes approximately 75% of acute risk. For the MEIW, Plating Room contributes approximately 66% of acute risk.

The value for the MEIR and MEIW acute noncancer risk exceeds the level (1.0) for which the SCAQMD requires individuals in the area to be notified. With respect to the MEIW, the land is zoned for M-1 light manufacturing with permitted uses for light manufacturing and prohibitions for residential and school use. The location of MEIR is also zoned for M-1 uses but is currently occupied by residential use which does not conform with the designated county zoning. No sensitive receptors exist in the zone of impact for acute noncancer risks. Per Table 5b, approximately 121 residents reside within an area with HIA greater than 0.5. There are no census receptors within the area with HIA greater than 1.0 but residences are present.

2. INTRODUCTION

This HRA was prepared pursuant to California Air Resources Board's Air Toxics Hot Spots Program (Hot Spots Program), which is implemented per the requirements of California Assembly Bill 2588 (AB 2588). Guidelines used in the preparation of this HRA included OEHHA's "*Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (February 2015)*", and SCAQMD's "*AB 2588 and Rule 1402 Supplemental Guidelines (Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act) (October 2020)*".

The objectives of this HRA are to: (1) estimate off-site air concentrations of the substances identified in AB2588 and emitted from the facility, (2) evaluate potential exposures to the surrounding community, (3) characterize the potential health risks to individuals and the exposed population associated with those levels of exposure, and (4) determine if additional actions are required per Rule 1402. This report presents the results of the HRA analysis utilizing refined air dispersion modeling based on guidance provided by the SCAQMD and OEHHA.

2.1 Applicable Regulations

SCAQMD Rule 1402 implements AB 2588 for facilities within its jurisdiction, which requires health risk assessment, public notification and risk reduction measures for facilities which exceed applicable risk levels. Rule 1402 identifies public notification and action risk levels for carcinogenic impacts, as well as non-cancer acute and chronic hazard impacts. The following key requirements are provided per SCAQMD Rule 1402:

- **Public Notification Risk Levels** – The SCAQMD requires public notification to affected populations which equal or exceed the following health risk levels: MICR = 10 in 1 million, HIC = 1.0, or HIA = 1.0
- **Action Risk Levels** – The SCAQMD requires facilities to implement risk reduction measures if affected populations are exposed to health risk levels that equal or exceed the following: MICR = 25 in 1 million, Cancer Burden = 0.5, HIC = 3.0, or HIA = 3.0
- **Significant Risk Levels** – The SCAQMD requires facilities to implement risk reduction measures if affected populations are exposed to health risk levels that equal or exceed the following: MICR = 100 in 1 million, HIC = 5.0, or HIA = 5.0. Risk reduction measures are implemented more quickly than when the Action Risk Levels are exceeded.

2.2 Background

In its letter dated June 30, 2022, the SCAQMD conditionally approved Bowman's 2019 Air Toxics Inventory Report (2019 ATIR), which required the inclusion of certain report modifications as stated by the letter (refer to Appendix D). Further, the SCAQMD required the preparation of an HRA by August 1, 2022, based on the conditionally approved 2019 ATIR and stated report modifications. As required, Bowman submitted an HRA on August 1, 2022. In its letter dated September 16, 2022, SCAQMD rejected the HRA and required to re-submit the HRA with revisions by November 15, 2022. At the request of Bowman on November 10, 2022, the SCAQMD emailed its approval to extend the submittal deadline for the revised HRA until November 29, 2022. Among the stated revisions required by the SCAQMD in its rejection letter included corrections to worker adjustment factors, variable emission rates, use of unpublished meteorological data, and other revisions which materially impacted the modeling results presented in this report. As required, Bowman submits the enclosed HRA which incorporates the stated modifications as required by the SCAQMD in its rejection letter. For reference, prior relevant correspondence from the SCAQMD is provided in Appendix C.

Over the course of the prior two (2) years since approximately June 2020, Bowman and SCAQMD staff have held numerous technical discussions regarding the facility's 2019 ATIR. While many of the concerns regarding the 2019 ATIR were adequately addressed during this time, Bowman and SCAQMD had significant disagreement regarding the agency's original estimates of fugitive hexavalent chromium emissions from Bowman's operations and assumed capture efficiency of the air pollution control system venting Tanks 314/321. To resolve this, Bowman conducted internal source tests of its equipment which demonstrated actual hexavalent chromium emissions were significantly lower than the agency's original estimates, which the SCAQMD did not accept. After several months, Bowman and SCAQMD staff reached an agreement that included conducting an official source test to measure the hourly fugitive emissions from this equipment, which was administered by SCAQMD source testing staff. As required by the agency's letter dated March 3, 2022, the results of the SCAQMD source test (dated October 2021) were incorporated into the 2019 ATIR (and reflected in this HRA). However, Bowman and SCAQMD had further disagreement regarding the number of production hours which Tanks 314/321 operated during Calendar Year 2019. In its letter dated May 24, 2022, Bowman provided supporting documentation that Tanks 314/321 operated less than 3,000 hours per year. Nevertheless, in its letter dated June 30, 2022, the SCAQMD did not accept Bowman's stated operating hours and conditionally approved Bowman's 2019 ATIR based on certain report modifications, including a requirement to assume 5,920 hours of operation for Tanks 314/321. Emissions from heated tanks is typically estimated based on 24 hours per day and 365 days per year, or 8,760 hours. However, Bowman requested to revise this calculation using 5,920 hours based on submitted electricity usage records in a letter dated February 5, 2021, which South Coast AQMD staff accepted. The supporting documentation Bowman submitted to reduce the operating hours of Tanks 314/321 further to 3,000 hours did not provide sufficient proof to supersede the electricity usage records that were already accepted. While Bowman has incorporated the agency's required modifications into this HRA, Bowman continues to disagree with the SCAQMD's assumed operating hours of 5,920 for Tanks 314/321. For this reason, Bowman anticipates the modeled health risk impacts presented in this HRA report are higher than otherwise expected for normal operations in Calendar Year 2019.

In addition, in its letter dated September 16, 2022, the SCAQMD required the use of meteorological data for air dispersion modeling from a station in the city of Compton instead of the nearby Hawthorne Airport station. This meteorological data was provided by SCAQMD upon request. As stated on the SCAQMD website regarding this meteorological data, "*The Compton (CMPT) station is not available for download as the station does not have 5 years of data that meets quality assurance procedures.* "[4] As a consequence, the Compton station is not identified on the list of publicly available meteorological data. Moreover, U.S. EPA guidance specifies the use of 5 years of adequately representative and quality assured meteorological data for AERMOD modeling applications.[5] However, South Coast AQMD staff views the available Compton station meteorological data as more appropriate than the Hawthorne station data for the air dispersion modeling. South Coast AQMD staff noted that the Bowman facility is located over six miles away from the Hawthorne meteorological station, and approximately one and a half miles away from the Compton meteorological station. The Hawthorne station is also located at an airport. For these reasons, South Coast AQMD staff believes the Compton meteorological data is more representative of the conditions at the Bowman facility than the Hawthorne meteorological data. The South Coast AQMD webpage does not "expressly (indicate) this station's data did not meet quality assurance requirements" but rather that 3 years of data that meet quality assurance procedures are available rather than 5, as per EPA's Appendix W Guideline. The Appendix W Guideline is intended for permitting purposes and not explicitly for the AB 2588 Program. All previous AB 2588-related work for the Bowman facility, including approved HRAs for the two prior inventory years and associated RRPs, used Compton meteorological data. Additionally, South Coast AQMD staff offered Bowman

[4] https://www.aqmd.gov/home/air-quality/meteorological-data/aermod-table-1

[5] 40 CFR Part 51, Appendix W, Section 8.4, Revisions to the Guideline on Air Quality Models, United States Environmental Protection Agency

an opportunity to provide additional justification, such as a comparison of surface roughness, albedo, and Bowen ratio between the site and the Hawthorne and Compton stations, to justify using the Hawthorne station data but received no supporting evidence.

Although the SCAQMD has required it for purposes of this HRA, Bowman continues to disagree with the use of this unpublished Compton meteorological data due to the concerns noted above, and that modeling results will be materially impacted.

Prior to Calendar Year 2019, Bowman had installed ultralow HEPA filtration for its spray booth operations which provided 99.999% control efficiency for particulates and metal emissions. This control measure was accounted for in the HRA. While not reflected in the results of this HRA, Bowman has made additional investments into air pollution controls for its facility since Calendar Year 2019 that has significantly reduced air toxic emissions from its operations. In addition, since Calendar Year 2019, Bowman has been proactive in reducing air toxic emissions from its facility and invested significant capital into additional air pollution controls for its Anodizing Room and Plating Room, which are not accounted in this HRA. As of the date of this HRA report, Bowman has constructed Permanent Total Enclosures (PTEs) to provide 100% capture of all emissions from its metal finishing tanks. Further, Bowman installed additional ultralow HEPA filtration systems providing 99.999% control efficiencies for all of its tank operations, including Tanks 314/321. As a result, the health risk impacts that are presented in this HRA report have already been significantly reduced since Calendar Year 2019, and current health risk impacts from the facility are anticipated to be less than Rule 1402 action risk levels.

2.3 Report Format

The report format for this HRA is consistent with SCAQMD requirements, and based on guidance by the Office of Environmental Health Hazard Assessment (OEHHA), as well as SCAQMD's "*AB 2588 and Rule 1402 Supplemental Guidelines (October 2020)* ".

Section 1.0 Executive Summary -This section summarizes facility information, emission sources, modeling parameters and key findings of this HRA.

Section 2.0 Introduction -This section discusses applicable regulatory requirements, project background and report format.

Section 3.0 Hazard Identification -This section identifies the reported substances emitted from the facility. The substances evaluated for cancer and noncancer endpoints are identified for Appendix A-I substances.

Section 4.0 Exposure Assessment -This section describes the estimated emissions for the chemicals of interest, the air dispersion modeling for determining airborne concentrations, the exposure pathways evaluated, and off-site receptors evaluated.

Section 5.0 Risk Characterization -This section presents the results of the risk assessment for the exposure scenarios evaluated. An evaluation of the zone of impact (ZOI), sensitive receptors, and population health risks are presented where appropriate.

Section 6.0 References -This section identifies the various publications, sources and other references used to prepare this HRA.

In addition to this HRA report, an accompanying flash drive has been submitted which includes required and supplemental electronic files, including, modeling input and output files. Electronic files included in the flash drive are as follows:

- AERMOD Input File
- AERMOD File
- AERMOD Text File
- AERMAP Input and Output Text Files
- BPIP Input and Output Text Files
- AERMOD Plot Files by 1 Hour and Period by Source (.plt)
- USGS Terrain File
- Met File
- HARP Files
- HARP Excel Risk Files (Cancer, Chronic, and Acute for Residential)
- HARP Excel Risk Files (Cancer, Chronic, and Acute for Worker)
- HARP Generated KML Files
- HARP Risk Reports Text Files

3. HAZARD IDENTIFICATION

In this initial step of HRA development, hazard identification involves identifying if a hazard exists, and if so, what are the pollutant(s) of concern and whether a pollutant has potential human carcinogen and/or other adverse health effects. In general, OEHHA guidelines require health risk assessment for chemicals identified as Appendix A-I Substances per AB 2588 regulations. This section provides descriptions of the facility, applicable plant processes, pollutants of concern, and emission estimates.

3.1 Facility Description

Bowman operates a 102,000 square foot industrial plant that is located at 2631 East 126th Street in Compton, California. In general, the local topography around the plant is flat terrain within an urban environmental setting. The facility is located in an unincorporated area of Willowbrook city under the jurisdiction of Los Angeles County. As shown by Figure 2 – Vicinity Map, Bowman's facility boundary is located on 126th Street and west of East Alameda Street. A site plot of the facility including, facility boundary, building heights and emission sources are identified on Figure 3a and 4. As shown on Figure 5a, per Los Angeles County Zoning Maps (and Los Angeles County Green Zone Program), the immediate areas surrounding the facility is zoned for M-1 and extends north to 124th Street and south to 127th Street. Per county requirements, zone M-1 allows permitted uses for light manufacturing and prohibits residential and school uses. However, despite these zoning and land use restrictions, much of the immediate surrounding areas currently include residential homes, which do not conform with the designated county zoning (refer to Figure 5b).

3.2 Process Description

Bowman provides various metal finishing capabilities for aerospace customers and products, including, plating, anodizing, spray coatings and others. For purposes of this HRA, the primary air toxic emission sources for Bowman's operations include spray booths, natural gas boilers and ovens, abrasive blasting cabinets and metal finishing tanks. The primary emissions of regulated air toxics from Bowman's operations result from pigments and volatiles from liquid spray coating operations, acids and metal emissions from the process tanks, and products of natural gas combustion. Per the requirements of applicable operating permits, Bowman utilizes regular and ultralow HEPA filter systems to control metal emissions and other particulates for its operations, which provide at least 99.97% and 99.999% emission reductions, respectively. Emission source locations are depicted in Figure 4, and descriptions of each principal operations follows below.

3.2.1 Spray Booths

Bowman operates four (4) permitted SCAQMD spray booths (Permit Nos. G54929, G45909, G45910, and G19828). Refer to Figure 4 for the location of the spray booths. These spray booths apply liquid coatings per customer specifications, some of which contain regulated AB 2588 chemicals. The principal toxic of concern from these spray booths is hexavalent chromium that exists within chromated pigments, such as strontium chromate, barium chromate and others. Pigments can be emitted from the spray booths due to the overspray of coatings onto aerospace parts and components, which are then exhausted through existing roof top vertical stacks. Three of the primary spray booths are currently equipped with ultralow HEPA filter systems which reduces the emitted particulate emissions by a minimum of 99.999%, while the fourth spray

booth is infrequently used which is equipped with regular HEPA filters with 99.97% control efficiency. All volatile and metal emissions from the spray booths are modeled as stack emission sources (point sources). Note that Spray Booth 4 has four (4) stacks for spray coating emissions, and an additional separate stack for combustion emissions from a built-in natural gas heater.

3.2.2 Process Tanks

Bowman's metal finishing process tanks operate within two (2) primary rooms referred to as Anodizing Room and Plating Room. Based on aerospace specifications, metal parts are treated with different finishes or treatments. Metal finishing operations within the Anodizing Room include sulfuric anodizing, hard anodizing, chromic acid anodizing, titanium etch, sodium dichromate seal, chromic seal, deoxidizer and others. For purposes of the 2019 ATIR, the primary air pollution controls for the dilute chromic seal (Tank 314) and sodium dichromate seal (Tank 321) include a covered hood, polyballs, mist eliminator and ultralow HEPA filters. Metal finishing operations within the Plating Room include nickel plating, nickel strike, cadmium plating, alkaline cleaning, passivation and others. For purposes of the 2019 ATIR, the cadmium tank (Tank 150) has been equipped with an add-on control device providing at least 98% control efficiency.

Note the approved tank emission calculations for Reporting Year 2019 included heated tank emissions, electrolytic emissions and evaporative emissions. AB 2588 chemicals from these rooms include nickel, cadmium, hexavalent chromium, sulfuric acid, nitric acid, sodium hydroxide and others. Air toxic emissions from Tanks 314/321 and Tank 150 are modeled as point sources on the rooftops from the air pollution control device stacks described above. For Calendar Year 2019, all other tank emissions from the Anodizing and Plating Rooms are fugitive emissions, which are modeled as area sources in this HRA. As of the submittal of this HRA, Bowman has invested into additional air pollution controls that have been constructed for the Anodizing and Plating Rooms, which included Permanent Total Enclosures (PTE) providing 100% capture efficiency, and ultralow HEPA filter systems providing 99.999% control efficiency for both rooms, respectively.

3.2.3 Combustion Sources

Bowman operates several natural gas sources which are permitted and exempted, which include three (3) permitted ovens, one (1) permitted spray booth heater and three (3) permit exempt boilers. AB 2588 chemicals are emitted from the combustion of natural gas from these sources. Air toxic emissions from natural gas combustion are principally benzene, formaldehyde, ammonia, naphthalene, PAHs, acetaldehyde, acrolein, propylene, toluene, xylene, ethyl benzene, and hexane. Emission factors for natural gas combustion are based on Ventura County Air Pollution Control District's AB 2588's Combustion Emission Factors. These combustion sources are modeled as point sources.

3.2.4 Abrasive Blasting

Bowman operates two (2) abrasive blasting cabinets which are infrequently used, which operate under SCAQMD Permit Nos. G55996 and F83389. These emission sources are modeled as point sources.

3.3 Emissions Inventory

For purposes of this HRA, Trinity utilized emissions and other information as identified on the conditionally approved 2019 ATIR and reported emissions. Based on this report, emission calculations applied emission factors for estimations of pigment loss and volatiles from spray booth operations, emissions from metal

finishing (heating, evaporative and electrolytic) and default AB 2588 air toxic emission factors for natural gas combustion. Point sources operate continuously during normal business hours, which are typically up to 18 hours per day, Monday through Friday, Saturday (half-day), and approximately 49 weeks per year. In addition, fugitive emissions from the process tanks in the Anodizing and Plating Rooms were modeled as area sources. Emission rates for each modeled source for this HRA are provided on Table 2a, which include source names, CAS numbers for chemicals, maximum hourly emissions and annual average emissions. Emission rates are based on the submitted 2019 ATIR, as approved by the SCAQMD (refer to Appendix D).

3.4 Chemicals of Interest

Per OEHHA guidelines, the modeled chemicals in this HRA from the facility emission sources were identified from AB 2588 Appendix A-I list of substances, which include 34 chemicals were identified. Chemical profiles of these air toxics are well established by OEHHA and regulatory authorities, such as physical characteristics, general uses, and toxicity information. As shown by Tables 3a and 3b, 10 substances have carcinogenic impacts, and 25 substances have chronic, 8-hour chronic, and acute noncancer hazard impacts. Target organs for the acute and chronic noncancer health effects include: cardiovascular system, central nervous system, immune system, gastrointestinal tract & liver or alimentary tract, kidneys, reproductive system & developmental, respiratory system, skin, eyes, bone/teeth, endocrine system, hematological system (blood), and others as identified in Table 3b.

4. EXPOSURE ASSESSMENT

In this step of HRA development, exposure assessment involves estimating the extent of public exposure to each regulated substance for which there exists potential cancer risk and/or noncancer health hazard effects. This involves modeling of environmental transport, evaluation of environmental fate, identification of exposure routes, identification of exposed populations, and estimation of short-term and long-term exposure levels. This section describes air dispersion modeling and associated parameters used to estimate the potential for human exposure to the AB2588 emissions from this facility, including: (1) summarize and describe the source information and emission estimates used in the environmental transport models; (2) describe potentially exposed populations; (3) describe the assumptions used in the air dispersion and Assessment of Chemical Exposure (HARP) model; and (4) identify primary methodologies for calculating health risk impacts.

4.1 Air Dispersion Modeling

Air dispersion modeling is used to estimate off-site air concentrations of chemicals associated with facility emissions. For this HRA, Trinity used the HARP Version 2.0 – Air Dispersion and Risk Tool (22094) in CY 2022. U.S. EPA compiled version of AERMOD is integrated within HARP 2.0 along with its related processors such as AERMAP, AERPLOT, and BPIP PRIME.

4.1.1 Model Options

For this HRA, a single and multi-source dispersion modeling in urban or rural areas with "simple terrain" (flat or gently rolling, with ground elevations below the pollutant release heights) was used, which is typical of the area immediately surrounding the facility. The following AERMOD model options were used in the modeling analysis:

- AERMOD — Version 22118
- HARP — Version 2.0 (22094)
- Projection — Universal Transverse Mercator (UTM)
- Datum — World Geodetic System 1984
- UTM Zone — 11
- Hemisphere — Northern
- Selection — Hourly and Period
- AERMOD File — .AMI and .AMZ
- AERMOD Output File — Plot File by Source

The following default model options were used:

- Use regulatory default? — Yes
- Urban or Rural? — Urban
- Gradual plume rise? — No
- Stack-tip downwash? — Yes

- Buoyancy-induced dispersion? Yes
- Calms processing? No
- Missing data processing? No
- Include building downwash? Yes
- Lowbound option? No

To determine noncarcinogenic acute health hazards, HARP 2.0 dispersion module calculated ground level concentrations for the maximum 1-hour averaging period. To determine noncarcinogenic chronic health hazards and carcinogenic health impacts, HARP 2.0 dispersion calculated ground level concentrations for the annual average period.

4.1.2 Source Parameters

Based on current facility operations and reported emissions, modeling sources were identified for purposes of this HRA. Modeling sources are generally identified as point, line, volume or area sources. For purposes of this HRA, all of the emission sources for this facility are point sources or area sources. Table 2a identifies each modeled source, which also provides maximum 1-hour and annual average emission rates by each source and regulated chemical. Table 2b provides facility-wide total emissions of each regulated chemical. In addition, Table 4 contains the key parameters that were applied to for applicable emission sources, which includes source ID, source name, UTM coordinates, base elevation, heights, stack velocity, stack temperature, operating hours and operating days. For inputted sources, AERMOD calculates ground level concentrations based on inputted source-specific parameters, including the emission rate, stack height, stack inside diameter, stack exit velocity, and stack gas temperature. All relevant emissions source parameters that were applied for this model is presented in the attached tables.

4.1.3 Receptors

According to OEHHA guidance, HRAs must provide a detailed analysis of the potentially exposed population. This analysis includes identification of the maximum exposed individuals (MEIs) for nearby workers (MEIW) and residences (MEIR), identification of sensitive receptors within the ZOI, identification of fence line receptors, and evaluation of potential population impacts within the ZOI. As required, various receptor locations were inputted into AERMOD, which covered the property fenceline, nearby residences and workers, sensitive receptors and census block receptors. Additional detail for each receptor type is provided as follows:

- **Fenceline** - Fenceline receptors were defined at 20-meter increments along the property border, in accordance with SCAQMD guidance. Figures 3a and 4 shows the fenceline for this HRA. The fenceline boundary UTM coordinates are located on Table 6a.
- **Nearby Residences and Workers (Cartesian Grid)** - The general locations of potential MEIs were determined based on the location of sources and the surrounding land use. The nearest immediate residential receptors are located south side and north side of the facility boundary. Worker receptors are located immediately north of the facility boundary. Receptor grid points had 20 meter spacing from 0 to 200 meters from facility center, 50 meter spacing from 200 to 1000 meters, and 250 meter spacing beyond 1000 meters. Additional 5 meter spacing was added to the receptors north of the facility. Figures 5a and 5b show the surrounding zoning and land uses within the immediate vicinity of the facility.
- **Sensitive Receptors** – In accordance with OEHHA guidance, sensitive receptors must be identified within the ZOI (if any), such as K-12 schools, hospitals, nursing/convalescent homes, daycares and senior centers. As applicable, to determine the location of nearby sensitive receptors within the ZOI,

Trinity reviewed applicable public sources of information and databases, including, Google and online search. A breakdown of the sensitive receptors are identified in Table 6b, and ground-level concentrations of each pollutant at each sensitive receptor are identified in Tables 6c, 6d, and 6e.

- **Census Block Receptors** - AB2588 also requires an estimate of the number of impacted individuals in residences and off-site workplaces within the ZOI. Census data is used to determine affected populations within geographic areas defined by census tracts. A census tract centroid (geographical center) is identified as a receptor location, which represents exposure to the population within that census tract. Census tract information were obtained directly from HARP dispersion modeling by inputting the facility center and a distance of 2000 meters.
- **Onsite Receptors** – No onsite receptors were identified.

4.1.4 Building Downwash

The purpose of this evaluation is to determine if stack discharge might become caught in the turbulent wakes of structures within close proximity. Wind blowing around a building creates zones of turbulence that are greater than if the building was absent. The USEPA-approved Building Profile Input Program PRIME (BPIP-PRIME) 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. U.S. EPA has promulgated stack height regulations that restrict the use of stack heights in excess of "Good Engineering Practice" (GEP) in air dispersion modeling analyses[6]. Under these regulations, that portion of a stack in excess of the GEP height is generally not creditable when modeling to determine source impacts. This essentially prevents the use of excessively tall stacks to reduce the ground-level pollutant concentrations. The stack height not subject to the effects of downwash, called the GEP stack height, is defined by the following formula:

$H_{GEP} = H + 1.5L$

Where:
H_{GEP} = GEP stack height,
H = structure height, and
L = lesser dimension of the structure (height or projected width).

This equation is limited to stacks located within 5L of a structure. Stacks located at a distance greater than 5L are not subject to the wake effects of the structure. If there is more than one stack at a given facility, the above equation must be successively applied to each stack. If more than one structure is involved, the equations must also be successively applied to each structure. To calculate downwash effects, if any, building coordinates and height of nearby structures were inputted into BPIP-PRIME and can be seen on Table 6a. A total of 8 facility buildings and a total of 7 external buildings were modeled for building downwash. Figures 3a and 3b show a model plan of the boundary and buildings.

4.1.5 Meteorological and Elevation Data

The facility is located in Compton at approximately 70 feet above sea level (refer to Figure 1 – Location Map). In general, the local topography around the facility is flat terrain within an urban environmental setting. As noted previously, Bowman had utilized published meteorological data for the Hawthorne Airport (KHHR) station in its prior HRA submittal, which includes 5 years of processed data for CY 2012, 2013, 2014, 2015 and 2016. However, in its letter dated September 16, 2022, the SCAQMD rejected the use of this published data from Hawthorne Airport station, and instead, required the use of meteorological data

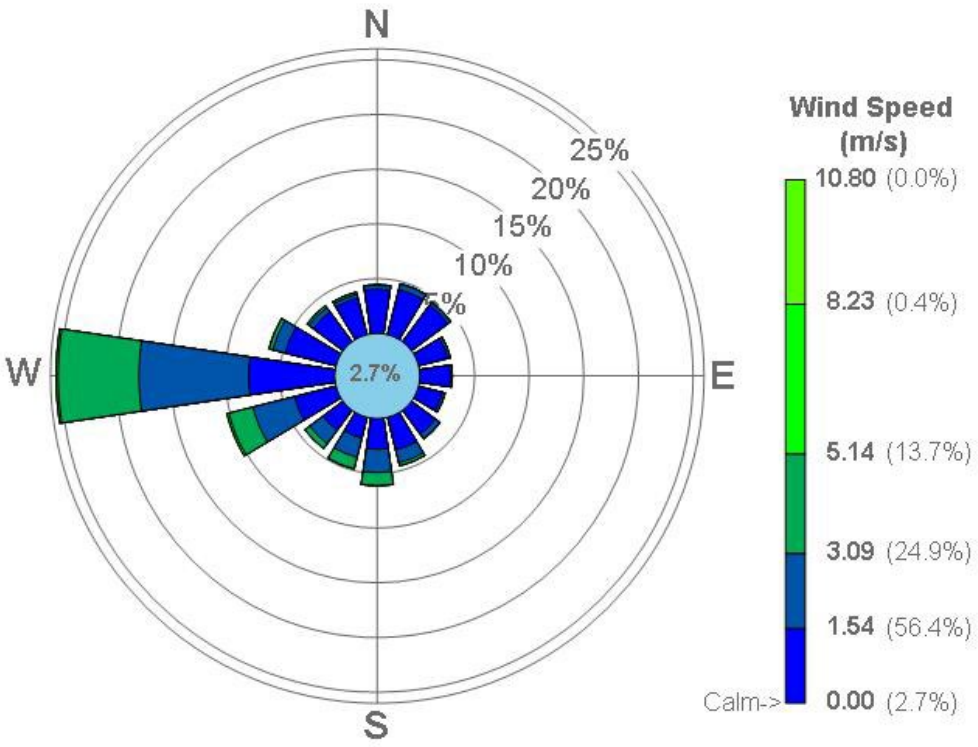
[6] U.S. Environmental Protection Agency, Good Engineering Practice Stack Height Regulations, October 1988

from the Compton (CMPT) station, which includes only 3 years of data for CY 2012, 2015, and 2016. As stated by the SCAQMD website, "*The Compton (CMPT) station is not available for download as the station does not have 5 years of data that meets quality assurance procedures."*[7] Further, U.S. EPA guidance specifies the use of 5 years of adequately representative and quality assured meteorological data for AERMOD modeling applications.[8] As a consequence, due to concerns of insufficient quality assured meteorological data and applicable U.S EPA guidance, Bowman utilized the published data for the Hawthorne Airport station in its prior HRA submittal. Given its close proximity and similar terrain, elevation, land use and other surface characteristics, the Hawthorne Airport station provides representative meteorological data for the Bowman facility, which satisfies applicable modeling guidance. Nevertheless, the SCAQMD required the use of this unpublished Compton station data, which Bowman continues to disagree for purposes of this HRA as the modeling results will be materially impacted. As previously stated in Section 1.1, South Coast AQMD staff views the available Compton station meteorological data as more appropriate than the Hawthorne station data for the air dispersion modeling. South Coast AQMD staff noted that the Bowman facility is located over six miles away from the Hawthorne meteorological station, and approximately one and a half miles away from the Compton meteorological station. The Hawthorne station is also located at an airport. For these reasons, South Coast AQMD staff believes the Compton meteorological data is more representative of the conditions at the Bowman facility than the Hawthorne meteorological data. The South Coast AQMD webpage does not "expressly (indicate) this station's data did not meet quality assurance requirements" but rather that 3 years of data that meet quality assurance procedures are available rather than 5, as per EPA's Appendix W Guideline. The Appendix W Guideline is intended for permitting purposes and not explicitly for the AB 2588 Program. All previous AB 2588-related work for the Bowman facility, including approved HRAs for the two prior inventory years and associated RRPs, used Compton meteorological data. Additionally, South Coast AQMD staff offered Bowman an opportunity to provide additional justification, such as a comparison of surface roughness, albedo, and Bowen ratio between the site and the Hawthorne and Compton stations, to justify using the Hawthorne station data but received no supporting evidence.

With respect to the Compton station meteorological data, the ASCII data are in the format specified by AERMOD for standard ASCII input. The figure below presents an annual wind rose for the Compton met station data from for 2012, 2015 and 2016. The surface file (CMPT_3Y.SFC) and profile file (CMPT_3Y.PFL) were inputted into AERMOD and processed with all receptors and sources. Terrain data (00206861.tif) were obtained from the USGS in the form of National Elevation Dataset (NED) files at 1/3 arc second resolution.

[7] https://www.aqmd.gov/home/air-quality/meteorological-data/aermod-table-1

[8] 40 CFR Part 51, Appendix W, Section 8.4, Revisions to the Guideline on Air Quality Models, United States Environmental Protection Agency



4.2 Assessment of Chemical Exposure

SCAQMD requires that all AB2588 HRAs be prepared using the HARP model. The most recent version of HARP (version 2.0) was used to prepare this HRA. The health risk module of HARP 2.0 incorporates the current OEHHA guidelines, exposure factors and most recent toxicity values for modeled substances.

4.2.1 Exposure Pathways

Exposure pathways are generally classified as primary pathways and secondary pathways. Inhalation is the primary exposure pathway for all modeled sources and substances. For multipathway substances, there are non-inhalation exposure pathways that should also be evaluated. As applicable, the non-inhalation pathways include dermal exposure, water ingestion, crop ingestion (direct deposition), soil ingestion, ingestion of mother's milk, fish and dairy products or other.

In general, most air toxics assessed under the Hot Spots Program are volatile organic compounds that remain as gases when emitted into the air. These volatile chemicals are not subject to appreciable deposition to soil, surface waters or plants. Therefore, human exposure does not normally occur to any appreciable extent via ingestion or dermal exposure. Rather, the primary exposure pathway to these volatiles occurs through the inhalation pathway. A small subset of regulated substances, i.e. semi-volatile organic and metals, is emitted partially or totally as particles subject to deposition. In these cases, ingestion and dermal pathways as well as the inhalation pathway must be evaluated.

Based on SCAQMD guidelines, in addition to the inhalation pathway, residential cancer risk for multipathway substances evaluated the following exposure pathways: home grown produce (fraction = .0137), dermal absorption, soil ingestion (deposition rate = 0.02 m/s), and mother's milk. In addition to the inhalation

pathway, worker cancer risks for multipathway substances were modeled with the pathways of dermal absorption and soil ingestion (deposition rate = 0.02 m/s). The water ingestion pathway was not considered since the drinking water supply in the vicinity is not derived from local surface water and is not required by SCAQMD. The fish, beef, dairy, pig, chicken, and egg pathways were not considered since they are not required by SCAQMD.

4.2.2 Carcinogenic Health Impacts

In accordance with the SCAQMD and OEHHA guidance, cancer risk estimates based on the theoretical upper-bound excess cancer risk were evaluated for the MEIR, MEIW and PMI. The guidelines also require cancer risk to be evaluated for affected sensitive receptors and populations within the Zone of Impact (ZOI), as defined by the guidelines (refer to Section 5.1).

The HARP model computes the total excess cancer risk from both inhalation and noninhalation pathways at each receptor location. For example, the inhalation risk for each pollutant at a receptor location is calculated by multiplying the inhalation dosage by its cancer potency factor. The estimated risks for individual substances emitted by the facility are added to provide the total excess cancer risk for individual receptor locations. For inhalation exposures, the theoretical upper-bound excess cancer risk is estimated assuming that an individual is exposed continuously to the annual average air concentrations over a 30-year lifetime. Once these annual average air concentrations are estimated for each receptor, the excess cancer risk is calculated for the carcinogenic effects in the model.

For residential and sensitive receptors, OEHHA requires a lifetime exposure of 30 years. At a minimum, the HRA must show the results of cancer risk assuming a 30-year exposure duration for all residential (and sensitive) receptors and exposure duration is 70 years for cancer burden calculations. In the case of worker receptors, OEHHA requires exposure durations of a 25-year exposure period. OEHHA guidelines provide adjustment factors for inhalation risks for offsite workers.

4.2.3 Noncarcinogenic Health Impacts

Potential noncarcinogenic health effects (acute HI, 8-hour HI, and chronic HI) associated with exposure to chemical emissions have been evaluated using the HARP model. Acute and chronic health hazards for different substances impact different target human organs (e.g., central nervous system, reproductive system, liver, etc.). For inhalation exposures, the model divides the predicted average air concentrations for each chemical at the receptor locations by the appropriate inhalation RELs provided by the SCAQMD and OEHHA. These ratios are chemical-specific to the chronic or acute hazard quotients.

Noncarcinogenic health effects were also evaluated in terms of their assumed potential additive effect on target organs or systems. For inhalation exposures, the target organ-specific HI is the sum of the individual hazard quotients for each chemical affecting a specific target organ. In the case of a multipathway pollutant (i.e., pollutants with noninhalation exposures), health risk impacts take into account the additional noncancer risks associated with noninhalation routes of exposure from certain pollutants.

4.2.4 Worker Adjustment Factors

The HARP model assumes emissions are continuous. When emission sources do not run continuously, some hours have zero emissions and therefore receptors have zero exposure. If an offsite worker receptor is not present during these hours, the worker's health risks are underestimated. To account for this, a "worker adjustment factor" (WAF) must be applied to worker carcinogenic impacts and 8-hour noncarcinogenic

chronic impacts. The WAF will vary depending on the operating schedule of the equipment, which is calculated per the following equation:

WAF = (24*7) / H

Where:
WAF = Worker Adjustment Factor
H = Hours operated by the equipment per week

The following table calculates the WAF for each of Bowman's equipment.

Equipment	Operating Schedule	Hours per Week (H)	WAF
Spray Booth 1	Mon-Fri 08:00 - 24:00	80	2.1
Spray Booth 2	Mon-Fri 08:00 - 24:00	80	2.1
Spray Booth 3	Mon-Fri 08:00 - 24:00	80	2.1
Spray Booth 4_1	Mon-Fri 08:00 - 24:00	80	2.1
Spray Booth 4_2	Mon-Fri 08:00 - 24:00	80	2.1
Spray Booth 4_3	Mon-Fri 08:00 - 24:00	80	2.1
Spray Booth 4_4	Mon-Fri 08:00 - 24:00	80	2.1
Spray Booth 4 Heater	Mon-Fri 08:00 - 24:00	80	2.1
Boilers 1 - 3	Mon-Fri 08:00 - 24:00	80	2.1
Abrasive Blasting Cabinet Baghouse	Mon-Fri 08:00- 12:00, 13:00-17:00	40	4.2
Oven 1	Mon-Fri 08:00 - 24:00	80	2.1
Oven 2	Mon-Fri 08:00 - 24:00	80	2.1
Oven 3	Mon-Fri 08:00 - 24:00	80	2.1
Cadmium Tank 150 Scrubber	Mon-Fri 08:00 - 24:00, Sat 06:00-12:00	86	1.95
Anodizing Line ULPA	Mon-Fri 0:00 - 24:00, Sat 06:00-12:00	126	1.33
Plating Room	Mon-Fri 08:00 - 24:00, Sat 06:00-12:00	86	1.95
Anodizing Room	Mon-Fri 00:00 - 24:00, Sat 06:00-12:00	126	1.33

5. RISK CHARACTERIZATION

The risk characterization section discusses the results of the modeling, including, noncancer health hazards, carcinogenic health hazards, zones of impact, maximum exposures, cancer burden calculations and affected populations. The following summarizes the key modeling parameters and results from this HRA.

5.1 Zone of Impact

As required, modeling receptor points were identified to include the property fence line, nearby workers, local residential neighborhoods and nearby sensitive receptors. The ZOI is commonly defined as the area surrounding the facility where receptors have a potential cancer risk equal or greater than 1 in 1 million, acute hazard index equal or greater than 0.5, or chronic hazard index equal or greater than 0.5. The results from the HARP model provides the information necessary to identify the ZOI by generating the associated risk isopleths (i.e., a geographical presentation of areas of equal risk). Maps depicting the ZOIs for this HRA are provided in Figure 6 through Figure 10.

5.2 Carcinogenic Health Effects

5.2.1 Point of Maximum Impact (PMI)

Results for the PMI by each pollutant and by each source are presented in Tables 7a and 7b. As shown in Figure 6b, the PMI (Receptor #3837, UTM E 386749.6 N 3753792.1) for carcinogenic health effects is located on the facility fence line (north side of property) with a predicted excess cancer risk of 8.54×10^{-4} (or 854 chances in-one-million).

5.2.2 Maximum Exposed Individual Resident (MEIR)

Estimated excess cancer risks for the MEIR by each pollutant and by each source are presented in Tables 8a and 8b. As shown in Figure 6b, the MEIR (Receptor #2229, UTM E 386756 N 3753797) for carcinogenic health risk is located to the north of the facility boundary with a predicted excess cancer risk of 6.73×10^{-4} (or 673 chances in-one-million). For reference, Figures 6a and 6b present the cancer risk isopleths identifying the various concentration contours for residential modeling scenarios. Based on this HRA, the MEIR is above the action risk level of 25 in 1 million as per SCAQMD Rule 1402. The MEIR value is above the level (1×10^{-5} or ten-in-one million) at which the SCAQMD requires the distribution of public notices pursuant Rule 1402. Table 5b estimates the number of exposed residential receptors. As noted earlier, the residential land use conflict with existing Los Angeles County Zoning and land use restrictions for this area surrounding the facility, which is legally zoned for light manufacturing.

5.2.3 Maximum Exposed Individual Worker (MEIW)

Estimated excess cancer risks for the MEIW by each pollutant and by each source are presented in Tables 9a and 9b. As shown in Figure 7, the MEIW (Receptor #2228, UTM E 386751 N 3753797) for carcinogenic health effects is located north of the facility boundary with an estimated excess cancer risk of 4.42×10^{-5} (or 44.2 chances in-one-million). Figure 7 presents the cancer risk isopleths identifying the ZOI for worker modeling scenarios. Based on this HRA, the MEIW is above the action risk level of 25 in 1 million as per SCAQMD Rule 1402. For reference, The MEIW value is above the level (1×10^{-5} or ten-in-one million) at which the SCAQMD requires the distribution of public notices pursuant Rule 1402.

5.2.4 Sensitive Receptors

There are a number of sensitive receptor areas near the facility, which are shown on Figure 6a. The Ralph J Bunche Middle School approximately at 170 meter distance from the facility is the closest sensitive receptor, which has a predicted excess cancer risk of 1.40×10^{-5} (or 14.0 chances in-one-million).

5.2.5 Population Cancer Burden

Population cancer burdens are calculated for affected populations within the ZOI. 199 census tracts were found in the zone of impact (ZOI) in which the lifetime (70-year) cancer risk is greater than 1×10^{-6} (or 1.0 chances in-one-million). The total cancer burden is estimated to be 1.42×10^{-1} as shown in Table 5a, which is below the SCAQMD public notice threshold.

5.3 Noncancer Chronic Health Effects

5.3.1 Point of Maximum Impact

Results for the PMI by each pollutant and by each source are presented in Tables 10a and 10b. As shown in Figure 8, the location for PMI (Receptor #3837, UTM E 386749.6 N 3753792.1) for chronic noncancer health effects is located on the facility fence line (northern side of property) with a predicted excess chronic hazard of 1.01.

5.3.2 Maximum Exposed Individual Resident (MEIR)

Noncancer HIC for the MEIR by each pollutant and by each source are presented in Tables 11a and 11b. As shown in Figure 8, the MEIR (Receptor #2229, UTM E 386756 N 3753797) for chronic noncancer health effects is located to the north of the facility boundary with a predicted excess chronic hazard of 0.80. Based on this HRA, the MEIR is below the notification risk level of 1.0 as per SCAQMD Rule 1402, and therefore, there are no residential receptors which require public notice under applicable SCAQMD rules.

5.3.3 Maximum Exposed Individual Worker (MEIW)

Noncancer HIC for the MEIW by each pollutant and by each source are presented in Tables 12a and 12b. As shown by Figure 8, the MEIW (Receptor #2228, UTM E 386751 N 3753797) for chronic noncancer health effects is located to the north of the facility boundary with a predicted excess chronic risk of 0.79. Based on this HRA, the MEIW is below the notification risk level of 1.0 as per SCAQMD Rule 1402, and therefore, there are no worker receptors which require public notice under applicable SCAQMD rules.

5.3.4 Sensitive Receptors

There are a number of sensitive receptor areas near the facility as shown by Figure 5a. However, there are no sensitive receptors with a chronic risk exceeding public notice risk levels of 1.0. Further, all chronic hazards are under the threshold for a defined zone of impact and does not meet the minimum requirement for ZOI, therefore the noncancer chronic ZOI does not impact any sensitive receptors.

5.4 Noncancer 8-Hour Chronic Health Effects

5.4.1 Point of Maximum Impact

Results for the PMI by each pollutant and by each source are presented in Tables 16a and 16b. As shown in Figure 9, the location for PMI (Receptor #3837, UTM E 386749.6 N 3753792.1) for 8-hour chronic

noncancer health effects is on the north side of the facility fence line with a predicted excess chronic hazard of 0.23.

5.4.2 Maximum Exposed Individual Resident (MEIR)

Per SCAQMD guidance, 8-hour chronic health hazards only apply to workers.

5.4.3 Maximum Exposed Individual Worker (MEIW)

Noncancer 8-hour HIC for the MEIW by each pollutant and by each source are presented in Tables 17a and 17b. As shown by Figure 9, the MEIW (Receptor #2228, UTM E 386751 N 3753797) for 8-hour chronic noncancer health effects is located to the north of the facility boundary with a predicted excess chronic risk of 0.18. Based on this HRA, the MEIW is below the notification risk level of 1.0 as per SCAQMD Rule 1402, and therefore, there are no worker receptors which require public notice under applicable SCAQMD rules.

5.4.4 Sensitive Receptors

There are a number of sensitive receptor areas near the facility as shown by Figure 5a. However, there are no sensitive receptors with an 8-hour chronic risk exceeding public notice risk levels of 1.0. Therefore, 8-hour chronic hazards do not meet the minimum requirement for ZOI and noncancer 8-hour chronic ZOI does not impact any sensitive receptors.

5.5 Noncancer Acute Health Effects

5.5.1 Point of Maximum Impact

Results for the PMI by each pollutant and by each source are presented in Tables 13a and 13b. As shown by Figure 10, the PMI (Receptor #3836, UTM E 386769.6 N 3753792.1) for acute noncancer health effects is located on the northern side of the facility boundary with a predicted excess acute hazard risk of 2.89.

5.5.2 Maximum Exposed Individual Resident (MEIR)

Noncancer HIA for the MEIR by each pollutant and by each source are presented in Tables 14a and 14b. As shown in Figure 10, the MEIR (Receptor #2231, UTM E 386766 N 3753797) for acute noncancer health effects is located north of the facility boundary line with a predicted excess acute hazard risk of 2.34. Based on this HRA, the MEIR is above the notification risk level of 1.0 as per SCAQMD Rule 1402. Population exposure estimates based on census data can be found in Table 5b, approximately 121 residents reside within an area with HIA greater than 0.5, and no residents reside within an area with HIA greater than 1.0 based on census receptor location data. However, a residence to the north of the facility is exposed to acute noncancer health effects risk above 1.0.

5.5.3 Maximum Exposed Individual Worker (MEIW)

Noncancer HIA for the MEIW by each pollutant and by each source are presented in Tables 15a and 15b. As shown in Figure 10, the location for MEIW (Receptor #2228, UTM E 386751 N 3753797) acute noncancer health effects receptor is located to the north of the facility boundary with a predicted excess acute hazard risk of 1.57. Based on this HRA, the MEIW is above the notification risk level of 1.0 as per SCAQMD Rule 1402 for specific worker receptors, as shown by Figure 10.

5.5.4 Sensitive Receptors

There are a number of sensitive receptor areas near the facility as shown by Figure 5a. However, there are no sensitive receptors with an acute risk exceeding public notice risk levels of 1.0.

6. REFERENCES

(1) Office of Environmental Health Hazard Assessment (OEHHA), California Environmental Protection Agency, Toxicity Criteria Database, http://www.oehha.ca.gov/risk

(2) Office of Environmental Health Hazard Assessment (OEHHA), The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments, February 2015

(3) California Environmental Protection Agency, Air Resources Board, March 17, 2015, User Manual for the Hotspots Analysis and Reporting Program, Air Dispersion Modeling and Risk Assessment Tool, Version 2.0

(4) United States Census Bureau, the 2010 Census, http://www.factfinder.census.gov

(5) Los Angeles County Zoning Map and Green Zone Programs

(6) South Coast Air Quality Management District, Meteorological Data for Air Dispersion Modeling, http://www.aqmd.gov/home/air-quality/meteorological-data/data-for-aermod

(7) Google Earth, http://www.earth.google.com

APPENDIX A. TABLES

TABLE ES-1

HEALTH RISK ASSESSMENT SUMMARY FORM

Facility Name : **Bowman Plating**

Facility Address: **2631 East 126th Street**
Compton, CA 90222

Type of Business: **Metal Plating**

SCAQMD ID No.: **18989**

A. Cancer Risk*

(One in a million means one chance in a million of getting cancer from being constantly exposed to a certain level of a chemical over 30 years)

1. Inventory Reporting Year : **2019**
2. Maximum Cancer Risk to Receptors :

a. Offsite	**854**	in a million	Location:	**Receptor 3837 | UTME 386749.6 | UTMN 3753792.1**
b. Residence	**673**	in a million	Location:	**Receptor 2229 | UTME 386756 | UTMN 3753797**
c. Worker	**44.2**	in a million	Location:	**Receptor 2228 | UTME 386751 | UTMN 3753797**

3. Substances Accounting for 90% of Cancer Risk: **Hexavalent Chromium**
   Processes Accounting for 90% of Cancer Risk: **Anodizing Room**

4. Cancer Burden for a 70-yr exposure: *(Cancer Burden = [cancer risk] x [# of people exposed to specific cancer risk])*
   a. Cancer Burden: **1.42E-01**
   b. Number of people exposed to >1 per million cancer risk for a 70-yr exposure: **36,241**
   c. Maximum distance to edge of 70-year, 1 x 10^{-6} cancer risk isopleth: **2480 meters**

B. Hazard Indices*

[Long Term Effects(chronic) and Short Term Effects (acute)]
(non-carcinogenic impacts are estimated by comparing calculated concentration to identified reference exposure levels, and expressing this comparison in terms of a "Hazard Index")

1. Maximum Chronic Hazard Indices:

a. Residence HI:	**0.80**	Location:	**Receptor 2229 | UTME 386756 | UTMN 3753797**	Toxicological endpoint:	**RESP**
b. Worker HI :	**0.79**	Location:	**Receptor 2228 | UTME 386751 | UTMN 3753797**	Toxicological endpoint:	**RESP**

2. Substances Accounting for 90% of Chronic Hazard Index: **Nickel, Sulfuric Acid, Silica Crystalline**

3. Maximum 8-hour Chronic Hazard Index:
   8-Hour Chronic HI: **0.18** Location: **Receptor 2228 \| UTME 386751 \| UTMN 3753797** Toxicological endpoint: **RESP**

4. Substances Accounting for 90% of 8-Hour Chronic Hazard Index: **Nickel**

5. Maximum Acute Hazard Indices:
   PMI: **2.89** Location: **Receptor 3836 \| UTME 386769.6 \| UTMN 3753792.1** Toxicological endpoint: **IMMUN**

4. Substances Accounting for 90% of Acute Hazard Index: **Nickel**

C Public Notification and Risk Reduction

1. Public Notification Required? **X** Yes _____ No
   a. If 'yes', estimated population exposed to risks > 10 in a million for a 30-year exposure, or an HI > 1
   1463

2. Risk Reduction Required? **X** Yes _____ No

TABLE 1. SUMMARY OF HEALTH RISK RESULTS

Bowman Plating, Compton, CA
Facility ID # 018989

Receptor Description	Grid ID	Cancer Risk	Grid ID	Chronic Hazard Index	Grid ID	Acute Hazard Index	Grid ID	8-Hour Chronic Hazard Index
PMI (Point of Max Impact)	3837	8.54E-04	3837	1.01E+00	3836	2.89E+00	3835	4.49E-01
MEIR (Residence)	2229	6.73E-04	2229	7.97E-01	2231	2.34E+00	N/A	N/A
MEIW (Worker)	2228	4.42E-05	2228	7.88E-01	2228	1.57E+00	2228	2.29E-01

TABLE 2a. EMISSION RATE BY SUBSTANCE AND SOURCE

Bowman Plating, Compton, CA
Facility ID # 018989

Device ID	Source Name	Substance Name	CAS No.	1-Hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
1	SPRAY_BOOTH_1	Silica, Crystln	1175	3.72E-03	4.69E-04	1.55E+01	1.95E+00
		Formaldehyde	50000	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	67561	7.54E-05	9.50E-06	3.14E-01	3.95E-02
		Isopropyl Alcoh	67630	7.13E-03	8.98E-04	2.96E+01	3.74E+00
		n-Butyl Alcohol	71363	4.06E-03	5.12E-04	1.69E+01	2.13E+00
		sec-Butyl Alcoh	78922	1.30E-01	1.64E-02	5.41E+02	6.82E+01
		MEK	78933	5.42E-02	6.83E-03	2.26E+02	2.84E+01
		1,2,4TriMeBenze	95636	3.10E-04	3.90E-05	1.29E+00	1.62E-01
		Ethyl Benzene	100414	5.95E-03	7.50E-04	2.48E+01	3.12E+00
		PGME	107982	9.21E-03	1.16E-03	3.83E+01	4.83E+00
		MIBK	108101	4.54E-02	5.72E-03	1.89E+02	2.38E+01
		PGMEA	108656	9.21E-04	1.16E-04	3.83E+00	4.83E-01
		Toluene	108883	2.71E-02	3.42E-03	1.13E+02	1.42E+01
		Hexane	110543	3.55E-03	4.47E-04	1.48E+01	1.86E+00
		EGBE	111762	2.71E-04	3.41E-05	1.13E+00	1.42E-01
		DEGBE	112345	8.79E-05	1.11E-05	3.66E-01	4.61E-02
		Xylenes	1330207	2.05E-02	2.59E-03	8.25E+01	1.04E+01
		EGPE	2807309	6.02E-04	7.59E-05	2.51E+00	3.16E-01
		Cr(VI)	18540299	2.16E-07	2.72E-08	8.99E-04	1.13E-04
2	SPRAY_BOOTH_2	Silica, Crystln	1175	5.36E-03	6.75E-04	2.23E+01	2.81E+00
		Formaldehyde	50000	9.98E-07	1.26E-07	4.15E-03	5.23E-04
		Methanol	67561	2.01E-04	2.53E-05	8.35E-01	1.05E-01
		Isopropyl Alcoh	67630	7.34E-03	9.25E-04	3.05E+01	3.85E+00
		n-Butyl Alcohol	71363	3.60E-03	4.53E-04	1.50E+01	1.88E+00
		sec-Butyl Alcoh	78922	1.68E-01	2.12E-02	7.00E+02	8.82E+01
		MEK	78933	5.89E-02	7.42E-03	2.45E+02	3.09E+01
		1,2,4TriMeBenze	95636	3.89E-04	4.90E-05	1.62E+00	2.04E-01
		Ethyl Benzene	100414	7.95E-03	1.00E-03	3.31E+01	4.17E+00
		PGME	107982	9.39E-03	1.18E-03	3.90E+01	4.92E+00
		MIBK	108101	6.29E-02	7.93E-03	2.50E+02	3.15E+01
		PGMEA	108656	9.77E-04	1.23E-04	4.06E+00	5.12E-01
		Toluene	108883	2.93E-02	3.69E-03	1.22E+02	1.53E+01
		Hexane	110543	2.64E-03	3.33E-04	1.10E+01	1.38E+00
		EGBE	111762	2.94E-04	3.70E-05	1.22E+00	1.54E-01
		DEGBE	112345	7.63E-06	9.61E-07	3.17E-02	4.00E-03
		Xylenes	1330207	2.99E-02	3.77E-03	1.11E+02	1.40E+01
		EGPE	2807309	1.56E-03	1.96E-04	6.47E+00	8.15E-01
		Cr(VI)	18540299	2.87E-07	3.62E-08	1.20E-03	1.52E-04
3	SPRAY_BOOTH_3	Silica, Crystln	1175	2.42E-02	3.05E-03	1.01E+02	1.27E+01
		Formaldehyde	50000	9.98E-07	1.26E-07	4.15E-03	5.23E-04
		Methanol	67561	2.38E-04	3.00E-05	9.92E-01	1.25E-01
		Isopropyl Alcoh	67630	8.09E-03	1.02E-03	3.37E+01	4.24E+00
		n-Butyl Alcohol	71363	3.60E-03	4.53E-04	1.50E+01	1.88E+00
		sec-Butyl Alcoh	78922	1.70E-01	2.14E-02	7.08E+02	8.92E+01
		MEK	78933	8.90E-02	1.12E-02	3.70E+02	4.67E+01
		1,2,4TriMeBenze	95636	9.37E-03	1.18E-03	3.90E+01	4.91E+00
		Ethyl Benzene	100414	1.54E-02	1.93E-03	6.39E+01	8.05E+00
		PGME	107982	2.44E-02	3.07E-03	1.01E+02	1.28E+01
		MIBK	108101	7.34E-02	9.25E-03	3.05E+02	3.85E+01
		PGMEA	108656	4.40E-03	5.54E-04	1.83E+01	2.31E+00
		Toluene	108883	4.98E-02	6.28E-03	2.07E+02	2.61E+01
		Hexane	110543	2.81E-03	3.54E-04	1.17E+01	1.47E+00
		EGBE	111762	8.08E-03	1.02E-03	3.36E+01	4.24E+00
		DEGBE	112345	3.81E-06	4.81E-07	1.59E-02	2.00E-03
		Xylenes	1330207	3.98E-02	5.01E-03	1.65E+02	2.08E+01
		EGPE	2807309	1.52E-03	1.91E-04	6.30E+00	7.94E-01
		Cr(VI)	18540299	2.82E-07	3.55E-08	1.18E-03	1.49E-04

TABLE 2a. EMISSION RATE BY SUBSTANCE AND SOURCE

Bowman Plating, Compton, CA
Facility ID # 018989

Device ID	Source Name	Substance Name	CAS No.	1-Hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
4	SPRAY_BOOTH_4_1	Silica, Crystln	1175	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Formaldehyde	50000	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	67561	3.71E-04	4.68E-05	1.54E+00	1.95E-01
		Isopropyl Alcoh	67630	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		n-Butyl Alcohol	71363	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		sec-Butyl Alcoh	78922	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		MEK	78933	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		1,2,4TriMeBenze	95636	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethyl Benzene	100414	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		PGME	107982	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		MIBK	108101	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		PGMEA	108656	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	108883	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	110543	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		EGBE	111762	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		DEGBE	112345	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylenes	1330207	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		EGPE	2807309	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	SPRAY_BOOTH_4_2	Silica, Crystln	1175	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Formaldehyde	50000	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	67561	3.71E-04	4.68E-05	1.54E+00	1.95E-01
		Isopropyl Alcoh	67630	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		n-Butyl Alcohol	71363	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		sec-Butyl Alcoh	78922	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		MEK	78933	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		1,2,4TriMeBenze	95636	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethyl Benzene	100414	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		PGME	107982	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		MIBK	108101	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		PGMEA	108656	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	108883	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	110543	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		EGBE	111762	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		DEGBE	112345	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylenes	1330207	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		EGPE	2807309	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	SPRAY_BOOTH_4_3	Silica, Crystln	1175	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Formaldehyde	50000	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	67561	3.71E-04	4.68E-05	1.54E+00	1.95E-01
		Isopropyl Alcoh	67630	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		n-Butyl Alcohol	71363	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		sec-Butyl Alcoh	78922	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		MEK	78933	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		1,2,4TriMeBenze	95636	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethyl Benzene	100414	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		PGME	107982	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		MIBK	108101	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		PGMEA	108656	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	108883	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	110543	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		EGBE	111762	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		DEGBE	112345	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylenes	1330207	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		EGPE	2807309	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TABLE 2a. EMISSION RATE BY SUBSTANCE AND SOURCE

Bowman Plating, Compton, CA
Facility ID # 018989

Device ID	Source Name	Substance Name	CAS No.	1-Hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
7	SPRAY_BOOTH_4_4	Silica, Crystln	1175	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Formaldehyde	50000	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Methanol	67561	3.71E-04	4.68E-05	1.54E+00	1.95E-01
		Isopropyl Alcoh	67630	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		n-Butyl Alcohol	71363	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		sec-Butyl Alcoh	78922	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		MEK	78933	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		1,2,4TriMeBenze	95636	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Ethyl Benzene	100414	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		PGME	107982	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		MIBK	108101	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		PGMEA	108656	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Toluene	108883	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Hexane	110543	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		EGBE	111762	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		DEGBE	112345	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Xylenes	1330207	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		EGPE	2807309	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Cr(VI)	18540299	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	HEATER	PAHs-w/o	1151	5.68E-08	7.15E-09	2.36E-04	2.98E-05
		Formaldehyde	50000	6.98E-06	8.80E-07	2.90E-02	3.66E-03
		Benzene	71432	3.29E-06	4.15E-07	1.37E-02	1.73E-03
		Acetaldehyde	75070	1.76E-06	2.22E-07	7.32E-03	9.22E-04
		Naphthalene	91203	1.70E-07	2.15E-08	7.09E-04	8.93E-05
		Ethyl Benzene	100414	3.92E-06	4.94E-07	1.63E-02	2.05E-03
		Acrolein	107028	1.53E-06	1.93E-07	6.38E-03	8.03E-04
		Toluene	108883	1.50E-05	1.90E-06	6.26E-02	7.89E-03
		Hexane	110543	2.61E-06	3.29E-07	1.09E-02	1.37E-03
		Xylenes	1330207	1.12E-05	1.41E-06	4.65E-02	5.86E-03
		NH3	7664417	1.02E-02	1.29E-03	4.25E+01	5.36E+00

TABLE 2a. EMISSION RATE BY SUBSTANCE AND SOURCE

Bowman Plating, Compton, CA
Facility ID # 018989

Device ID	Source Name	Substance Name	CAS No.	1-Hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
9	BOILERS	PAHs-w/o	1151	1.08E-07	1.36E-08	4.49E-04	5.65E-05
		Formaldehyde	50000	1.33E-05	1.67E-06	5.52E-02	6.95E-03
		Benzene	71432	6.26E-06	7.88E-07	2.60E-02	3.28E-03
		Acetaldehyde	75070	3.34E-06	4.21E-07	1.39E-02	1.75E-03
		Naphthalene	91203	3.24E-07	4.08E-08	1.35E-03	1.70E-04
		Ethyl Benzene	100414	7.44E-06	9.38E-07	3.10E-02	3.90E-03
		Acrolein	107028	2.91E-06	3.67E-07	1.21E-02	1.53E-03
		Toluene	108883	2.86E-05	3.60E-06	1.19E-01	1.50E-02
		Hexane	110543	4.96E-06	6.25E-07	2.06E-02	2.60E-03
		Xylenes	1330207	2.13E-05	2.68E-06	8.84E-02	1.11E-02
		NH3	7664417	1.94E-02	2.45E-03	8.08E+01	1.02E+01
		PAHs-w/o	1151	1.08E-07	1.36E-08	4.49E-04	5.65E-05
		Formaldehyde	50000	1.33E-05	1.67E-06	5.52E-02	6.95E-03
		Benzene	71432	6.26E-06	7.88E-07	2.60E-02	3.28E-03
		Acetaldehyde	75070	3.34E-06	4.21E-07	1.39E-02	1.75E-03
		Naphthalene	91203	3.24E-07	4.08E-08	1.35E-03	1.70E-04
		Ethyl Benzene	100414	7.44E-06	9.38E-07	3.10E-02	3.90E-03
		Acrolein	107028	2.91E-06	3.67E-07	1.21E-02	1.53E-03
		Toluene	108883	2.86E-05	3.60E-06	1.19E-01	1.50E-02
		Hexane	110543	4.96E-06	6.25E-07	2.06E-02	2.60E-03
		Xylenes	1330207	2.13E-05	2.68E-06	8.84E-02	1.11E-02
		NH3	7664417	1.94E-02	2.45E-03	8.08E+01	1.02E+01
		PAHs-w/o	1151	1.08E-07	1.36E-08	4.49E-04	5.65E-05
		Formaldehyde	50000	1.33E-05	1.67E-06	5.52E-02	6.95E-03
		Benzene	71432	6.26E-06	7.88E-07	2.60E-02	3.28E-03
		Acetaldehyde	75070	3.34E-06	4.21E-07	1.39E-02	1.75E-03
		Naphthalene	91203	3.24E-07	4.08E-08	1.35E-03	1.70E-04
		Ethyl Benzene	100414	7.44E-06	9.38E-07	3.10E-02	3.90E-03
		Acrolein	107028	2.91E-06	3.67E-07	1.21E-02	1.53E-03
		Toluene	108883	2.86E-05	3.60E-06	1.19E-01	1.50E-02
		Hexane	110543	4.96E-06	6.25E-07	2.06E-02	2.60E-03
		Xylenes	1330207	2.13E-05	2.68E-06	8.84E-02	1.11E-02
		NH3	7664417	1.94E-02	2.45E-03	8.08E+01	1.02E+01
10	BLAST_CB	Lead	7439921	1.00E-07	1.26E-08	1.70E-05	2.14E-06
		Nickel	7440020	1.14E-04	1.44E-05	1.94E-02	2.44E-03
		Copper	7440508	1.90E-06	2.39E-07	3.23E-04	4.07E-05
12	OVEN_1	PAHs-w/o	1151	1.70E-08	2.15E-09	7.09E-05	8.93E-06
		Formaldehyde	50000	2.09E-06	2.64E-07	8.71E-03	1.10E-03
		Benzene	71432	9.88E-07	1.24E-07	4.11E-03	5.18E-04
		Acetaldehyde	75070	5.28E-07	6.65E-08	2.20E-03	2.77E-04
		Naphthalene	91203	5.11E-08	6.44E-09	2.13E-04	2.68E-05
		Ethyl Benzene	100414	1.18E-06	1.48E-07	4.89E-03	6.16E-04
		Acrolein	107028	4.60E-07	5.79E-08	1.91E-03	2.41E-04
		Toluene	108883	4.51E-06	5.69E-07	1.88E-02	2.37E-03
		Hexane	110543	7.83E-07	9.87E-08	3.26E-03	4.11E-04
		Xylenes	1330207	3.36E-06	4.23E-07	1.40E-02	1.76E-03
		NH3	7664417	3.07E-03	3.86E-04	1.28E+01	1.61E+00
13	OVEN_2	PAHs-w/o	1151	5.68E-08	7.15E-09	2.36E-04	2.98E-05
		Formaldehyde	50000	6.98E-06	8.80E-07	2.90E-02	3.66E-03
		Benzene	71432	3.29E-06	4.15E-07	1.37E-02	1.73E-03
		Acetaldehyde	75070	1.76E-06	2.22E-07	7.32E-03	9.22E-04
		Naphthalene	91203	1.70E-07	2.15E-08	7.09E-04	8.93E-05
		Ethyl Benzene	100414	3.92E-06	4.94E-07	1.63E-02	2.05E-03
		Acrolein	107028	1.53E-06	1.93E-07	6.38E-03	8.03E-04
		Toluene	108883	1.50E-05	1.90E-06	6.26E-02	7.89E-03
		Hexane	110543	2.61E-06	3.29E-07	1.09E-02	1.37E-03
		Xylenes	1330207	1.12E-05	1.41E-06	4.65E-02	5.86E-03
		NH3	7664417	1.02E-02	1.29E-03	4.25E+01	5.36E+00

TABLE 2a. EMISSION RATE BY SUBSTANCE AND SOURCE

Bowman Plating, Compton, CA
Facility ID # 018989

Device ID	Source Name	Substance Name	CAS No.	1-Hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
14	OVEN_3	PAHs-w/o	1151	5.68E-08	7.15E-09	2.36E-04	2.98E-05
		Formaldehyde	50000	6.98E-06	8.80E-07	2.90E-02	3.66E-03
		Benzene	71432	3.29E-06	4.15E-07	1.37E-02	1.73E-03
		Acetaldehyde	75070	1.76E-06	2.22E-07	7.32E-03	9.22E-04
		Naphthalene	91203	1.70E-07	2.15E-08	7.09E-04	8.93E-05
		Ethyl Benzene	100414	3.92E-06	4.94E-07	1.63E-02	2.05E-03
		Acrolein	107028	1.53E-06	1.93E-07	6.38E-03	8.03E-04
		Toluene	108883	1.50E-05	1.90E-06	6.26E-02	7.89E-03
		Hexane	110543	2.61E-06	3.29E-07	1.09E-02	1.37E-03
		Xylenes	1330207	1.12E-05	1.41E-06	4.65E-02	5.86E-03
		NH3	7664417	1.02E-02	1.29E-03	4.25E+01	5.36E+00
15	CADMIUM	Cadmium	7440439	2.86E-05	3.60E-06	2.36E-03	2.97E-04
16	ANODE_LN	Cr(VI)	18540299	1.65E-07	2.08E-08	5.89E-05	7.42E-06
17	PLATE_RM	DEGBE	112345	8.43E-07	1.06E-07	7.39E-03	9.31E-04
		Sodium Hydroxid	1310732	1.50E-05	1.89E-06	1.31E-01	1.65E-02
		Nickel	7440020	4.74E-04	5.97E-05	1.26E-01	1.59E-02
		Cadmium	7440439	1.44E-03	1.82E-04	9.62E-02	1.21E-02
		HCl	7647010	8.83E-04	1.11E-04	3.80E+00	4.79E-01
		HF	7664393	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Sulfuric Acid	7664939	2.75E-19	3.47E-20	2.41E-15	3.04E-16
		Nitric Acid	7697372	1.29E-04	1.63E-05	8.38E-01	1.06E-01
		Cr(VI)	18540299	8.00E-06	1.01E-06	2.37E-02	2.99E-03
18	ANODE_RM	DEGBE	112345	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		Sodium Hydroxid	1310732	8.45E-06	1.06E-06	7.40E-02	9.32E-03
		Nickel	7440020	1.25E-04	1.57E-05	7.40E-01	9.32E-02
		Cadmium	7440439	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		HCl	7647010	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		HF	7664393	7.73E-03	9.74E-04	6.77E+01	8.53E+00
		Sulfuric Acid	7664939	2.54E-01	3.20E-02	1.07E+01	1.35E+00
		Nitric Acid	7697372	4.06E-04	5.11E-05	3.34E+00	4.21E-01
		Cr(VI)	18540299	1.68E-05	2.12E-06	9.96E-02	1.25E-02

TABLE 2b. TOTAL EMISSION RATE BY SUBSTANCE

Bowman Plating, Compton, CA
Facility ID # 018989

Substance Name	CAS No.	1-Hour Maximum (lb/hr)	1-Hour Maximum (g/s)	Annual Average (lb/yr)	Annual Average (g/s)
Silica, Crystln	1175	3.33E-02	4.19E-03	1.38E+02	1.74E+01
Formaldehyde	50000	6.48E-05	8.17E-06	2.70E-01	3.40E-02
Methanol	67561	2.00E-03	2.52E-04	8.32E+00	1.05E+00
Isopropyl Alcoh	67630	2.26E-02	2.84E-03	9.39E+01	1.18E+01
n-Butyl Alcohol	71363	1.13E-02	1.42E-03	4.68E+01	5.90E+00
sec-Butyl Alcoh	78922	4.69E-01	5.90E-02	1.95E+03	2.46E+02
MEK	78933	2.02E-01	2.55E-02	8.41E+02	1.06E+02
1,2,4TriMeBenze	95636	1.01E-02	1.27E-03	4.19E+01	5.28E+00
Ethyl Benzene	100414	2.93E-02	3.69E-03	1.22E+02	1.54E+01
PGME	107982	4.30E-02	5.41E-03	1.79E+02	2.25E+01
MIBK	108101	1.82E-01	2.29E-02	7.19E+02	9.05E+01
PGMEA	108656	6.30E-03	7.94E-04	2.62E+01	3.30E+00
Toluene	108883	1.06E-01	1.34E-02	4.42E+02	5.57E+01
Hexane	110543	9.02E-03	1.14E-03	3.75E+01	4.73E+00
EGBE	111762	8.64E-03	1.09E-03	3.60E+01	4.53E+00
DEGBE	112345	1.00E-04	1.26E-05	4.21E-01	5.30E-02
Xylenes	1330207	9.03E-02	1.14E-02	3.34E+02	4.20E+01
EGPE	2807309	3.67E-03	4.63E-04	1.53E+01	1.93E+00
Cr(VI)	18540299	2.57E-05	3.24E-06	1.27E-01	1.60E-02
PAHs-w/o	1151	5.11E-07	6.44E-08	2.13E-03	2.68E-04
Benzene	71432	2.96E-05	3.73E-06	1.23E-01	1.55E-02
Acetaldehyde	75070	1.58E-05	2.00E-06	6.59E-02	8.30E-03
Naphthalene	91203	1.53E-06	1.93E-07	6.38E-03	8.03E-04
Acrolein	107028	1.38E-05	1.74E-06	5.74E-02	7.23E-03
NH3	7664417	9.20E-02	1.16E-02	3.83E+02	4.82E+01
Lead	7439921	1.00E-07	1.26E-08	1.70E-05	2.14E-06
Nickel	7440020	7.12E-04	8.98E-05	8.86E-01	1.12E-01
Copper	7440508	1.90E-06	2.39E-07	3.23E-04	4.07E-05
Cadmium	7440439	1.47E-03	1.85E-04	9.86E-02	1.24E-02
Sodium Hydroxid	1310732	2.35E-05	2.96E-06	2.05E-01	2.59E-02
HCl	7647010	8.83E-04	1.11E-04	3.80E+00	4.79E-01
HF	7664393	7.73E-03	9.74E-04	6.77E+01	8.53E+00
Sulfuric Acid	7664939	2.54E-01	3.20E-02	1.07E+01	1.35E+00
Nitric Acid	7697372	5.35E-04	6.74E-05	4.18E+00	5.27E-01

TABLE 3a. TOXICITY DATA BY SUBSTANCE- EXPOSURE PATHWAYS

Bowman Plating, Compton, CA
Facility ID # 018989

						Modeled Exposure Pathways									
Substance Name	**CAS No.**	**Cancer**	**Chronic**	**Acute**	**8-hr**	**Multipathway Substance**	**Inhalation**	**Dermal**	**Soil Ingestion**	**Home Grown Produce**	**Mother's Milk**	**Drinking Water**	**Fish**	**Beef & Dairy**	**Pig, Chicken, & Egg**
Silica, Crystln	1175		X				W,R	W,R	W,R	R	R				
Formaldehyde	50000	X	X	X	X		W,R	W,R	W,R	R	R				
Methanol	67561		X	X			W,R	W,R	W,R	R	R				
Isopropyl Alcoh	67630		X	X			W,R	W,R	W,R	R	R				
n-Butyl Alcohol	71363						W,R	W,R	W,R	R	R				
sec-Butyl Alcoh	78922						W,R	W,R	W,R	R	R				
MEK	78933			X			W,R	W,R	W,R	R	R				
1,2,4TriMeBenze	95636						W,R	W,R	W,R	R	R				
Ethyl Benzene	100414	X	X				W,R	W,R	W,R	R	R				
PGME	107982		X				W,R	W,R	W,R	R	R				
MIBK	108101						W,R	W,R	W,R	R	R				
PGMEA	108656						W,R	W,R	W,R	R	R				
Toluene	108883		X	X	X		W,R	W,R	W,R	R	R				
Hexane	110543		X				W,R	W,R	W,R	R	R				
EGBE	111762		X	X	X		W,R	W,R	W,R	R	R				
DEGBE	112345						W,R	W,R	W,R	R	R				
Xylenes	1330207		X	X			W,R	W,R	W,R	R	R				
EGPE	2807309						W,R	W,R	W,R	R	R				
Cr(VI)	18540299	X	X			Y	W,R	W,R	W,R	R	R				
PAHs-w/o	1151	X				Y	W,R	W,R	W,R	R	R				
Benzene	71432	X	X	X	X		W,R	W,R	W,R	R	R				
Acetaldehyde	75070	X	X	X	X		W,R	W,R	W,R	R	R				
Naphthalene	91203	X	X				W,R	W,R	W,R	R	R				
Acrolein	107028		X	X	X		W,R	W,R	W,R	R	R				
NH3	7664417		X	X			W,R	W,R	W,R	R	R				
Lead	7439921	X				Y	W,R	W,R	W,R	R	R				
Nickel	7440020	X	X	X	X	Y	W,R	W,R	W,R	R	R				
Copper	7440508			X			W,R	W,R	W,R	R	R				
Cadmium	7440439	X	X			Y	W,R	W,R	W,R	R	R				
Sodium Hydroxid	1310732			X			W,R	W,R	W,R	R	R				
HCl	7647010		X	X			W,R	W,R	W,R	R	R				
HF	7664393		X	X		Y	W,R	W,R	W,R	R	R				
Sulfuric Acid	7664939		X	X			W,R	W,R	W,R	R	R				
Nitric Acid	7697372			X			W,R	W,R	W,R	R	R				

OEHHA "Air Toxics Hot Spots Program Risk Assessment Guidelines" Table 6.1 page 6-4. Table 6.3 page 6-7and Table.
W: Modeled for worker receptors. R: Modeled for residential receptors

TABLE 3b. TOXICITY DATA BY SUBSTANCE - TARGET ORGANS

Bowman Plating, Compton, CA
Facility ID # 018989

		Acute Target Organs												Chronic Target Organs												8-Hour Chronic Target Organs											
Substance Name	**CAS No.**	**CV**	**CNS**	**IMMUN**	**Kidney**	**GILV**	**REPRO/DEVEL**	**RESP**	**SKIN**	**EYE**	**BONE/TEETH**	**ENDO**	**BLOOD**	**ODOR**	**CV**	**CNS**	**IMMUN**	**Kidney**	**GILV**	**REPRO/DEVEL**	**RESP**	**SKIN**	**EYE**	**BONE/TEETH**	**ENDO**	**BLOOD**	**ODOR**	**CV**	**CNS**	**IMMUN**	**Kidney**	**GILV**	**REPRO/DEVEL**	**RESP**	**SKIN**	**EYE**	**BONE/TEETH**	**ENDO**	**BLOOD**	**ODOR**
Silica, Crystln	1175																				X																		
Formaldehyde	50000									X											X												X						
Methanol	67561		X																	X																		
Isopropyl Alcoh	67630							X		X								X		X																		
n-Butyl Alcohol	71363																																						
sec-Butyl Alcoh	78922																																						
MEK	78933							X		X																													
1,2,4TriMeBenze	95636																																						
Ethyl Benzene	100414																	X	X	X					X														
PGME	107982																		X																				
MIBK	108101																																						
PGMEA	108656																																						
Toluene	108883		X					X		X													X													X			
Hexane	110543														X																								
EGBE	111762							X		X											X												X						
DEGBE	112345																																						
Xylenes	1330207		X					X		X						X					X		X																
EGPE	2807309																																						
Cr(VI)	18540299																				X					X													
PAHs-w/o	1151																																						
Benzene	71432			X			X						X													X												X	
Acetaldehyde	75070							X		X											X												X						
Naphthalene	91203																				X																		
Acrolein	107028							X		X											X												X						
NH3	7664417							X		X											X																		
Lead	7439921																																						
Nickel	7440020			X																X	X					X				X					X				
Copper	7440508							X																															
Cadmium	7440439																	X			X																		
Sodium Hydroxid	1310732							X	X	X																													
HCl	7647010							X		X											X																		
HF	7664393							X		X											X			X															
Sulfuric Acid	7664939							X													X																		
Nitric Acid	7697372							X																															

OEHHA "Air Toxics Hot Spots Program Risk Assessment Guidelines" Table 6.1 page 6-4. Table 6.3 page 6-7. and HARP output results.

CV: Cardiovascular System
CNS: Central Nervous System
IMMUN: Immune System
KIDNEY: Kidney
GILV: Gastrointestinal Tract & Liver or Alimentary Tract
REPRO/DEVEL: Reproductive System & Developmental
RESP: Respiratory System
SKIN: Skin
EYE: Eye
BONE/TEETH: Bones & Teeth
ENDO: Endocrine System
BLOOD: Hematological System
ODOR: Response to Odors

TABLE 4. EMISSION SOURCE PARAMETERS

Bowman Plating, Compton, CA
Facility ID # 018989

Stack ID	Stack Name	UTM (km) Easting	UTM (km) Northing	Elevation (m)	Release Type	Orientation	Release Height (ft)	Diameter (ft)	Temp (K)	Stack Velocity (ft/min)	Hours of Operation	WAF
1	SPRAY_BOOTH_1	386720	3753754	25	Point	Vertical	30.5	2.5	297.0	2,933.54	Mon-Fri 08:00 - 24:00	2.10
2	SPRAY_BOOTH_2	386714	3753754	25	Point	Vertical	30.5	2.5	297.0	2,933.54	Mon-Fri 08:00 - 24:00	2.10
3	SPRAY_BOOTH_3	386708	3753754	25	Point	Vertical	30.5	2.5	297.0	2,933.54	Mon-Fri 08:00 - 24:00	2.10
4	SPRAY_BOOTH_4_1	386705	3753760	25	Point	Vertical	24	2.5	297.0	1,283.43	Mon-Fri 08:00 - 24:00	2.10
5	SPRAY_BOOTH_4_2	386701.5	3753760	24.64	Point	Vertical	24	2.5	297.0	1,283.43	Mon-Fri 08:00 - 24:00	2.10
6	SPRAY_BOOTH_4_3	386701.5	3753764	24.69	Point	Vertical	24	2.5	297.0	1,283	Mon-Fri 08:00 - 24:00	2.10
7	SPRAY_BOOTH_4_4	386704.9	3753764	24.69	Point	Vertical	24	2.5	297.0	1,283	Mon-Fri 08:00 - 24:00	2.10
8	HEATER	386703.8	3753767	24.73	Point	Vertical	21	1.25	305.4	52	Mon-Fri 08:00 - 24:00	2.10
9	BOILERS	386765.1	3753766	24.82	Point	Vertical	19	1.5	366.5	20	Mon-Fri 08:00 - 24:00	2.10
10	BLAST_CB	386675	3753754	24.54	Point	Vertical	25	0.51	297.0	567	Mon-Fri 08:00-12:00, 13:00-17:00	4.20
12	OVEN_1	386708.5	3753768	24.75	Point	Vertical	24	1	344.3	44	Mon-Fri 08:00 - 24:00	2.10
13	OVEN_2	386725.7	3753769	24.82	Point	Vertical	19	1	343.2	44	Mon-Fri 08:00 - 24:00	2.10
14	OVEN_3	386782.7	3753764	24.82	Point	Vertical	19	1.5	365.4	20	Mon-Fri 08:00 - 24:00	2.10
15	CADMIUM	386782	3753784	24.82	Point	Vertical	38.33	1.67	338.7	2	Mon-Fri 08:00 - 24:00, Sat 06:00-12:00	1.95
16	ANODE_LN	386784	3753787	24.82	Point	Vertical	42.25	1.38	293.7	1,659	Mon-Fri 00:00 - 24:00, Sat 06:00-12:00	1.33
Stack ID	**Stack Name**	**UTM (km) Easting**	**UTM (km) Northing**	**Elevation (m)**	**Release Type**	**Orientation**	**Release Height (ft)**	**Init Vertical Dim (ft)**	**Length (ft)**	**Width (ft)**	**Hours of Operation**	**WAF**
17	PLATE_RM	386768	3753780	24.82	Area	N/A	20	9.30	68.90	36.09	Mon-Fri 08:00 - 24:00, Sat 06:00-12:00	1.95
18	ANODE_RM	386728	3753780	24.82	Area	N/A	25	11.63	87.50	37.50	Mon-Fri 00:00 - 24:00, Sat 06:00-12:00	1.33

TABLE 5a. CANCER BURDEN

Bowman Plating, Compton, CA
Facility ID # 018989

Track No	Block No	Census Tract Population[1]	East UTM	North UTM	Maximum Cancer Risk	Cancer Burden[2]
541300	1004	111	385665.91	3753114.6	1.00E-06	2.09E+11
540102	2011	68	389022.88	3754134.19	1.00E-06	2.10E+11
541604	3003	463	387645.92	3752684.06	1.01E-06	2.10E+11
541700	3004	70	388742.12	3753197.04	1.01E-06	2.11E+11
541700	6004	133	389089.93	3753819.22	1.01E-06	2.11E+11
541400	5007	178	385844.66	3752762.1	1.01E-06	2.09E+11
541700	2002	134	389058.07	3753727.88	1.02E-06	2.11E+11
541700	2007	128	389025.58	3753637.43	1.02E-06	2.11E+11
541604	2007	76	388096.7	3752856.73	1.02E-06	2.10E+11
540203	1015	170	388688.03	3754378.99	1.03E-06	2.10E+11
542601	2003	190	386444.5	3752406.79	1.03E-06	2.10E+11
541300	1007	11	385714.63	3753029.06	1.03E-06	2.09E+11
540203	1011	217	388570.86	3754431.49	1.03E-06	2.10E+11
542601	3001	163	386170.63	3752517.09	1.04E-06	2.10E+11
540203	1018	176	388842.86	3754251.08	1.05E-06	2.10E+11
541400	5006	165	385836.77	3752836.61	1.06E-06	2.09E+11
540501	1001	269	387817.04	3754582	1.06E-06	2.10E+11
541300	1006	10	385715.83	3753106.01	1.07E-06	2.09E+11
541700	6001	150	389007.64	3753953.49	1.07E-06	2.11E+11
541400	4010	87	386133.46	3752563.56	1.07E-06	2.09E+11
540600	1001	315	385983.85	3754411.32	1.09E-06	2.09E+11
541604	2009	219	387873.14	3752827.2	1.09E-06	2.10E+11
541400	1001	559	385742.23	3753855.17	1.10E-06	2.09E+11
542601	2004	249	386545.9	3752450.27	1.10E-06	2.10E+11
541300	1005	12	385717.24	3753184.73	1.10E-06	2.09E+11
541603	2000	487	387382.04	3752647.26	1.10E-06	2.10E+11
542601	1008	213	386683.45	3752446.3	1.10E-06	2.10E+11
541400	5005	183	385832.48	3752910.42	1.11E-06	2.09E+11
541700	1005	197	388367.29	3753048.84	1.11E-06	2.10E+11
541700	3002	128	388794.17	3753440.85	1.13E-06	2.11E+11
541400	4009	192	386133.14	3752622.23	1.14E-06	2.09E+11
541700	6003	112	388920.71	3753880.09	1.14E-06	2.11E+11
541604	2006	132	388109.23	3752954.95	1.15E-06	2.10E+11
541400	5004	212	385828.19	3752984.22	1.16E-06	2.09E+11
541700	2003	126	388888.3	3753789.09	1.16E-06	2.11E+11
541700	2006	90	388856.17	3753698.08	1.17E-06	2.11E+11
540501	1010	194	387578.87	3754548.22	1.17E-06	2.09E+11
542601	2001	162	386342.79	3752554.06	1.18E-06	2.10E+11
541400	5000	210	385744.69	3753306.51	1.19E-06	2.09E+11
541400	4004	183	386107.7	3752690.52	1.20E-06	2.09E+11
541400	5003	124	385823.36	3753059.25	1.20E-06	2.09E+11
541700	4004	2	388725.7	3754130.68	1.21E-06	2.11E+11
541700	6002	54	388823.2	3753914.5	1.21E-06	2.11E+11
541700	1004	190	388379.24	3753160.38	1.23E-06	2.10E+11
542601	1012	113	386702.22	3752538.68	1.24E-06	2.10E+11
541700	2004	25	388791.44	3753823.16	1.24E-06	2.11E+11
541604	2008	301	387880.42	3752926.6	1.25E-06	2.10E+11

541400	5002	153	385819.35	3753133.71	1.25E-06	2.09E+11
541700	2005	49	388759.3	3753731.82	1.26E-06	2.11E+11
541400	4003	128	386083.46	3752758.57	1.26E-06	2.09E+11
540600	1004	78	385873.65	3754003.97	1.26E-06	2.09E+11
541400	4012	61	386327.93	3752618.68	1.27E-06	2.09E+11
541700	4010	209	388706	3754058.94	1.27E-06	2.11E+11
541604	2002	63	388102.94	3753033.32	1.27E-06	2.10E+11
541400	1002	551	385783.76	3753656.49	1.28E-06	2.09E+11
541400	5001	129	385814.61	3753208.51	1.28E-06	2.09E+11
541400	3007	196	386058.49	3752827.3	1.32E-06	2.09E+11
540502	3014	163	388143.64	3753089.62	1.33E-06	2.10E+11
540600	2016	242	386251.81	3754553.39	1.33E-06	2.09E+11
542601	2000	4	386472.11	3752612.74	1.33E-06	2.10E+11
541700	4011	223	388675.06	3753967.37	1.34E-06	2.11E+11
541400	4008	115	386312.9	3752667.99	1.34E-06	2.09E+11
541700	1003	135	388392.67	3753272.56	1.35E-06	2.10E+11
540501	1003	236	387840.99	3754464.82	1.37E-06	2.10E+11
541604	3002	466	387644.8	3752917.4	1.39E-06	2.10E+11
542601	1011	22	386720.72	3752624.52	1.39E-06	2.10E+11
541400	3004	158	386053.92	3752901.66	1.41E-06	2.09E+11
541700	4005	132	388361.33	3754247.75	1.42E-06	2.10E+11
541604	2004	266	387898.48	3753031.52	1.43E-06	2.10E+11
541400	4011	2	386484.83	3752662.93	1.43E-06	2.09E+11
541400	4005	152	386285.22	3752735.41	1.43E-06	2.09E+11
541700	4008	36	388434.15	3754173.81	1.44E-06	2.10E+11
542601	1005	49	386596.92	3752656.6	1.46E-06	2.10E+11
541603	1023	151	387486.98	3752895.65	1.46E-06	2.10E+11
541700	5000	374	388580.11	3753896.4	1.46E-06	2.10E+11
541700	1002	305	388407.2	3753383.85	1.46E-06	2.10E+11
541400	4007	78	386441.34	3752699.05	1.48E-06	2.09E+11
541700	4006	50	388352.65	3754201.27	1.49E-06	2.10E+11
541400	1010	771	385861.03	3753446.62	1.49E-06	2.09E+11
541700	5005	262	388547.02	3753802.41	1.50E-06	2.10E+11
541400	3003	163	386043.61	3752974.53	1.50E-06	2.09E+11
542601	1004	36	386647.61	3752674.19	1.50E-06	2.10E+11
540502	3009	145	388148.13	3753196.03	1.50E-06	2.10E+11
540501	4001	216	387533.27	3754460.59	1.50E-06	2.09E+11
541700	1000	273	388447.44	3753487.4	1.50E-06	2.10E+11
540501	2025	155	387269.49	3754459.51	1.51E-06	2.09E+11
541700	5004	249	388514.62	3753705.08	1.53E-06	2.10E+11
541400	4002	111	386255.98	3752803.08	1.53E-06	2.09E+11
541700	5006	255	388473.99	3753598.65	1.54E-06	2.10E+11
542601	1003	25	386709.02	3752698.07	1.56E-06	2.10E+11
540600	1009	278	386054.33	3754160.28	1.56E-06	2.09E+11
541400	2007	203	386031.26	3753046.99	1.58E-06	2.09E+11
541604	2003	129	387909.45	3753107.02	1.59E-06	2.10E+11
540502	3011	23	388222.35	3753311.05	1.59E-06	2.10E+11
541603	1022	203	387234.19	3752865.6	1.61E-06	2.10E+11
541400	4006	83	386415.24	3752766.9	1.62E-06	2.09E+11
541400	3006	127	386228.22	3752870.84	1.63E-06	2.09E+11
541500	2006	94	386594.14	3752734.05	1.63E-06	2.09E+11
541700	4007	156	388314.35	3754120.88	1.64E-06	2.10E+11
541400	2006	155	386020.02	3753119.65	1.66E-06	2.09E+11
540501	4000	63	387691.89	3754403.82	1.67E-06	2.10E+11
540502	3010	62	388162.22	3753308.32	1.67E-06	2.10E+11
540600	1000	149	386265.27	3754403.29	1.69E-06	2.09E+11

540501	3000	174	388054.96	3754279.86	1.70E-06	2.10E+11
541500	2002	146	386873.44	3752776.41	1.71E-06	2.09E+11
540501	3004	65	388183.81	3754191.17	1.71E-06	2.10E+11
541400	2004	130	386006.53	3753190.13	1.72E-06	2.09E+11
541500	2007	70	386697.77	3752762.64	1.72E-06	2.09E+11
540501	3001	212	387832.13	3754356.24	1.72E-06	2.10E+11
541604	3000	558	387697.61	3753074.59	1.73E-06	2.10E+11
541400	4001	93	386386.73	3752834.23	1.76E-06	2.09E+11
540502	3004	61	388217.06	3753427.12	1.77E-06	2.10E+11
541700	5001	126	388297.35	3754011.18	1.77E-06	2.10E+11
541500	2004	91	386565.93	3752803.03	1.81E-06	2.09E+11
541604	3001	149	387570.73	3753057.69	1.82E-06	2.10E+11
540600	1011	225	386204.5	3754277.59	1.83E-06	2.09E+11
541400	3002	127	386207.98	3752979.32	1.84E-06	2.09E+11
540502	3005	13	388169.66	3753422.24	1.84E-06	2.10E+11
540502	2005	600	387824.77	3753171.13	1.85E-06	2.10E+11
541700	1001	58	388243.96	3753545.02	1.86E-06	2.10E+11
540502	3008	300	387962.74	3753258.22	1.87E-06	2.10E+11
541700	5002	121	388281.62	3753900.79	1.88E-06	2.10E+11
541400	3005	68	386358.51	3752901.77	1.90E-06	2.09E+11
540501	2027	258	387357.75	3754386.71	1.92E-06	2.09E+11
541500	2003	80	386680.1	3752831.61	1.93E-06	2.09E+11
541700	5003	138	388266.73	3753789.84	1.94E-06	2.10E+11
541400	1005	15	385988.04	3753551.89	1.95E-06	2.09E+11
540501	3003	245	388040.25	3754169.91	1.98E-06	2.10E+11
541500	3007	66	386537.7	3752870.02	2.01E-06	2.09E+11
540501	4002	182	387513.98	3754354.8	2.04E-06	2.09E+11
540502	3007	263	387988.51	3753365.82	2.07E-06	2.10E+11
541603	1020	162	387460.19	3753092.82	2.08E-06	2.10E+11
541400	3001	68	386284.89	3753008.9	2.08E-06	2.09E+11
541400	2005	121	386158.7	3753141.5	2.10E-06	2.09E+11
540501	3002	169	387796.97	3754252.52	2.15E-06	2.10E+11
540501	4003	89	387657.37	3754299.98	2.17E-06	2.10E+11
541500	3008	72	386657.52	3752900.2	2.18E-06	2.09E+11
540502	2004	99	387557.68	3753157.98	2.21E-06	2.09E+11
541500	2001	156	386844.77	3752923.8	2.23E-06	2.09E+11
541500	3006	116	386509.29	3752937.68	2.23E-06	2.09E+11
541400	3000	101	386336.13	3753024.92	2.26E-06	2.09E+11
540502	3006	467	388005.06	3753475.64	2.27E-06	2.10E+11
540502	2003	6	387499.35	3753151.24	2.27E-06	2.09E+11
540501	3010	190	388078.23	3753925.15	2.30E-06	2.10E+11
541603	1021	9	387210.49	3753065.73	2.32E-06	2.10E+11
540502	3002	350	388048.51	3753576.82	2.33E-06	2.10E+11
540501	3006	308	388005.26	3754009.52	2.38E-06	2.10E+11
541400	2002	81	386216.09	3753170.09	2.38E-06	2.09E+11
540502	3001	175	388064.11	3753692.42	2.40E-06	2.10E+11
540600	1010	441	386213.67	3754086.5	2.43E-06	2.09E+11
540501	3009	163	388055.56	3753821.94	2.44E-06	2.10E+11
541500	3005	140	386635.13	3752968.67	2.48E-06	2.09E+11
540502	2000	602	387727.65	3753331.64	2.58E-06	2.10E+11
540501	3008	170	387779.26	3754154.03	2.59E-06	2.10E+11
541400	2003	90	386268.12	3753183.66	2.64E-06	2.09E+11
541500	3002	212	386455.96	3753063.86	2.72E-06	2.09E+11
540501	4005	192	387496.08	3754248.1	2.76E-06	2.09E+11
540501	3007	169	387851.24	3754017.88	2.83E-06	2.10E+11
540502	2001	285	387541.23	3753306.68	2.99E-06	2.09E+11

540501	4004	248	387689.97	3754116.94	3.03E-06	2.10E+11
541500	2000	192	386813.72	3753080.43	3.13E-06	2.09E+11
540502	2002	1	387481.28	3753304.06	3.16E-06	2.09E+11
541500	3003	229	386557.62	3753097.8	3.16E-06	2.09E+11
540502	1011	1074	387724.95	3753533.62	3.37E-06	2.10E+11
541500	3004	135	386634.08	3753136.14	3.60E-06	2.09E+11
540501	4009	187	387652.3	3754020.12	3.68E-06	2.10E+11
540501	4006	135	387477.82	3754143.18	3.68E-06	2.09E+11
541603	1019	92	387227.72	3753270.47	3.69E-06	2.10E+11
540502	1004	596	387740.59	3753738.16	3.75E-06	2.10E+11
541500	4000	589	386285.46	3753850.86	4.08E-06	2.09E+11
541500	1007	206	386796.9	3753189.65	4.16E-06	2.09E+11
541500	3000	407	386456.07	3753266.36	4.18E-06	2.09E+11
540502	1010	467	387516.6	3753507.03	4.45E-06	2.09E+11
540502	1000	228	387604.3	3753909.12	4.49E-06	2.10E+11
540501	4007	92	387458.15	3754050.92	4.67E-06	2.09E+11
541603	1018	143	387409.65	3753493.88	5.18E-06	2.10E+11
541500	4003	673	386322.92	3753651.34	5.27E-06	2.09E+11
541500	1006	282	386779.78	3753289.22	5.68E-06	2.09E+11
540502	1002	241	387472.81	3753915.67	5.69E-06	2.09E+11
541500	4005	412	386418.57	3753446.92	5.79E-06	2.09E+11
540502	1007	267	387493.92	3753707.26	5.79E-06	2.09E+11
540502	1008	4	387434.39	3753700.42	6.56E-06	2.09E+11
540502	1003	60	387410.85	3753898.66	6.62E-06	2.09E+11
541603	1004	67	386642.01	3754117.31	6.65E-06	2.09E+11
541603	1005	26	387177.72	3754073.55	6.75E-06	2.10E+11
541603	1017	59	387162.16	3753464.77	7.27E-06	2.10E+11
541603	1010	147	387385.77	3753694.12	7.32E-06	2.10E+11
541603	1009	26	387362.44	3753894.02	7.44E-06	2.10E+11
541500	1005	338	386763.88	3753389.89	8.34E-06	2.09E+11
541603	1006	3	386933.78	3754046.07	9.97E-06	2.10E+11
541603	1011	296	387187.54	3753670.31	1.24E-05	2.10E+11
541603	1008	32	387164.12	3753870.32	1.37E-05	2.10E+11
541500	1004	283	386744.83	3753490.82	1.37E-05	2.09E+11
541500	4004	83	386525.01	3753634.07	1.41E-05	2.09E+11
541500	1003	219	386726.44	3753591.85	2.75E-05	2.09E+11
541500	1000	189	386674.09	3753892.57	3.63E-05	2.09E+11
541603	1007	5	386958.49	3753846.15	3.94E-05	2.10E+11
541500	1002	235	386709.15	3753692.97	8.14E-05	2.09E+11
541500	1001	121	386692.96	3753792.98	1.80E-04	2.09E+11

[1] Population from 2010 Census data using HARP Database

[2] Cancer Burden = (Maximum Cancer Risk) x (Zone of Impact Population)

TABLE 5b. POPULATION EXPOSURE

Bowman Plating, Compton, CA
Facility ID # 018989

Cancer Risk	Population
1.00E-06	36241
1.00E-05	1463
1.00E-04	121

Chronic Hazard	Population
0.5	0
1.0	0
3.0	0
3.0	0

8-Hour Chronic Hazard	Population
0.5	0
1.0	0
3.0	0
3.0	0

Acute	Population
0.5	121
1.0	0
3.0	0
3.0	0

[1] Population from 2010 Census data using HARP Database

TABLE 6a. BUILDING DIMENSIONS AND BOUNDARY RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

Receptor Type	Receptor	Height (ft)	East UTM	North UTM	Elevation	Hill Height
Facility Center	--	--	386730.2	3753772	--	--
Boundary Receptors						
Boundary	3834	--	386828.5	3753751	24.82	24.82
	3835	--	386828.5	3753771	24.82	24.82
	3836	--	386828.5	3753791	24.82	24.82
	3837	--	386828.5	3753792.1	24.82	24.82
	3838	--	386809.6	3753792.1	24.82	24.82
	3839	--	386789.6	3753792.1	24.82	24.82
	3840	--	386769.6	3753792.1	24.82	24.82
	3841	--	386749.6	3753792.1	24.82	24.82
	3842	--	386729.6	3753792.1	24.82	24.82
	3843	--	386709.6	3753792.1	24.82	24.82
	3844	--	386689.6	3753792.1	24.82	24.82
	3845	--	386669.6	3753792.1	24.82	24.82
	3846	--	386649.6	3753792.1	24.82	24.82
	3847	--	386630.5	3753792.1	24.82	24.82
	3848	--	386630.5	3753791.2	24.82	24.82
	3849	--	386630.5	3753771.2	24.82	24.82
	3850	--	386630.5	3753751.2	24.81	24.81
	3851	--	386630.5	3753751	24.81	24.81
	3852	--	386650.3	3753751	24.72	24.72
	3853	--	386670.3	3753751	24.51	24.51
	3854	--	386690.3	3753751	24.51	24.51
	3855	--	386710.3	3753751	24.59	24.59
	3856	--	386730.3	3753751	24.81	24.81
	3857	--	386750.3	3753751	24.82	24.82
	3858	--	386770.3	3753751	24.82	24.82
	3859	--	386790.3	3753751	24.82	24.82
	3860	--	386810.3	3753751	24.82	24.82

TABLE 6a. BUILDING DIMENSIONS AND BOUNDARY RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

Receptor Type	Receptor	Height (ft)	East UTM	North UTM	Elevation	Hill Height
Facility Buildings						
Building	B1	14.0	386672.3	3753752.1	24.51	--
Building	B2	25.0	386705.5	3753784.0	24.82	--
Building	B3	25.0	386728.0	3753791.9	24.82	--
Building	B4	22.5	386789.1	3753756.7	24.82	--
Building	B5	16.0	386688.6	3753766.2	24.73	--
Building	B6	18.0	386705.5	3753772.3	24.82	--
Building	B7	20.0	386768.3	3753791.0	24.82	--
Building	B8	19.0	386775.3	3753756.7	24.82	--
Building Downwash						
Building	DB1	23.0	386674.5	3753818.8	24.82	--
Building	DB2	18.0	386748.5	3753813.9	24.82	--
Building	DB3	20.0	386837.3	3753795.5	24.85	--
Building	DB4	41.0	386854.0	3753753.0	25.04	--
Building	DB5	22.0	386841.0	3753725.0	24.91	--
Building	DB6	20.0	386796.0	3753715.0	24.78	--
Building	DB7	25.0	386641.1	3753728.2	24.53	--

Notes:
UTM coordinates based on WGS 84.

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
Facility Center	--	386730.2	3753772	--	--	
Sensitive Receptors						
Ralph J. Bunche Middle School	2018	386492	3753952	25.11	25.11	7.16E-06
	2019	386512	3753950.8	24.95	24.95	7.93E-06
	2020	386525	3753950	24.82	24.82	8.50E-06
	2021	386525	3753956.9	24.82	24.82	8.29E-06
	2022	386525	3753965	24.82	24.82	8.04E-06
	2023	386536.8	3753966.6	24.82	24.82	8.46E-06
	2024	386556.7	3753969.2	24.82	24.82	9.21E-06
	2025	386576.5	3753971.9	25.06	25.06	9.99E-06
	2026	386596.3	3753974.5	25.12	25.12	1.08E-05
	2027	386616.1	3753977.2	25.12	25.12	1.15E-05
	2028	386636	3753979.8	25.12	25.12	1.23E-05
	2029	386645	3753981	25.18	25.18	1.26E-05
	2030	386655.8	3753982.3	25.36	25.36	1.29E-05
	2031	386675.6	3753984.7	25.42	25.42	1.35E-05
	2032	386695.5	3753987.2	25.4	25.4	1.38E-05
	2033	386715.4	3753989.6	25.12	25.12	1.40E-05
	2034	386735	3753992	25.12	25.12	1.40E-05
	2035	386735	3753992.2	25.12	25.12	1.39E-05
	2036	386732.7	3754012.1	25.12	25.12	1.19E-05
	2037	386730.5	3754032	25.12	25.12	1.02E-05
	2038	386728.2	3754051.8	25.27	25.27	8.95E-06
	2039	386726	3754071.7	25.42	25.42	7.90E-06
	2040	386723.8	3754091.6	25.43	25.43	7.03E-06
	2041	386721.5	3754111.4	25.61	25.61	6.31E-06
	2042	386721	3754116	25.66	25.66	6.16E-06
	2043	386719.3	3754131.3	25.73	25.73	5.70E-06
	2044	386717.1	3754151.2	25.73	25.73	5.17E-06
	2045	386714.9	3754171.1	25.96	25.96	4.73E-06
	2046	386712.7	3754191	26.03	26.03	4.34E-06
	2047	386710.5	3754210.8	26.02	26.02	3.99E-06
	2048	386708.3	3754230.7	26.03	26.03	3.69E-06
	2049	386706.1	3754250.6	26.03	26.03	3.43E-06
	2050	386703.9	3754270.5	26.03	26.03	3.19E-06
	2051	386701.7	3754290.4	26.03	26.03	2.98E-06
	2052	386701	3754297	26.05	26.05	2.91E-06
	2053	386687.8	3754295.5	26.03	26.03	2.93E-06
	2054	386667.9	3754293.1	26.03	26.03	2.95E-06
	2055	386648	3754290.8	26.04	26.04	2.96E-06

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
Ralph J. Bunche Middle School	2056	386628.2	3754288.5	25.8	25.8	2.95E-06
	2057	386608.3	3754286.2	25.73	25.73	2.93E-06
	2058	386588.4	3754283.9	25.73	25.73	2.91E-06
	2059	386568.6	3754281.6	25.73	25.73	2.88E-06
	2060	386548.7	3754279.3	25.73	25.73	2.84E-06
	2061	386528.8	3754277	25.49	25.49	2.78E-06
	2062	386509	3754274.7	25.43	25.43	2.73E-06
	2063	386489.1	3754272.3	25.42	25.42	2.67E-06
	2064	386469.2	3754270	25.42	25.42	2.61E-06
	2065	386449.4	3754267.7	25.42	25.42	2.54E-06
	2066	386429.5	3754265.4	25.42	25.42	2.47E-06
	2067	386426	3754265	25.42	25.42	2.46E-06
	2068	386429	3754248.8	25.42	25.42	2.57E-06
	2069	386432.6	3754229.1	25.42	25.42	2.71E-06
	2070	386436.2	3754209.5	25.21	25.21	2.86E-06
	2071	386439.8	3754189.8	25.12	25.12	3.03E-06
	2072	386443.4	3754170.1	25.12	25.12	3.22E-06
	2073	386447	3754150.5	25.12	25.12	3.42E-06
	2074	386450.6	3754130.8	25.12	25.12	3.64E-06
	2075	386454.3	3754111.1	25.12	25.12	3.88E-06
	2076	386457.9	3754091.4	25.12	25.12	4.14E-06
	2077	386461.5	3754071.8	24.93	24.93	4.43E-06
	2078	386464	3754058	24.82	24.82	4.65E-06
	2079	386465.5	3754052.2	24.82	24.82	4.75E-06
	2080	386470.6	3754032.9	24.82	24.82	5.12E-06
	2081	386475.7	3754013.5	24.82	24.82	5.53E-06
	2082	386480.9	3753994.2	24.82	24.82	5.98E-06
	2083	386486	3753974.8	24.84	24.84	6.49E-06
	2084	386491.1	3753955.5	25.1	25.1	7.05E-06

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
Martin Luther King Elementary	2085	386442	3754049	24.82	24.82	4.43E-06
	2086	386438.1	3754068.6	25.07	25.07	4.15E-06
	2087	386434.2	3754088.2	25.12	25.12	3.89E-06
	2088	386430.2	3754107.8	25.12	25.12	3.66E-06
	2089	386426.3	3754127.4	25.12	25.12	3.44E-06
	2090	386424	3754139	25.12	25.12	3.32E-06
	2091	386415.8	3754139	25.12	25.12	3.26E-06
	2092	386395.8	3754139	25.12	25.12	3.09E-06
	2093	386375.8	3754139	25.12	25.12	2.94E-06
	2094	386355.8	3754139	25.12	25.12	2.79E-06
	2095	386335.8	3754139	25.28	25.28	2.65E-06
	2096	386315.8	3754139	25.42	25.42	2.52E-06
	2097	386295.8	3754139	25.42	25.42	2.39E-06
	2098	386275.8	3754139	25.42	25.42	2.28E-06
	2099	386255.8	3754139	25.42	25.42	2.17E-06
	2100	386235.8	3754139	25.42	25.42	2.07E-06
	2101	386215.8	3754139	25.43	25.43	1.97E-06
	2102	386195.8	3754139	25.73	25.73	1.88E-06
	2103	386179	3754139	25.73	25.73	1.81E-06
	2104	386178.8	3754135.8	25.73	25.73	1.81E-06
	2105	386177.4	3754115.8	25.66	25.66	1.85E-06
	2106	386176	3754095.9	25.42	25.42	1.90E-06
	2107	386174.7	3754075.9	25.42	25.42	1.94E-06
	2108	386173.3	3754056	25.42	25.42	1.98E-06
	2109	386173	3754052	25.42	25.42	1.98E-06
	2110	386189	3754051.8	25.42	25.42	2.07E-06
	2111	386209	3754051.6	25.42	25.42	2.18E-06
	2112	386229	3754051.4	25.42	25.42	2.29E-06
	2113	386249	3754051.2	25.42	25.42	2.42E-06
	2114	386269	3754050.9	25.39	25.39	2.56E-06
	2115	386289	3754050.7	25.14	25.14	2.72E-06
	2116	386309	3754050.5	25.12	25.12	2.88E-06
	2117	386329	3754050.3	25.12	25.12	3.06E-06
	2118	386349	3754050	25.12	25.12	3.26E-06
	2119	386369	3754049.8	25.12	25.12	3.47E-06
	2120	386389	3754049.6	25.12	25.12	3.71E-06
	2121	386409	3754049.4	25.12	25.12	3.96E-06
	2122	386429	3754049.1	24.94	24.94	4.24E-06

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
ISANA Achernar Academy	2725	387040.3	3753545.1	24.53	24.53	1.09E-05
	2726	387043.1	3753525.3	24.51	24.51	9.88E-06
	2727	387045.9	3753505.5	24.51	24.51	8.97E-06
	2728	387048.8	3753485.7	24.42	24.42	8.17E-06
	2729	387051.6	3753465.9	24.22	24.22	7.46E-06
	2730	387054.4	3753446.1	24.21	24.21	6.83E-06
	2731	387057.2	3753426.3	24.21	24.21	6.28E-06
	2732	387059.6	3753409.8	24.17	24.17	5.87E-06
	2733	387056.3	3753409.4	24.12	24.12	5.88E-06
	2734	387036.5	3753406.7	23.9	23.9	5.94E-06
	2735	387016.7	3753404	23.9	23.9	6.00E-06
	2736	386996.8	3753401.3	24.01	24.01	6.07E-06
	2737	386977	3753398.6	23.9	23.9	6.13E-06
	2738	386968.9	3753397.5	23.9	23.9	6.15E-06
	2739	386967.4	3753409.2	23.9	23.9	6.46E-06
	2740	386964.8	3753429	23.94	23.94	7.03E-06
	2741	386962.2	3753448.9	24.23	24.23	7.70E-06
	2742	386959.6	3753468.7	24.52	24.52	8.48E-06
	2743	386957	3753488.5	24.59	24.59	9.38E-06
	2744	386954.4	3753508.4	24.79	24.79	1.05E-05
	2745	386951.8	3753528.2	25.02	25.02	1.17E-05
	2746	386951.4	3753531.3	25.08	25.08	1.19E-05
	2747	386968.1	3753533.9	24.84	24.84	1.18E-05
	2748	386987.8	3753537	24.82	24.82	1.16E-05
	2749	387007.6	3753540	24.82	24.82	1.14E-05
	2750	387027.4	3753543.1	24.71	24.71	1.11E-05
Mona House Head Start	2751	386708.1	3753185.5	23.29	23.29	3.62E-06
	2752	386707.5	3753165.5	23.29	23.29	3.42E-06
	2753	386707	3753145.6	23.29	23.29	3.25E-06
	2754	386706.9	3753145.6	23.29	23.29	3.25E-06
	2755	386686.9	3753145.6	23.29	23.29	3.24E-06
	2756	386681	3753145.6	23.29	23.29	3.24E-06
	2757	386677.2	3753159.2	23.29	23.29	3.35E-06
	2758	386671.7	3753178.4	23.29	23.29	3.53E-06
	2759	386669.6	3753185.9	23.29	23.29	3.60E-06
	2760	386681.8	3753185.8	23.29	23.29	3.61E-06
	2761	386701.8	3753185.6	23.29	23.29	3.62E-06

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
Anderson Elementary	2790	386228	3753330.7	25.12	25.12	2.58E-06
	2791	386235.4	3753312.1	25.12	25.12	2.56E-06
	2792	386242.8	3753293.5	25.12	25.12	2.54E-06
	2793	386250.1	3753274.9	25.12	25.12	2.51E-06
	2794	386257.2	3753257.1	25.05	25.05	2.49E-06
	2795	386256.4	3753257	25.04	25.04	2.49E-06
	2796	386236.5	3753254.5	24.82	24.82	2.38E-06
	2797	386216.7	3753252	24.82	24.82	2.29E-06
	2798	386196.9	3753249.5	24.81	24.81	2.20E-06
	2799	386177	3753247	24.56	24.56	2.11E-06
	2800	386157.2	3753244.5	24.51	24.51	2.03E-06
	2801	386137.3	3753242	24.51	24.51	1.95E-06
	2802	386117.5	3753239.5	24.51	24.51	1.88E-06
	2803	386097.6	3753237	24.51	24.51	1.81E-06
	2804	386077.8	3753234.5	24.51	24.51	1.74E-06
	2805	386058	3753232	24.48	24.48	1.68E-06
	2806	386038.1	3753229.4	24.31	24.31	1.62E-06
	2807	386018.8	3753224.6	24.21	24.21	1.56E-06
	2808	385999.7	3753218.7	24.27	24.27	1.50E-06
	2809	385980.6	3753212.8	24.21	24.21	1.45E-06
	2810	385961.4	3753206.9	24.21	24.21	1.40E-06
	2811	385942.3	3753201.1	24.21	24.21	1.35E-06
	2812	385923.2	3753195.2	24.21	24.21	1.31E-06
	2813	385915.8	3753192.9	24.21	24.21	1.29E-06
	2814	385913.7	3753205	24.47	24.47	1.29E-06
	2815	385910.3	3753224.7	24.51	24.51	1.30E-06
	2816	385906.8	3753244.4	24.51	24.51	1.31E-06
	2817	385903.4	3753264.1	24.51	24.51	1.31E-06
	2818	385902.8	3753284	24.51	24.51	1.33E-06
	2819	385902.5	3753304	24.51	24.51	1.34E-06
	2820	385902.3	3753324	24.51	24.51	1.35E-06
	2821	385902.2	3753332.4	24.51	24.51	1.35E-06
	2822	385913.8	3753332.3	24.51	24.51	1.38E-06
	2823	385933.8	3753332.2	24.51	24.51	1.43E-06
	2824	385953.8	3753332.1	24.51	24.51	1.48E-06
	2825	385973.8	3753332	24.51	24.51	1.54E-06
	2826	385993.8	3753331.9	24.51	24.51	1.60E-06
	2827	386013.8	3753331.8	24.51	24.51	1.66E-06
	2828	386033.8	3753331.7	24.51	24.51	1.73E-06
	2829	386053.8	3753331.6	24.53	24.53	1.80E-06
	2830	386073.8	3753331.5	24.8	24.8	1.87E-06
	2831	386093.8	3753331.4	24.82	24.82	1.95E-06
	2832	386113.8	3753331.3	24.82	24.82	2.03E-06
	2833	386133.8	3753331.2	24.82	24.82	2.11E-06
	2834	386153.8	3753331.1	24.82	24.82	2.20E-06
	2835	386173.8	3753331	24.81	24.81	2.30E-06
	2836	386193.8	3753330.9	24.88	24.88	2.40E-06
	2837	386213.8	3753330.8	25.13	25.13	2.50E-06

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
Jefferson Elementary	2838	386876.4	3753010.6	23.29	23.29	2.26E-06
	2839	386876.8	3752990.6	23.29	23.29	2.17E-06
	2840	386877.2	3752970.6	23.29	23.29	2.09E-06
	2841	386877.7	3752950.6	23.31	23.31	2.01E-06
	2842	386878.1	3752930.6	23.29	23.29	1.93E-06
	2843	386878.5	3752910.6	23.29	23.29	1.86E-06
	2844	386878.9	3752890.6	23.29	23.29	1.79E-06
	2845	386879.3	3752874.1	23.29	23.29	1.74E-06
	2846	386875.8	3752874.1	23.29	23.29	1.74E-06
	2847	386855.8	3752874.2	23.29	23.29	1.75E-06
	2848	386835.8	3752874.2	23.29	23.29	1.77E-06
	2849	386815.8	3752874.2	23.29	23.29	1.78E-06
	2850	386795.8	3752874.3	23.26	23.26	1.79E-06
	2851	386775.8	3752874.3	23.17	23.17	1.79E-06
	2852	386755.8	3752874.4	22.99	22.99	1.80E-06
	2853	386750.7	3752874.4	22.99	22.99	1.80E-06
	2854	386747	3752888.8	22.99	22.99	1.85E-06
	2855	386742	3752908.2	22.99	22.99	1.92E-06
	2856	386736.9	3752927.5	23	23	1.99E-06
	2857	386731.9	3752946.9	23.24	23.24	2.07E-06
	2858	386726.9	3752966.2	23	23	2.15E-06
	2859	386721.9	3752985.6	23.02	23.02	2.24E-06
	2860	386716.9	3753005	23.26	23.26	2.34E-06
	2861	386715.7	3753009.5	23.21	23.21	2.36E-06
	2862	386731	3753009.6	23.1	23.1	2.36E-06
	2863	386751	3753009.7	23.15	23.15	2.35E-06
	2864	386771	3753009.9	23.29	23.29	2.34E-06
	2865	386791	3753010	23.29	23.29	2.33E-06
	2866	386811	3753010.2	23.29	23.29	2.32E-06
	2867	386831	3753010.3	23.29	23.29	2.31E-06
	2868	386851	3753010.4	23.29	23.29	2.29E-06
	2869	386871	3753010.6	23.29	23.29	2.27E-06

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
Lindbergh Elementary School	2870	387831.9	3753738.5	24.51	24.51	2.83E-06
	2871	387812.1	3753735.4	24.51	24.51	2.91E-06
	2872	387792.4	3753732.3	24.51	24.51	3.00E-06
	2873	387772.6	3753729.1	24.51	24.51	3.09E-06
	2874	387752.9	3753726	24.51	24.51	3.18E-06
	2875	387733.1	3753722.9	24.51	24.51	3.28E-06
	2876	387713.4	3753719.8	24.51	24.51	3.38E-06
	2877	387693.6	3753716.7	24.51	24.51	3.49E-06
	2878	387690.6	3753716.2	24.51	24.51	3.50E-06
	2879	387689.1	3753733.1	24.51	24.51	3.53E-06
	2880	387688	3753744.6	24.51	24.51	3.54E-06
	2881	387679.7	3753743.4	24.51	24.51	3.59E-06
	2882	387676.6	3753742.9	24.51	24.51	3.61E-06
	2883	387674.6	3753759.7	24.51	24.51	3.63E-06
	2884	387672.2	3753779.5	24.51	24.51	3.65E-06
	2885	387669.9	3753799.4	24.54	24.54	3.65E-06
	2886	387667.5	3753819.3	24.78	24.78	3.66E-06
	2887	387665.7	3753834.3	24.82	24.82	3.65E-06
	2888	387670.5	3753834.8	24.82	24.82	3.62E-06
	2889	387683.6	3753836.1	24.82	24.82	3.54E-06
	2890	387683.2	3753843	24.82	24.82	3.54E-06
	2891	387681.9	3753862.9	24.82	24.82	3.51E-06
	2892	387685	3753881.5	24.82	24.82	3.46E-06
	2893	387697.1	3753897.5	24.82	24.82	3.36E-06
	2894	387707.3	3753910.9	24.82	24.82	3.28E-06
	2895	387710.1	3753909.5	24.82	24.82	3.27E-06
	2896	387728	3753900.7	24.82	24.82	3.20E-06
	2897	387747.2	3753897.3	24.82	24.82	3.11E-06
	2898	387767.1	3753898	24.82	24.82	3.02E-06
	2899	387786.8	3753897.5	24.82	24.82	2.93E-06
	2900	387803.4	3753886.3	24.82	24.82	2.88E-06
	2901	387820	3753875.1	24.82	24.82	2.83E-06
	2902	387836.5	3753863.9	24.82	24.82	2.77E-06
	2903	387853.1	3753852.8	24.82	24.82	2.72E-06
	2904	387871.9	3753846.9	24.82	24.82	2.66E-06
	2905	387891.5	3753843.1	24.82	24.82	2.59E-06
	2906	387898	3753841.8	24.82	24.82	2.57E-06
	2907	387889.8	3753831.2	24.82	24.82	2.60E-06
	2908	387877.5	3753815.5	24.82	24.82	2.65E-06
	2909	387865.2	3753799.7	24.82	24.82	2.71E-06
	2910	387852.9	3753783.9	24.82	24.82	2.76E-06
	2911	387840.6	3753768.1	24.82	24.82	2.80E-06
	2912	387831.3	3753751.4	24.61	24.61	2.84E-06

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
Helen Keller Elementary School	2925	388403.2	3753334.7	24.21	24.21	1.22E-06
	2926	388395.7	3753316.2	24.21	24.21	1.21E-06
	2927	388388.2	3753297.6	24.21	24.21	1.20E-06
	2928	388380.8	3753279.1	24.21	24.21	1.19E-06
	2929	388373.3	3753260.5	24.21	24.21	1.18E-06
	2930	388366.5	3753243.7	24.03	24.03	1.16E-06
	2931	388364.7	3753244.3	24.01	24.01	1.17E-06
	2932	388345.9	3753251.1	23.91	23.91	1.19E-06
	2933	388327.1	3753257.8	23.97	23.97	1.21E-06
	2934	388308.2	3753264.5	23.95	23.95	1.24E-06
	2935	388289.4	3753271.3	23.9	23.9	1.26E-06
	2936	388270.4	3753277.2	23.9	23.9	1.29E-06
	2937	388250.4	3753277.2	23.9	23.9	1.31E-06
	2938	388230.4	3753277.2	23.9	23.9	1.33E-06
	2939	388222.5	3753277.2	23.9	23.9	1.34E-06
	2940	388222.4	3753289.3	23.9	23.9	1.35E-06
	2941	388222.2	3753309.3	24.16	24.16	1.38E-06
	2942	388222.1	3753329.3	24.21	24.21	1.41E-06
	2943	388221.9	3753349.3	24.21	24.21	1.43E-06
	2944	388221.8	3753369.3	24.21	24.21	1.46E-06
	2945	388221.7	3753378	24.21	24.21	1.47E-06
	2946	388233	3753378	24.21	24.21	1.45E-06
	2947	388253	3753378	24.21	24.21	1.43E-06
	2948	388272.8	3753376.7	24.21	24.21	1.40E-06
	2949	388291.8	3753370.6	24.21	24.21	1.37E-06
	2950	388310.8	3753364.4	24.21	24.21	1.35E-06
	2951	388329.9	3753358.3	24.21	24.21	1.32E-06
	2952	388348.9	3753352.2	24.21	24.21	1.29E-06
	2953	388368	3753346	24.21	24.21	1.27E-06
	2954	388387	3753339.9	24.21	24.21	1.24E-06

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
Lynwood High School	2955	388946.5	3753507.9	25.12	25.12	9.04E-07
	2956	388940.6	3753488.8	24.87	24.87	9.02E-07
	2957	388934.7	3753469.7	24.82	24.82	8.99E-07
	2958	388928.8	3753450.6	24.82	24.82	8.95E-07
	2959	388923	3753431.4	24.82	24.82	8.92E-07
	2960	388917.1	3753412.3	24.82	24.82	8.88E-07
	2961	388911.2	3753393.2	24.82	24.82	8.84E-07
	2962	388905.3	3753374.1	24.78	24.78	8.78E-07
	2963	388899.4	3753355	24.51	24.51	8.74E-07
	2964	388893.5	3753335.9	24.51	24.51	8.68E-07
	2965	388887.6	3753316.8	24.51	24.51	8.62E-07
	2966	388881.8	3753297.6	24.51	24.51	8.56E-07
	2967	388875.9	3753278.5	24.51	24.51	8.50E-07
	2968	388870	3753259.4	24.51	24.51	8.43E-07
	2969	388864.1	3753240.3	24.35	24.35	8.36E-07
	2970	388858.6	3753222.4	24.21	24.21	8.29E-07
	2971	388857.4	3753222.8	24.21	24.21	8.30E-07
	2972	388838.6	3753229.5	24.21	24.21	8.43E-07
	2973	388819.7	3753236.3	24.21	24.21	8.57E-07
	2974	388800.9	3753243	24.21	24.21	8.70E-07
	2975	388782	3753249.7	24.33	24.33	8.84E-07
	2976	388763.2	3753256.4	24.47	24.47	8.99E-07
	2977	388744.4	3753263.1	24.46	24.46	9.14E-07
	2978	388725.5	3753269.8	24.5	24.5	9.29E-07
	2979	388706.7	3753276.5	24.5	24.5	9.45E-07
	2980	388687.8	3753283.2	24.51	24.51	9.61E-07
	2981	388669	3753290	24.51	24.51	9.77E-07
	2982	388650.2	3753296.7	24.51	24.51	9.94E-07
	2983	388631.3	3753303.4	24.51	24.51	1.01E-06
	2984	388612.5	3753310.1	24.51	24.51	1.03E-06
	2985	388593.6	3753316.8	24.51	24.51	1.05E-06
	2986	388578.2	3753322.3	24.51	24.51	1.06E-06
	2987	388579.4	3753325.7	24.51	24.51	1.06E-06
	2988	388585.8	3753344.7	24.51	24.51	1.07E-06
	2989	388592.2	3753363.6	24.51	24.51	1.08E-06
	2990	388598.7	3753382.5	24.51	24.51	1.09E-06
	2991	388605.1	3753401.5	24.52	24.52	1.10E-06
	2992	388611.5	3753420.4	24.8	24.8	1.10E-06
	2993	388618	3753439.3	24.82	24.82	1.11E-06
	2994	388624.4	3753458.3	24.82	24.82	1.11E-06
	2995	388630.8	3753477.2	24.82	24.82	1.12E-06
	2996	388637.3	3753496.2	24.82	24.82	1.12E-06
	2997	388643.7	3753515.1	24.82	24.82	1.13E-06
	2998	388650.1	3753534	24.82	24.82	1.13E-06
	2999	388656.6	3753553	25.09	25.09	1.13E-06
	3000	388663	3753571.9	25.12	25.12	1.13E-06
	3001	388669.4	3753590.8	25.12	25.12	1.13E-06
	3002	388673.7	3753603.4	25.12	25.12	1.13E-06
	3003	388680.1	3753601.2	25.12	25.12	1.13E-06
	3004	388698.9	3753594.6	25.12	25.12	1.11E-06
	3005	388717.8	3753588	25.12	25.12	1.09E-06
	3006	388736.7	3753581.4	25.12	25.12	1.07E-06

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
Lynwood High School	3007	388755.6	3753574.7	25.12	25.12	1.06E-06
	3008	388774.4	3753568.1	25.12	25.12	1.04E-06
	3009	388793.3	3753561.5	25.12	25.12	1.02E-06
	3010	388812.2	3753554.9	25.12	25.12	1.01E-06
	3011	388831.1	3753548.3	25.12	25.12	9.93E-07
	3012	388849.9	3753541.7	25.12	25.12	9.77E-07
	3013	388868.8	3753535.1	25.12	25.12	9.62E-07
	3014	388887.7	3753528.5	25.12	25.12	9.47E-07
	3015	388906.6	3753521.9	25.12	25.12	9.33E-07
	3016	388925.5	3753515.3	25.12	25.12	9.19E-07
	3017	388944.3	3753508.7	25.12	25.12	9.06E-07
Rosa Parks Elementary	3018	388901.8	3753639.9	25.42	25.42	9.70E-07
	3019	388894.8	3753621.1	25.28	25.28	9.68E-07
	3020	388887.9	3753602.4	25.12	25.12	9.67E-07
	3021	388880.9	3753583.6	25.12	25.12	9.68E-07
	3022	388874	3753564.9	25.12	25.12	9.68E-07
	3023	388867	3753546.1	25.12	25.12	9.67E-07
	3024	388865.3	3753541.5	25.12	25.12	9.67E-07
	3025	388851.3	3753547	25.12	25.12	9.78E-07
	3026	388832.7	3753554.3	25.12	25.12	9.94E-07
	3027	388814.1	3753561.6	25.12	25.12	1.01E-06
	3028	388795.5	3753569	25.12	25.12	1.02E-06
	3029	388776.8	3753576.3	25.12	25.12	1.04E-06
	3030	388758.2	3753583.6	25.12	25.12	1.06E-06
	3031	388739.6	3753590.9	25.12	25.12	1.08E-06
	3032	388721.4	3753598.1	25.12	25.12	1.09E-06
	3033	388721.5	3753598.5	25.12	25.12	1.09E-06
	3034	388728.6	3753617.2	25.12	25.12	1.09E-06
	3035	388735.6	3753636	25.12	25.12	1.09E-06
	3036	388742.6	3753654.7	25.4	25.4	1.09E-06
	3037	388749.6	3753673.4	25.42	25.42	1.09E-06
	3038	388755.7	3753689.8	25.42	25.42	1.09E-06
	3039	388758.1	3753689	25.42	25.42	1.09E-06
	3040	388777	3753682.5	25.42	25.42	1.07E-06
	3041	388795.9	3753676.1	25.42	25.42	1.05E-06
	3042	388814.9	3753669.6	25.42	25.42	1.04E-06
	3043	388833.8	3753663.1	25.42	25.42	1.02E-06
	3044	388852.7	3753656.7	25.42	25.42	1.01E-06
	3045	388871.6	3753650.2	25.42	25.42	9.93E-07
	3046	388890.6	3753643.7	25.42	25.42	9.78E-07

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
Mark Twain Elementary	3047	389087.4	3753286.4	24.51	24.51	7.52E-07
	3048	389081	3753267.5	24.51	24.51	7.48E-07
	3049	389074.5	3753248.5	24.51	24.51	7.43E-07
	3050	389068.1	3753229.6	24.49	24.49	7.38E-07
	3051	389061.6	3753210.7	24.21	24.21	7.33E-07
	3052	389055.2	3753191.7	24.21	24.21	7.27E-07
	3053	389048.8	3753172.8	24.21	24.21	7.21E-07
	3054	389046	3753164.7	24.21	24.21	7.19E-07
	3055	389056.7	3753160.7	24.21	24.21	7.13E-07
	3056	389075.5	3753153.8	24.21	24.21	7.03E-07
	3057	389094.3	3753147	24.21	24.21	6.93E-07
	3058	389113.1	3753140.1	24.21	24.21	6.83E-07
	3059	389131.8	3753133.2	24.21	24.21	6.74E-07
	3060	389150.6	3753126.3	24.21	24.21	6.64E-07
	3061	389169.4	3753119.4	24.21	24.21	6.55E-07
	3062	389188.2	3753112.5	24.21	24.21	6.47E-07
	3063	389206.9	3753105.6	24.21	24.21	6.38E-07
	3064	389225.7	3753098.7	24.21	24.21	6.30E-07
	3065	389244.5	3753091.8	24.21	24.21	6.21E-07
	3066	389250.6	3753089.5	24.21	24.21	6.18E-07
	3067	389254.6	3753102.4	24.21	24.21	6.22E-07
	3068	389260.5	3753121.5	24.21	24.21	6.27E-07
	3069	389266.4	3753140.6	24.21	24.21	6.32E-07
	3070	389272.3	3753159.7	24.21	24.21	6.37E-07
	3071	389278.2	3753178.8	24.21	24.21	6.42E-07
	3072	389284.1	3753197.9	24.23	24.23	6.46E-07
	3073	389288.2	3753211.3	24.51	24.51	6.49E-07
	3074	389282.6	3753213.4	24.51	24.51	6.52E-07
	3075	389263.8	3753220.4	24.51	24.51	6.61E-07
	3076	389245.1	3753227.4	24.51	24.51	6.70E-07
	3077	389226.4	3753234.4	24.51	24.51	6.79E-07
	3078	389207.7	3753241.4	24.51	24.51	6.88E-07
	3079	389188.9	3753248.4	24.51	24.51	6.97E-07
	3080	389170.2	3753255.4	24.51	24.51	7.07E-07
	3081	389151.5	3753262.4	24.51	24.51	7.17E-07
	3082	389132.7	3753269.4	24.51	24.51	7.27E-07
	3083	389114	3753276.5	24.51	24.51	7.37E-07
	3084	389095.3	3753283.5	24.51	24.51	7.48E-07

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
Foster Elementary School	3085	389005.6	3752476.4	22.99	22.99	4.32E-07
	3086	389006.9	3752456.4	22.99	22.99	4.25E-07
	3087	389008.2	3752436.5	22.99	22.99	4.18E-07
	3088	389009.4	3752416.5	22.99	22.99	4.12E-07
	3089	389010.7	3752396.6	22.99	22.99	4.05E-07
	3090	389011.2	3752389	22.99	22.99	4.02E-07
	3091	388998.9	3752390.7	22.99	22.99	4.04E-07
	3092	388979.1	3752393.4	22.99	22.99	4.07E-07
	3093	388959.3	3752396.2	22.99	22.99	4.11E-07
	3094	388939.5	3752398.9	22.99	22.99	4.14E-07
	3095	388919.6	3752401.6	22.99	22.99	4.17E-07
	3096	388899.8	3752404.4	22.99	22.99	4.21E-07
	3097	388880	3752407.1	22.99	22.99	4.24E-07
	3098	388860.2	3752409.9	22.99	22.99	4.28E-07
	3099	388840.4	3752412.6	22.99	22.99	4.31E-07
	3100	388820.6	3752415.3	22.99	22.99	4.35E-07
	3101	388800.8	3752418.1	22.99	22.99	4.38E-07
	3102	388785.3	3752420.2	22.99	22.99	4.41E-07
	3103	388784.9	3752424.6	22.99	22.99	4.43E-07
	3104	388783	3752444.5	22.99	22.99	4.51E-07
	3105	388781.2	3752464.4	22.99	22.99	4.58E-07
	3106	388780	3752477	22.99	22.99	4.64E-07
	3107	388772.8	3752478.3	22.99	22.99	4.65E-07
	3108	388753.1	3752482	22.99	22.99	4.70E-07
	3109	388734.2	3752485.5	22.99	22.99	4.74E-07
	3110	388734.2	3752486.2	22.99	22.99	4.74E-07
	3111	388735	3752506.2	22.99	22.99	4.82E-07
	3112	388735.5	3752519	22.99	22.99	4.88E-07
	3113	388742.7	3752518.2	22.99	22.99	4.86E-07
	3114	388762.6	3752516	22.99	22.99	4.82E-07
	3115	388782.4	3752513.8	22.99	22.99	4.79E-07
	3116	388802.3	3752511.5	22.99	22.99	4.75E-07
	3117	388822.2	3752509.3	22.99	22.99	4.70E-07
	3118	388842.1	3752507.1	22.99	22.99	4.67E-07
	3119	388861.9	3752504.9	22.99	22.99	4.63E-07
	3120	388881.8	3752502.7	22.99	22.99	4.59E-07
	3121	388901.7	3752500.5	22.99	22.99	4.55E-07
	3122	388921.6	3752498.2	22.99	22.99	4.52E-07
	3123	388941.4	3752496	22.99	22.99	4.48E-07
	3124	388961.3	3752493.8	22.99	22.99	4.45E-07
	3125	388981.2	3752491.6	22.99	22.99	4.41E-07
	3126	389001.1	3752489.4	22.99	22.99	4.38E-07
	3127	389004.3	3752489	22.99	22.99	4.37E-07

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
Mayo Elementary	3128	387787.5	3752046.6	22.07	22.07	4.53E-07
	3129	387807.4	3752048	22.07	22.07	4.50E-07
	3130	387827.4	3752049.5	22.07	22.07	4.47E-07
	3131	387847.3	3752050.9	22.09	22.09	4.44E-07
	3132	387849.7	3752051.1	22.09	22.09	4.44E-07
	3133	387850.5	3752033.5	22.07	22.07	4.38E-07
	3134	387851.5	3752013.5	22.07	22.07	4.32E-07
	3135	387852.4	3751993.5	22.07	22.07	4.25E-07
	3136	387853.4	3751973.6	22.07	22.07	4.19E-07
	3137	387854.4	3751953.6	22.07	22.07	4.13E-07
	3138	387855.3	3751933.6	22.07	22.07	4.08E-07
	3139	387856.3	3751913.6	22.07	22.07	4.02E-07
	3140	387857.2	3751893.6	22.07	22.07	3.96E-07
	3141	387857.5	3751887.8	22.07	22.07	3.94E-07
	3142	387843.4	3751887.3	22.07	22.07	3.96E-07
	3143	387823.4	3751886.7	22.07	22.07	3.99E-07
	3144	387803.4	3751886	22.07	22.07	4.02E-07
	3145	387797.9	3751885.8	22.07	22.07	4.02E-07
	3146	387797	3751900.3	22.07	22.07	4.07E-07
	3147	387795.7	3751920.2	22.07	22.07	4.13E-07
	3148	387794.4	3751940.2	22.07	22.07	4.19E-07
	3149	387793.1	3751960.2	22.07	22.07	4.25E-07
	3150	387791.8	3751980.1	22.07	22.07	4.31E-07
	3151	387790.5	3752000.1	22.07	22.07	4.37E-07
	3152	387789.2	3752020	22.07	22.07	4.44E-07
	3153	387787.9	3752040	22.07	22.07	4.51E-07

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
Rosecrans Elementary	3154	386415.6	3752304.1	22.59	22.59	7.91E-07
	3155	386414	3752303.1	22.56	22.56	7.89E-07
	3156	386421.6	3752286.7	22.38	22.38	7.77E-07
	3157	386430	3752268.5	22.38	22.38	7.64E-07
	3158	386438.5	3752250.4	22.38	22.38	7.51E-07
	3159	386446.9	3752232.2	22.38	22.38	7.38E-07
	3160	386455.3	3752214.1	22.38	22.38	7.25E-07
	3161	386463.7	3752196	22.38	22.38	7.13E-07
	3162	386472.1	3752177.8	22.38	22.38	7.02E-07
	3163	386474.7	3752158.2	22.38	22.38	6.88E-07
	3164	386475.7	3752138.3	22.38	22.38	6.75E-07
	3165	386476.5	3752121.9	22.38	22.38	6.64E-07
	3166	386472.9	3752121.9	22.38	22.38	6.64E-07
	3167	386452.9	3752121.8	22.38	22.38	6.62E-07
	3168	386432.9	3752121.7	22.38	22.38	6.61E-07
	3169	386412.9	3752121.7	22.38	22.38	6.59E-07
	3170	386392.9	3752121.6	22.38	22.38	6.56E-07
	3171	386372.9	3752121.5	22.38	22.38	6.54E-07
	3172	386352.9	3752121.4	22.38	22.38	6.51E-07
	3173	386343.8	3752121.4	22.38	22.38	6.50E-07
	3174	386343.9	3752132.3	22.38	22.38	6.57E-07
	3175	386344.2	3752152.3	22.38	22.38	6.70E-07
	3176	386344.3	3752165.1	22.38	22.38	6.78E-07
	3177	386337.1	3752165.1	22.38	22.38	6.76E-07
	3178	386317.1	3752165.1	22.38	22.38	6.73E-07
	3179	386297.1	3752165.1	22.38	22.38	6.70E-07
	3180	386283.9	3752165.1	22.38	22.38	6.68E-07
	3181	386283.4	3752171.9	22.38	22.38	6.72E-07
	3182	386282	3752191.9	22.38	22.38	6.84E-07
	3183	386280.7	3752211.8	22.38	22.38	6.97E-07
	3184	386279.3	3752231.8	22.55	22.55	7.11E-07
	3185	386277.9	3752251.7	22.68	22.68	7.24E-07
	3186	386276.5	3752271.7	22.68	22.68	7.38E-07
	3187	386275.1	3752291.6	22.68	22.68	7.52E-07
	3188	386273.7	3752311.6	22.68	22.68	7.67E-07
	3189	386273	3752322.3	22.68	22.68	7.75E-07
	3190	386282.2	3752322.5	22.68	22.68	7.78E-07
	3191	386302.2	3752323	22.68	22.68	7.83E-07
	3192	386322.2	3752323.5	22.68	22.68	7.88E-07
	3193	386342.2	3752324	22.68	22.68	7.93E-07
	3194	386359.9	3752324.4	22.68	22.68	7.97E-07
	3195	386360.8	3752322.3	22.68	22.68	7.96E-07
	3196	386368.9	3752304	22.68	22.68	7.82E-07
	3197	386374.5	3752291.1	22.68	22.68	7.73E-07
	3198	386380.2	3752292.9	22.68	22.68	7.76E-07
	3199	386399.3	3752298.9	22.66	22.66	7.84E-07

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
Sunshine Daycare Preschool Center	2762	387514.3	3753673.6	24.51	24.51	4.72E-06
	2763	387516.4	3753653.7	24.37	24.37	4.63E-06
	2764	387516.7	3753651.3	24.32	24.32	4.61E-06
	2765	387499.3	3753648.9	24.28	24.28	4.76E-06
	2766	387479.5	3753646.2	24.22	24.22	4.94E-06
	2767	387465.9	3753644.4	24.21	24.21	5.07E-06
	2768	387465.1	3753650.7	24.21	24.21	5.11E-06
	2769	387463.3	3753666	24.42	24.42	5.20E-06
	2770	387467.8	3753666.7	24.43	24.43	5.16E-06
	2771	387487.6	3753669.6	24.51	24.51	4.96E-06
	2772	387507.4	3753672.6	24.51	24.51	4.78E-06
Ella Fitzgerald Child Care Center	2773	386559.9	3754284.4	25.73	25.73	2.83E-06
	2774	386576	3754286.3	25.73	25.73	2.86E-06
	2775	386575.6	3754290.1	25.73	25.73	2.83E-06
	2776	386574.8	3754299	25.73	25.73	2.75E-06
	2777	386585.7	3754300.6	25.73	25.73	2.76E-06
	2778	386603.9	3754303.4	25.74	25.74	2.77E-06
	2779	386603.8	3754305	25.74	25.74	2.76E-06
	2780	386602.5	3754325	25.81	25.81	2.60E-06
	2781	386602	3754333.4	25.94	25.94	2.54E-06
	2782	386590.5	3754332.5	26	26	2.53E-06
	2783	386575.7	3754331.3	25.98	25.98	2.51E-06
	2784	386575.7	3754326.1	25.92	25.92	2.55E-06
	2785	386575.7	3754324.1	25.88	25.88	2.56E-06
	2786	386557.8	3754323	25.73	25.73	2.53E-06
	2787	386555.5	3754322.9	25.73	25.73	2.52E-06
	2788	386557.5	3754305.3	25.73	25.73	2.66E-06
	2789	386559.8	3754285.4	25.73	25.73	2.82E-06

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
We Care Daycare Center	2913	387789.9	3753664.6	24.51	24.51	2.94E-06
	2914	387786.5	3753684.3	24.51	24.51	2.98E-06
	2915	387783.1	3753704	24.51	24.51	3.02E-06
	2916	387779.9	3753722.8	24.51	24.51	3.05E-06
	2917	387779	3753722.6	24.51	24.51	3.05E-06
	2918	387759.4	3753718.7	24.51	24.51	3.14E-06
	2919	387753.6	3753717.5	24.51	24.51	3.17E-06
	2920	387755.9	3753703.6	24.51	24.51	3.14E-06
	2921	387759.2	3753683.8	24.51	24.51	3.11E-06
	2922	387762.5	3753664.1	24.51	24.51	3.06E-06
	2923	387762.8	3753662.4	24.51	24.51	3.06E-06
	2924	387781	3753663.9	24.51	24.51	2.98E-06
Tiny Treasures Daycare	3200	388154.6	3754050.1	25.42	25.42	1.71E-06
	3201	388153.8	3754030.1	25.42	25.42	1.74E-06
	3202	388153.5	3754021.2	25.42	25.42	1.75E-06
	3203	388142.4	3754020.7	25.42	25.42	1.77E-06
	3204	388122.4	3754019.9	25.42	25.42	1.81E-06
	3205	388109.9	3754019.4	25.42	25.42	1.83E-06
	3206	388110	3754026.8	25.42	25.42	1.82E-06
	3207	388110.3	3754046.8	25.42	25.42	1.80E-06
	3208	388110.3	3754049.1	25.42	25.42	1.79E-06
	3209	388128	3754049.5	25.42	25.42	1.76E-06
	3210	388148	3754050	25.42	25.42	1.72E-06
Griggs-Smith Family Child Care	3211	387597.3	3753008	23.29	23.29	1.42E-06
	3212	387599.9	3752988.2	23.29	23.29	1.38E-06
	3213	387602.5	3752968.3	23.29	23.29	1.33E-06
	3214	387603	3752964.7	23.29	23.29	1.32E-06
	3215	387619.2	3752966.6	23.29	23.29	1.31E-06
	3216	387639.1	3752968.9	23.29	23.29	1.31E-06
	3217	387639.7	3752969	23.29	23.29	1.30E-06
	3218	387636.7	3752988.1	23.29	23.29	1.35E-06
	3219	387633.6	3753007.9	23.29	23.29	1.39E-06
	3220	387632.8	3753013	23.29	23.29	1.41E-06
	3221	387618.1	3753010.9	23.29	23.29	1.41E-06
	3222	387598.3	3753008.1	23.29	23.29	1.42E-06

TABLE 6b. SENSITIVE RECEPTORS

Bowman Plating, Compton, CA
Facility ID # 018989

	Receptor	East UTM	North UTM	Elevation	Hill Height	Cancer Risk
Rainbow Child Development Center	3223	386052.2	3753735.3	25.12	25.12	1.90E-06
	3224	386032.2	3753735.5	25.16	25.16	1.81E-06
	3225	386012.2	3753735.6	25.16	25.16	1.72E-06
	3226	385993	3753735.8	25.36	25.36	1.65E-06
	3227	385993	3753735	25.34	25.34	1.65E-06
	3228	385992.8	3753715	25.12	25.12	1.66E-06
	3229	385992.7	3753695	25.12	25.12	1.67E-06
	3230	385992.5	3753675	25.12	25.12	1.68E-06
	3231	385992.4	3753662.5	25.12	25.12	1.69E-06
	3232	385999.9	3753662.6	25.12	25.12	1.72E-06
	3233	386019.9	3753662.9	25.12	25.12	1.80E-06
	3234	386039.9	3753663.2	25.12	25.12	1.89E-06
	3235	386059.9	3753663.5	25.12	25.12	1.98E-06
	3236	386079.9	3753663.8	25.12	25.12	2.09E-06
	3237	386081.4	3753663.8	25.12	25.12	2.10E-06
	3238	386074.4	3753680.9	25.12	25.12	2.05E-06
	3239	386066.8	3753699.4	25.12	25.12	2.00E-06
	3240	386059.3	3753717.9	25.12	25.12	1.95E-06
Santa Fe Heights Healthcare Center	3241	387481.3	3753282	23.9	23.9	2.61E-06
	3242	387461.4	3753279.9	23.9	23.9	2.65E-06
	3243	387441.5	3753277.7	23.9	23.9	2.69E-06
	3244	387421.6	3753275.6	23.9	23.9	2.73E-06
	3245	387401.8	3753273.4	23.9	23.9	2.76E-06
	3246	387400.7	3753273.3	23.9	23.9	2.77E-06
	3247	387402.7	3753254.5	23.9	23.9	2.64E-06
	3248	387404.8	3753234.6	23.9	23.9	2.52E-06
	3249	387406.8	3753214.7	23.9	23.9	2.41E-06
	3250	387408.1	3753202.7	23.74	23.74	2.34E-06
	3251	387415.9	3753203.9	23.77	23.77	2.33E-06
	3252	387435.7	3753207	23.85	23.85	2.31E-06
	3253	387455.5	3753210.1	23.77	23.77	2.29E-06
	3254	387475.2	3753213.2	23.76	23.76	2.27E-06
	3255	387484.7	3753214.7	23.8	23.8	2.26E-06
	3256	387484.2	3753225.1	23.9	23.9	2.31E-06
	3257	387483.2	3753245.1	23.9	23.9	2.41E-06
	3258	387482.2	3753265	23.9	23.9	2.52E-06

Table 6c. Annual Ground Level Concentrations (µg/m^3) at Sensitive Receptors Within ZOI

Bowman Plating, Compton, CA
Facility ID # 018989

Chemical Name	CAS #	Ralph J. Bunche Middle School Receptor 2033	Martin Luther King Elementary Receptor 2085	ISANA Achernar Academy Receptor 2746	Mona House Head Start Receptor 2751	Anderson Elementary Receptor 2790	Jefferson Elementary Receptor 2861	Lindbergh Elementary School Receptor 2886	Helen Keller Elementary School Receptor 2945	Lynwood High School Receptor 3002	Rosa Parks Elementary Receptor 3036	Sunshine Daycare Preschool Center Receptor 2769	Ella Fitzgerald Child Care Center Receptor 2774	We Care Daycare Center Receptor 2919	Tiny Treasures Daycare Receptor 3205	Griggs-Smith Family Child Care Receptor 3211	Rainbow Child Development Center Receptor 3237	Santa Fe Heights Healthcare Center Receptor 3246
Silica, Crystln	1175	1.56E-02	6.53E-03	9.67E-03	3.86E-03	3.20E-03	2.58E-03	3.05E-03	1.22E-03	9.40E-04	9.29E-04	4.21E-03	4.26E-03	2.63E-03	1.64E-03	1.43E-03	3.21E-03	2.51E-03
Formaldehyde	50000	5.49E-05	1.72E-05	3.03E-05	9.74E-06	7.41E-06	6.21E-06	5.76E-06	2.16E-06	1.56E-06	1.49E-06	8.43E-06	1.10E-05	4.85E-06	2.80E-06	3.17E-06	7.45E-06	5.63E-06
Methanol	67561	1.33E-03	5.09E-04	6.74E-04	2.71E-04	2.27E-04	1.76E-04	1.65E-04	6.55E-05	4.85E-05	4.73E-05	2.33E-04	3.10E-04	1.41E-04	8.58E-05	8.94E-05	2.32E-04	1.54E-04
Isopropyl Alcoh	67630	1.06E-02	4.39E-03	6.60E-03	2.61E-03	2.16E-03	1.75E-03	2.08E-03	8.28E-04	6.38E-04	6.28E-04	2.88E-03	2.88E-03	1.79E-03	1.11E-03	9.73E-04	2.16E-03	1.71E-03
n-Butyl Alcohol	71363	5.27E-03	2.19E-03	3.30E-03	1.30E-03	1.08E-03	8.72E-04	1.04E-03	4.13E-04	3.19E-04	3.13E-04	1.44E-03	1.44E-03	8.94E-04	5.53E-04	4.86E-04	1.08E-03	8.53E-04
sec-Butyl Alcoh	78922	2.20E-01	9.12E-02	1.37E-01	5.43E-02	4.49E-02	3.63E-02	4.32E-02	1.72E-02	1.33E-02	1.30E-02	5.97E-02	5.99E-02	3.72E-02	2.30E-02	2.02E-02	4.49E-02	3.55E-02
MEK	78933	9.48E-02	3.94E-02	5.91E-02	2.34E-02	1.94E-02	1.57E-02	1.86E-02	7.42E-03	5.72E-03	5.63E-03	2.57E-02	2.59E-02	1.60E-02	9.94E-03	8.71E-03	1.94E-02	1.53E-02
1,2,4TriMeBenze	95636	4.72E-03	1.98E-03	2.92E-03	1.17E-03	9.73E-04	7.81E-04	9.22E-04	3.68E-04	2.85E-04	2.82E-04	1.27E-03	1.29E-03	7.93E-04	4.97E-04	4.33E-04	9.75E-04	7.59E-04
Ethyl Benzene	100414	1.37E-02	5.73E-03	8.55E-03	3.40E-03	2.82E-03	2.27E-03	2.70E-03	1.07E-03	8.28E-04	8.17E-04	3.72E-03	3.75E-03	2.32E-03	1.44E-03	1.26E-03	2.82E-03	2.22E-03
PGME	107982	2.01E-02	8.40E-03	1.25E-02	4.98E-03	4.13E-03	3.33E-03	3.95E-03	1.58E-03	1.22E-03	1.20E-03	5.46E-03	5.50E-03	3.40E-03	2.12E-03	1.85E-03	4.13E-03	3.25E-03
MIBK	108101	8.52E-02	3.54E-02	5.31E-02	2.11E-02	1.74E-02	1.41E-02	1.68E-02	6.67E-03	5.14E-03	5.06E-03	2.31E-02	2.32E-02	1.44E-02	8.94E-03	7.84E-03	1.74E-02	1.38E-02
PGMEA	108656	2.95E-03	1.23E-03	1.83E-03	7.30E-04	6.06E-04	4.88E-04	5.78E-04	2.31E-04	1.78E-04	1.76E-04	7.98E-04	8.06E-04	4.97E-04	3.10E-04	2.71E-04	6.07E-04	4.76E-04
Toluene	108883	4.99E-02	2.08E-02	3.11E-02	1.23E-02	1.02E-02	8.25E-03	9.80E-03	3.90E-03	3.01E-03	2.96E-03	1.35E-02	1.36E-02	8.43E-03	5.23E-03	4.58E-03	1.02E-02	8.05E-03
Hexane	110543	4.24E-03	1.75E-03	2.65E-03	1.05E-03	8.64E-04	7.00E-04	8.34E-04	3.31E-04	2.55E-04	2.51E-04	1.15E-03	1.15E-03	7.17E-04	4.43E-04	3.89E-04	8.64E-04	6.84E-04
EGBE	111762	4.05E-03	1.70E-03	2.51E-03	1.00E-03	8.35E-04	6.70E-04	7.91E-04	3.16E-04	2.44E-04	2.42E-04	1.09E-03	1.11E-03	6.81E-04	4.26E-04	3.71E-04	8.37E-04	6.51E-04
DEGBE	112345	4.74E-05	1.93E-05	3.03E-05	1.17E-05	9.55E-06	7.81E-06	9.64E-06	3.81E-06	2.93E-06	2.86E-06	1.33E-05	1.28E-05	8.27E-06	5.07E-06	4.41E-06	9.51E-06	7.80E-06
Xylenes	1330207	4.24E-02	1.76E-02	2.64E-02	1.05E-02	8.67E-03	7.00E-03	8.32E-03	3.31E-03	2.55E-03	2.52E-03	1.15E-02	1.16E-02	7.15E-03	4.44E-03	3.89E-03	8.67E-03	6.84E-03
EGPE	2807309	1.72E-03	7.17E-04	1.07E-03	4.26E-04	3.53E-04	2.85E-04	3.38E-04	1.35E-04	1.04E-04	1.02E-04	4.67E-04	4.70E-04	2.91E-04	1.81E-04	1.58E-04	3.53E-04	2.78E-04
Cr(VI)	18540299	2.21E-05	6.99E-06	1.89E-05	5.73E-06	4.09E-06	3.74E-06	5.76E-06	2.31E-06	1.79E-06	1.72E-06	8.20E-06	4.51E-06	4.99E-06	2.89E-06	2.25E-06	3.31E-06	4.37E-06
PAHs-w/o	1151	4.39E-07	1.37E-07	2.42E-07	7.73E-08	5.87E-08	4.92E-08	4.54E-08	1.70E-08	1.22E-08	1.17E-08	6.65E-08	8.76E-08	3.81E-08	2.20E-08	2.51E-08	5.90E-08	4.46E-08
Benzene	71432	2.54E-05	7.94E-06	1.40E-05	4.49E-06	3.40E-06	2.85E-06	2.63E-06	9.84E-07	7.08E-07	6.76E-07	3.85E-06	5.08E-06	2.21E-06	1.27E-06	1.46E-06	3.42E-06	2.58E-06
Acetaldehyde	75070	1.36E-05	4.24E-06	7.50E-06	2.40E-06	1.82E-06	1.53E-06	1.41E-06	5.26E-07	3.78E-07	3.61E-07	2.06E-06	2.72E-06	1.18E-06	6.81E-07	7.78E-07	1.83E-06	1.38E-06
Naphthalene	91203	1.32E-06	4.10E-07	7.26E-07	2.32E-07	1.76E-07	1.48E-07	1.36E-07	5.09E-08	3.66E-08	3.50E-08	1.99E-07	2.63E-07	1.14E-07	6.59E-08	7.53E-08	1.77E-07	1.34E-07
Acrolein	107028	1.18E-05	3.69E-06	6.53E-06	2.09E-06	1.58E-06	1.33E-06	1.22E-06	4.58E-07	3.30E-07	3.15E-07	1.79E-06	2.37E-06	1.03E-06	5.93E-07	6.78E-07	1.59E-06	1.20E-06
NH3	7664417	7.90E-02	2.46E-02	4.36E-02	1.39E-02	1.06E-02	8.86E-03	8.16E-03	3.05E-03	2.20E-03	2.10E-03	1.20E-02	1.58E-02	6.87E-03	3.96E-03	4.52E-03	1.06E-02	8.02E-03
Lead	7439921	1.42E-09	3.07E-10	4.32E-10	1.19E-10	9.99E-11	7.03E-11	1.37E-10	3.92E-11	3.48E-11	3.41E-11	1.87E-10	1.82E-10	1.12E-10	6.47E-11	3.37E-11	1.02E-10	6.73E-11
Nickel	7440020	1.57E-04	4.97E-05	1.33E-04	4.10E-05	2.92E-05	2.67E-05	3.98E-05	1.61E-05	1.24E-05	1.19E-05	5.68E-05	3.18E-05	3.46E-05	1.99E-05	1.58E-05	2.35E-05	3.06E-05
Copper	7440508	2.70E-08	5.83E-09	8.20E-09	2.27E-09	1.90E-09	1.34E-09	2.60E-09	7.45E-10	6.61E-10	6.48E-10	3.56E-09	3.45E-09	2.13E-09	1.23E-09	6.40E-10	1.93E-09	1.28E-09
Cadmium	7440439	1.22E-05	2.99E-06	1.18E-05	2.24E-06	1.52E-06	1.45E-06	5.05E-06	1.88E-06	1.51E-06	1.46E-06	7.05E-06	2.27E-06	4.30E-06	2.52E-06	1.42E-06	1.33E-06	3.01E-06
Sodium Hydroxid	1310732	3.00E-05	8.45E-06	2.75E-05	6.75E-06	4.71E-06	4.39E-06	1.01E-05	3.89E-06	3.08E-06	2.97E-06	1.43E-05	5.85E-06	8.70E-06	5.07E-06	3.30E-06	3.91E-06	6.70E-06
HCl	7647010	4.62E-04	1.12E-04	4.55E-04	8.53E-05	5.78E-05	5.55E-05	1.97E-04	7.33E-05	5.90E-05	5.71E-05	2.76E-04	8.59E-05	1.68E-04	9.86E-05	5.52E-05	5.03E-05	1.17E-04
HF	7664393	1.28E-02	4.17E-03	1.08E-02	3.47E-03	2.48E-03	2.26E-03	3.03E-03	1.24E-03	9.51E-04	9.14E-04	4.34E-03	2.63E-03	2.64E-03	1.52E-03	1.27E-03	1.99E-03	2.43E-03
Sulfuric Acid	7664939	2.03E-03	6.62E-04	1.71E-03	5.51E-04	3.94E-04	3.59E-04	4.81E-04	1.97E-04	1.51E-04	1.45E-04	6.88E-04	4.18E-04	4.19E-04	2.41E-04	2.02E-04	3.15E-04	3.86E-04
Nitric Acid	7697372	7.35E-04	2.31E-04	6.32E-04	1.90E-04	1.35E-04	1.24E-04	1.93E-04	7.76E-05	6.00E-05	5.77E-05	2.75E-04	1.49E-04	1.68E-04	9.67E-05	7.50E-05	1.09E-04	1.46E-04

Table 6d. 8-Hour Ground Level Concentrations (µg/m^3) at Sensitive Receptors Within ZOI

Bowman Plating, Compton, CA
Facility ID # 018989

Chemical Name	CAS #	Ralph J. Bunche Middle School Receptor 2033	Martin Luther King Elementary Receptor 2085	ISANA Achernar Academy Receptor 2746	Mona House Head Start Receptor 2751	Anderson Elementary Receptor 2790	Jefferson Elementary Receptor 2861	Lindbergh Elementary School Receptor 2886	Helen Keller Elementary School Receptor 2945	Lynwood High School Receptor 3002	Rosa Parks Elementary Receptor 3036	Sunshine Daycare Preschool Center Receptor 2769	Ella Fitzgerald Child Care Center Receptor 2774	We Care Daycare Center Receptor 2919	Tiny Treasures Daycare Receptor 3205	Griggs-Smith Family Child Care Receptor 3211	Rainbow Child Development Center Receptor 3237	Santa Fe Heights Healthcare Center Receptor 3246
Silica, Crystln	1175	1.12E-02	2.07E-03	3.45E-03	8.92E-04	6.63E-04	5.10E-04	9.34E-04	2.62E-04	2.33E-04	2.29E-04	1.28E-03	1.44E-03	7.43E-04	4.56E-04	2.41E-04	6.38E-04	4.83E-04
Formaldehyde	50000	2.19E-05	3.61E-06	7.87E-06	1.69E-06	1.15E-06	9.76E-07	2.03E-06	5.09E-07	4.69E-07	4.64E-07	2.73E-06	2.66E-06	1.57E-06	9.62E-07	4.75E-07	1.10E-06	9.52E-07
Methanol	67561	7.30E-04	1.33E-04	2.02E-04	5.29E-05	4.02E-05	3.03E-05	5.61E-05	1.54E-05	1.39E-05	1.37E-05	7.53E-05	9.04E-05	4.43E-05	2.76E-05	1.42E-05	3.92E-05	2.82E-05
Isopropyl Alcoh	67630	7.57E-03	1.38E-03	2.36E-03	6.05E-04	4.46E-04	3.46E-04	6.38E-04	1.78E-04	1.58E-04	1.56E-04	8.73E-04	9.69E-04	5.07E-04	3.11E-04	1.64E-04	4.28E-04	3.29E-04
n-Butyl Alcohol	71363	3.77E-03	6.87E-04	1.18E-03	3.02E-04	2.22E-04	1.73E-04	3.19E-04	8.89E-05	7.90E-05	7.76E-05	4.36E-04	4.83E-04	2.53E-04	1.55E-04	8.17E-05	2.13E-04	1.64E-04
sec-Butyl Alcoh	78922	1.57E-01	2.87E-02	4.91E-02	1.26E-02	9.26E-03	7.19E-03	1.32E-02	3.70E-03	3.29E-03	3.23E-03	1.81E-02	2.01E-02	1.05E-02	6.45E-03	3.40E-03	8.89E-03	6.83E-03
MEK	78933	6.79E-02	1.24E-02	2.11E-02	5.42E-03	4.00E-03	3.10E-03	5.71E-03	1.60E-03	1.42E-03	1.39E-03	7.80E-03	8.69E-03	4.54E-03	2.78E-03	1.47E-03	3.84E-03	2.95E-03
1,2,4TriMeBenze	95636	3.40E-03	6.30E-04	1.04E-03	2.70E-04	2.02E-04	1.54E-04	2.82E-04	7.92E-05	7.03E-05	6.92E-05	3.84E-04	4.37E-04	2.24E-04	1.38E-04	7.27E-05	1.94E-04	1.46E-04
Ethyl Benzene	100414	9.85E-03	1.80E-03	3.05E-03	7.86E-04	5.81E-04	4.49E-04	8.26E-04	2.31E-04	2.05E-04	2.02E-04	1.13E-03	1.26E-03	6.56E-04	4.03E-04	2.12E-04	5.58E-04	4.26E-04
PGME	107982	1.45E-02	2.65E-03	4.48E-03	1.15E-03	8.53E-04	6.59E-04	1.21E-03	3.39E-04	3.01E-04	2.96E-04	1.65E-03	1.85E-03	9.63E-04	5.90E-04	3.11E-04	8.20E-04	6.25E-04
MIBK	108101	6.10E-02	1.12E-02	1.90E-02	4.88E-03	3.60E-03	2.79E-03	5.14E-03	1.43E-03	1.27E-03	1.25E-03	7.02E-03	7.82E-03	4.08E-03	2.50E-03	1.32E-03	3.45E-03	2.65E-03
PGMEA	108656	2.12E-03	3.91E-04	6.54E-04	1.69E-04	1.25E-04	9.66E-05	1.77E-04	4.96E-05	4.41E-05	4.33E-05	2.42E-04	2.72E-04	1.41E-04	8.64E-05	4.56E-05	1.21E-04	9.15E-05
Toluene	108883	3.57E-02	6.53E-03	1.11E-02	2.85E-03	2.11E-03	1.63E-03	3.00E-03	8.39E-04	7.45E-04	7.33E-04	4.10E-03	4.58E-03	2.39E-03	1.46E-03	7.71E-04	2.02E-03	1.55E-03
Hexane	110543	3.02E-03	5.50E-04	9.48E-04	2.42E-04	1.78E-04	1.38E-04	2.56E-04	7.13E-05	6.33E-05	6.23E-05	3.50E-04	3.87E-04	2.03E-04	1.24E-04	6.55E-05	1.71E-04	1.32E-04
EGBE	111762	2.92E-03	5.41E-04	8.91E-04	2.32E-04	1.73E-04	1.32E-04	2.42E-04	6.80E-05	6.04E-05	5.94E-05	3.30E-04	3.76E-04	1.92E-04	1.18E-04	6.24E-05	1.67E-04	1.25E-04
DEGBE	112345	3.38E-05	6.01E-06	1.08E-05	2.72E-06	1.97E-06	1.56E-06	2.91E-06	8.03E-07	7.15E-07	7.03E-07	3.99E-06	4.29E-06	2.31E-06	1.41E-06	7.37E-07	1.88E-06	1.48E-06
Xylenes	1330207	3.03E-02	5.55E-03	9.43E-03	2.42E-03	1.79E-03	1.38E-03	2.55E-03	7.12E-04	6.33E-04	6.22E-04	3.48E-03	3.89E-03	2.03E-03	1.24E-03	6.55E-04	1.72E-03	1.32E-03
EGPE	2807309	1.23E-03	2.26E-04	3.83E-04	9.86E-05	7.28E-05	5.63E-05	1.04E-04	2.90E-05	2.57E-05	2.53E-05	1.42E-04	1.58E-04	8.24E-05	5.05E-05	2.66E-05	6.99E-05	5.35E-05
Cr(VI)	18540299	1.25E-05	1.57E-06	3.25E-06	1.28E-06	9.30E-07	8.04E-07	9.39E-07	2.44E-07	2.18E-07	2.14E-07	1.25E-06	1.34E-06	7.21E-07	4.52E-07	2.60E-07	6.01E-07	4.83E-07
PAHs-w/o	1151	1.72E-07	2.84E-08	6.23E-08	1.33E-08	9.03E-09	7.69E-09	1.60E-08	4.01E-09	3.70E-09	3.66E-09	2.16E-08	2.09E-08	1.24E-08	7.60E-09	3.74E-09	8.65E-09	7.50E-09
Benzene	71432	9.99E-06	1.65E-06	3.62E-06	7.74E-07	5.24E-07	4.46E-07	9.31E-07	2.33E-07	2.15E-07	2.12E-07	1.25E-06	1.21E-06	7.21E-07	4.41E-07	2.17E-07	5.02E-07	4.35E-07
Acetaldehyde	75070	5.34E-06	8.79E-07	1.93E-06	4.14E-07	2.80E-07	2.38E-07	4.97E-07	1.24E-07	1.15E-07	1.14E-07	6.69E-07	6.48E-07	3.85E-07	2.36E-07	1.16E-07	2.68E-07	2.33E-07
Naphthalene	91203	5.17E-07	8.51E-08	1.87E-07	4.00E-08	2.71E-08	2.31E-08	4.81E-08	1.20E-08	1.11E-08	1.10E-08	6.47E-08	6.28E-08	3.73E-08	2.28E-08	1.12E-08	2.59E-08	2.25E-08
Acrolein	107028	4.65E-06	7.66E-07	1.68E-06	3.60E-07	2.44E-07	2.08E-07	4.33E-07	1.08E-07	1.00E-07	9.89E-08	5.83E-07	5.65E-07	3.36E-07	2.05E-07	1.01E-07	2.33E-07	2.03E-07
NH3	7664417	3.10E-02	5.11E-03	1.12E-02	2.40E-03	1.63E-03	1.38E-03	2.89E-03	7.22E-04	6.66E-04	6.59E-04	3.88E-03	3.77E-03	2.24E-03	1.37E-03	6.74E-04	1.56E-03	1.35E-03
Lead	7439921	2.92E-09	5.51E-10	6.99E-10	1.94E-10	1.60E-10	1.11E-10	1.84E-10	5.48E-11	4.90E-11	4.83E-11	2.46E-10	3.34E-10	1.48E-10	9.28E-11	5.14E-11	1.58E-10	9.92E-11
Nickel	7440020	8.96E-05	1.14E-05	2.31E-05	9.23E-06	6.74E-06	5.81E-06	6.54E-06	1.72E-06	1.53E-06	1.51E-06	8.69E-06	9.58E-06	5.04E-06	3.15E-06	1.86E-06	4.36E-06	3.45E-06
Copper	7440508	5.54E-08	1.05E-08	1.33E-08	3.69E-09	3.05E-09	2.11E-09	3.49E-09	1.04E-09	9.32E-10	9.17E-10	4.68E-09	6.34E-09	2.81E-09	1.76E-09	9.77E-10	3.01E-09	1.89E-09
Cadmium	7440439	9.82E-06	1.04E-06	2.49E-06	6.63E-07	4.72E-07	4.05E-07	9.58E-07	2.07E-07	2.00E-07	1.99E-07	1.24E-06	1.06E-06	7.11E-07	4.51E-07	1.71E-07	3.46E-07	3.42E-07
Sodium Hydroxid	1310732	2.05E-05	2.32E-06	5.20E-06	1.70E-06	1.22E-06	1.06E-06	1.79E-06	4.15E-07	3.89E-07	3.86E-07	2.33E-06	2.19E-06	1.35E-06	8.50E-07	3.85E-07	8.32E-07	7.43E-07
HCl	7647010	3.79E-04	3.99E-05	9.52E-05	2.55E-05	1.82E-05	1.56E-05	3.71E-05	7.97E-06	7.72E-06	7.69E-06	4.78E-05	4.08E-05	2.75E-05	1.74E-05	6.54E-06	1.32E-05	1.31E-05
HF	7664393	6.73E-03	8.65E-04	1.75E-03	7.46E-04	5.44E-04	4.72E-04	4.66E-04	1.28E-04	1.11E-04	1.09E-04	6.24E-04	7.17E-04	3.62E-04	2.26E-04	1.45E-04	3.42E-04	2.65E-04
Sulfuric Acid	7664939	1.07E-03	1.37E-04	2.77E-04	1.18E-04	8.64E-05	7.50E-05	7.39E-05	2.02E-05	1.77E-05	1.74E-05	9.89E-05	1.14E-04	5.74E-05	3.58E-05	2.30E-05	5.43E-05	4.20E-05
Nitric Acid	7697372	4.16E-04	5.15E-05	1.07E-04	4.25E-05	3.09E-05	2.68E-05	3.12E-05	8.06E-06	7.21E-06	7.10E-06	4.14E-05	4.44E-05	2.39E-05	1.50E-05	8.61E-06	1.98E-05	1.60E-05

Table 6e. Hourly Ground Level Concentrations (µg/m^3) at Sensitive Receptors Within ZOI

Bowman Plating, Compton, CA
Facility ID # 018989

Chemical Name	CAS #	Ralph J. Bunche Middle School Receptor 2033	Martin Luther King Elementary Receptor 2085	ISANA Achernar Academy Receptor 2746	Mona House Head Start Receptor 2751	Anderson Elementary Receptor 2790	Jefferson Elementary Receptor 2861	Lindbergh Elementary School Receptor 2886	Helen Keller Elementary School Receptor 2945	Lynwood High School Receptor 3002	Rosa Parks Elementary Receptor 3036	Sunshine Daycare Preschool Center Receptor 2769	Ella Fitzgerald Child Care Center Receptor 2774	We Care Daycare Center Receptor 2919	Tiny Treasures Daycare Receptor 3205	Griggs-Smith Family Child Care Receptor 3211	Rainbow Child Development Center Receptor 3237	Santa Fe Heights Healthcare Center Receptor 3246
Silica, Crystln	1175	4.51E-01	1.74E-01	2.16E-01	9.89E-02	9.08E-02	7.78E-02	6.18E-02	3.50E-02	2.34E-02	2.35E-02	7.55E-02	1.10E-01	5.37E-02	3.87E-02	5.01E-02	9.21E-02	6.97E-02
Formaldehyde	50000	2.59E-03	3.84E-04	9.89E-04	1.67E-04	1.07E-04	9.01E-05	9.13E-05	3.72E-05	2.30E-05	2.33E-05	1.24E-04	3.25E-04	7.92E-05	5.11E-05	6.93E-05	1.08E-04	1.40E-04
Methanol	67561	5.62E-02	1.23E-02	1.40E-02	4.73E-03	4.07E-03	3.24E-03	2.60E-03	1.29E-03	8.03E-04	8.09E-04	3.47E-03	8.08E-03	2.28E-03	1.57E-03	2.15E-03	4.17E-03	3.58E-03
Isopropyl Alcoh	67630	3.11E-01	1.18E-01	1.37E-01	6.69E-02	6.14E-02	5.27E-02	4.21E-02	2.38E-02	1.59E-02	1.59E-02	5.15E-02	7.43E-02	3.65E-02	2.62E-02	3.41E-02	6.21E-02	4.74E-02
n-Butyl Alcohol	71363	1.56E-01	5.86E-02	6.78E-02	3.34E-02	3.06E-02	2.63E-02	2.10E-02	1.19E-02	7.91E-03	7.93E-03	2.57E-02	3.71E-02	1.82E-02	1.31E-02	1.70E-02	3.09E-02	2.37E-02
sec-Butyl Alcoh	78922	6.47E+00	2.44E+00	2.84E+00	1.39E+00	1.27E+00	1.10E+00	8.74E-01	4.94E-01	3.29E-01	3.30E-01	1.07E+00	1.54E+00	7.59E-01	5.44E-01	7.07E-01	1.29E+00	9.84E-01
MEK	78933	2.78E+00	1.05E+00	1.24E+00	6.00E-01	5.50E-01	4.72E-01	3.77E-01	2.13E-01	1.42E-01	1.43E-01	4.61E-01	6.66E-01	3.27E-01	2.35E-01	3.05E-01	5.57E-01	4.24E-01
1,2,4TriMeBenze	95636	1.35E-01	5.30E-02	6.77E-02	3.00E-02	2.76E-02	2.36E-02	1.87E-02	1.06E-02	7.07E-03	7.12E-03	2.28E-02	3.32E-02	1.62E-02	1.17E-02	1.51E-02	2.80E-02	2.11E-02
Ethyl Benzene	100414	4.02E-01	1.53E-01	1.83E-01	8.70E-02	7.98E-02	6.85E-02	5.45E-02	3.08E-02	2.06E-02	2.07E-02	6.66E-02	9.66E-02	4.73E-02	3.40E-02	4.42E-02	8.08E-02	6.15E-02
PGME	107982	5.87E-01	2.25E-01	2.71E-01	1.28E-01	1.17E-01	1.00E-01	8.00E-02	4.52E-02	3.02E-02	3.03E-02	9.78E-02	1.42E-01	6.95E-02	4.99E-02	6.48E-02	1.19E-01	9.01E-02
MIBK	108101	2.50E+00	9.47E-01	1.11E+00	5.40E-01	4.95E-01	4.25E-01	3.39E-01	1.92E-01	1.28E-01	1.28E-01	4.14E-01	5.99E-01	2.94E-01	2.11E-01	2.74E-01	5.01E-01	3.82E-01
PGMEA	108656	8.55E-02	3.30E-02	4.07E-02	1.87E-02	1.72E-02	1.47E-02	1.17E-02	6.63E-03	4.42E-03	4.45E-03	1.43E-02	2.08E-02	1.02E-02	7.32E-03	9.49E-03	1.74E-02	1.32E-02
Toluene	108883	1.46E+00	5.55E-01	6.60E-01	3.16E-01	2.89E-01	2.48E-01	1.98E-01	1.12E-01	7.47E-02	7.50E-02	2.42E-01	3.51E-01	1.72E-01	1.23E-01	1.60E-01	2.93E-01	2.23E-01
Hexane	110543	1.25E-01	4.70E-02	5.45E-02	2.67E-02	2.45E-02	2.11E-02	1.68E-02	9.51E-03	6.33E-03	6.35E-03	2.06E-02	2.98E-02	1.46E-02	1.05E-02	1.36E-02	2.48E-02	1.90E-02
EGBE	111762	1.16E-01	4.55E-02	5.82E-02	2.57E-02	2.37E-02	2.02E-02	1.60E-02	9.08E-03	6.07E-03	6.12E-03	1.96E-02	2.85E-02	1.39E-02	1.01E-02	1.30E-02	2.40E-02	1.81E-02
DEGBE	112345	1.43E-03	5.33E-04	5.97E-04	3.04E-04	2.77E-04	2.39E-04	1.92E-04	1.08E-04	7.18E-05	7.16E-05	2.36E-04	3.37E-04	1.67E-04	1.19E-04	1.55E-04	2.80E-04	2.16E-04
Xylenes	1330207	1.24E+00	4.71E-01	5.57E-01	2.68E-01	2.46E-01	2.11E-01	1.68E-01	9.51E-02	6.34E-02	6.37E-02	2.06E-01	2.98E-01	1.46E-01	1.05E-01	1.36E-01	2.49E-01	1.90E-01
EGPE	2807309	5.06E-02	1.91E-02	2.24E-02	1.09E-02	1.00E-02	8.59E-03	6.85E-03	3.87E-03	2.58E-03	2.59E-03	8.36E-03	1.21E-02	5.94E-03	4.27E-03	5.54E-03	1.01E-02	7.71E-03
Cr(VI)	18540299	9.34E-04	3.90E-04	5.65E-04	2.38E-04	1.97E-04	1.68E-04	1.28E-04	6.69E-05	4.33E-05	4.06E-05	1.85E-04	2.53E-04	1.09E-04	7.17E-05	9.26E-05	2.05E-04	1.48E-04
PAHs-w/o	1151	2.08E-05	3.04E-06	7.94E-06	1.31E-06	8.28E-07	6.94E-07	7.12E-07	2.86E-07	1.76E-07	1.78E-07	9.68E-07	2.59E-06	6.17E-07	3.97E-07	5.39E-07	8.35E-07	1.11E-06
Benzene	71432	1.21E-03	1.76E-04	4.60E-04	7.59E-05	4.80E-05	4.03E-05	4.13E-05	1.66E-05	1.02E-05	1.03E-05	5.61E-05	1.50E-04	3.58E-05	2.30E-05	3.12E-05	4.84E-05	6.42E-05
Acetaldehyde	75070	6.45E-04	9.43E-05	2.46E-04	4.06E-05	2.57E-05	2.15E-05	2.21E-05	8.85E-06	5.44E-06	5.52E-06	3.00E-05	8.02E-05	1.91E-05	1.23E-05	1.67E-05	2.59E-05	3.43E-05
Naphthalene	91203	6.24E-05	9.12E-06	2.38E-05	3.93E-06	2.49E-06	2.08E-06	2.14E-06	8.57E-07	5.27E-07	5.34E-07	2.90E-06	7.76E-06	1.85E-06	1.19E-06	1.62E-06	2.50E-06	3.32E-06
Acrolein	107028	5.62E-04	8.21E-05	2.14E-04	3.54E-05	2.24E-05	1.88E-05	1.92E-05	7.71E-06	4.74E-06	4.81E-06	2.61E-05	6.98E-05	1.67E-05	1.07E-05	1.45E-05	2.25E-05	2.99E-05
NH3	7664417	3.75E+00	5.47E-01	1.43E+00	2.36E-01	1.49E-01	1.25E-01	1.28E-01	5.14E-02	3.16E-02	3.20E-02	1.74E-01	4.65E-01	1.11E-01	7.14E-02	9.70E-02	1.50E-01	1.99E-01
Lead	7439921	5.95E-06	9.28E-07	1.92E-06	4.93E-07	3.85E-07	2.79E-07	2.34E-07	8.16E-08	6.32E-08	6.33E-08	3.22E-07	1.05E-06	2.10E-07	1.34E-07	2.08E-07	4.01E-07	3.70E-07
Nickel	7440020	3.18E-02	1.20E-02	1.91E-02	7.37E-03	6.03E-03	5.18E-03	4.10E-03	2.05E-03	1.28E-03	1.23E-03	5.69E-03	8.02E-03	3.40E-03	2.28E-03	2.84E-03	6.26E-03	4.69E-03
Copper	7440508	1.13E-04	1.76E-05	3.65E-05	9.37E-06	7.31E-06	5.31E-06	4.44E-06	1.55E-06	1.20E-06	1.20E-06	6.13E-06	1.99E-05	3.98E-06	2.55E-06	3.95E-06	7.63E-06	7.03E-06
Cadmium	7440439	6.47E-02	2.82E-02	4.50E-02	1.77E-02	1.45E-02	1.27E-02	1.01E-02	5.13E-03	3.11E-03	3.00E-03	1.39E-02	1.74E-02	8.23E-03	5.58E-03	6.72E-03	1.50E-02	1.11E-02
Sodium Hydroxid	1310732	9.46E-04	4.07E-04	6.18E-04	2.53E-04	2.08E-04	1.80E-04	1.41E-04	7.22E-05	4.51E-05	4.29E-05	1.97E-04	2.57E-04	1.17E-04	7.79E-05	9.69E-05	2.16E-04	1.58E-04
HCl	7647010	3.88E-02	1.72E-02	2.71E-02	1.08E-02	8.83E-03	7.73E-03	6.18E-03	3.13E-03	1.90E-03	1.83E-03	8.46E-03	1.06E-02	5.02E-03	3.40E-03	4.10E-03	9.15E-03	6.77E-03
HF	7664393	2.62E-01	1.06E-01	1.45E-01	6.33E-02	5.30E-02	4.44E-02	3.26E-02	1.73E-02	1.18E-02	1.08E-02	4.88E-02	7.08E-02	2.87E-02	1.84E-02	2.49E-02	5.53E-02	3.93E-02
Sulfuric Acid	7664939	8.60E+00	3.47E+00	4.75E+00	2.08E+00	1.74E+00	1.46E+00	1.07E+00	5.69E-01	3.86E-01	3.53E-01	1.60E+00	2.32E+00	9.43E-01	6.03E-01	8.19E-01	1.81E+00	1.29E+00
Nitric Acid	7697372	1.94E-02	8.07E-03	1.16E-02	4.90E-03	4.07E-03	3.46E-03	2.62E-03	1.37E-03	8.95E-04	8.33E-04	3.80E-03	5.27E-03	2.24E-03	1.46E-03	1.91E-03	4.24E-03	3.05E-03

Table 7a. PMI Cancer Risk By Substance and Exposure Pathway

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 3837 | UTME 386749.6 | UTMN 3753792.1

Chemical Name	CAS #	Concentration ($\mu g/m^3$)	Inhalation	Soil	Dermal	Mother's Milk	Water	Fish	Homegrown Produce	Beef	Dairy	Pig	Chicken	EGG	Oral Subtotal	Total	Contribution
Silica, Crystln	1175	1.71E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Formaldehyde	50000	1.68E-03	2.43E-08	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	0.00E+00	0.00E+00	2.43E-08	0.00%
Methanol	67561	1.76E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Isopropyl Alcoh	67630	1.23E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
n-Butyl Alcohol	71363	6.18E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
sec-Butyl Alcoh	78922	2.54E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
MEK	78933	1.09E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
1,2,4TriMeBenze	95636	5.04E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Ethyl Benzene	100414	1.56E-01	9.37E-07	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	0.00E+00	0.00E+00	9.37E-07	0.11%
PGME	107982	2.27E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
MIBK	108101	9.79E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
PGMEA	108656	3.27E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Toluene	108883	5.73E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Hexane	110543	5.03E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
EGBE	111762	4.33E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
DEGBE	112345	6.16E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Xylenes	1330207	4.86E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
EGPE	2807309	1.96E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Cr(VI)	18540299	1.36E-03	4.80E-04	8.31E-06	3.19E-07	0.00E+00	0.00E+00	0.00E+00	3.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.54E-04	8.42E-04	98.63%
PAHs-w/o	1151	1.36E-05	2.58E-08	9.40E-08	2.34E-08	2.24E-07	0.00E+00	0.00E+00	6.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.60E-07	1.00E-06	0.12%
Benzene	71432	7.86E-04	5.43E-08	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	0.00E+00	0.00E+00	5.43E-08	0.01%
Acetaldehyde	75070	4.20E-04	2.90E-09	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	0.00E+00	0.00E+00	2.90E-09	0.00%
Naphthalene	91203	4.07E-05	3.37E-09	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	0.00E+00	0.00E+00	3.37E-09	0.00%
Acrolein	107028	3.66E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
NH3	7664417	2.44E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Lead	7439921	2.01E-08	4.13E-13	4.93E-12	1.20E-13	8.95E-14	0.00E+00	0.00E+00	1.36E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-12	6.91E-12	0.00%
Nickel	7440020	9.97E-03	6.26E-06	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	0.00E+00	0.00E+00	6.26E-06	0.73%
Copper	7440508	3.83E-07	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Cadmium	7440439	3.28E-04	3.40E-06	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	0.00E+00	0.00E+00	3.40E-06	0.40%
Sodium Hydroxid	1310732	1.39E-03	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
HCl	7647010	1.27E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
HF	7664393	8.71E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Sulfuric Acid	7664939	1.38E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Nitric Acid	7697372	4.58E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Total			4.91E-04	8.41E-06	3.42E-07	2.24E-07	0.00E+00	0.00E+00	3.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-04	8.54E-04	100.00%

Table 7b. PMI Cancer Risk By Source and Exposure Pathway

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 3837 | UTME 386749.6 | UTMN 3753792.1

Source ID	Source Name	Inhalation	Soil	Dermal	Mother's Milk	Water	Fish	Homegrown Produce	Beef	Dairy	Pig	Chicken	EGG	Oral Subtotal	Total	Contribution
1	SPRAY_BOOTH_1	6.76E-07	7.97E-09	3.05E-10	0.00E+00	0.00E+00	0.00E+00	3.39E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.39E-07	1.02E-06	0.12%
2	SPRAY_BOOTH_2	8.07E-07	9.49E-09	3.64E-10	0.00E+00	0.00E+00	0.00E+00	4.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.04E-07	1.22E-06	0.14%
3	SPRAY_BOOTH_3	9.53E-07	8.58E-09	3.29E-10	0.00E+00	0.00E+00	0.00E+00	3.65E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.65E-07	1.33E-06	0.16%
4	SPRAY_BOOTH_4_1	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
5	SPRAY_BOOTH_4_2	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
6	SPRAY_BOOTH_4_3	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
7	SPRAY_BOOTH_4_4	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
8	HEATER	8.58E-09	6.95E-09	1.73E-09	1.65E-08	0.00E+00	0.00E+00	4.70E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.35E-08	8.08E-08	0.01%
9	BOILERS	7.54E-08	6.10E-08	1.52E-08	1.45E-07	0.00E+00	0.00E+00	4.13E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.58E-07	7.10E-07	0.08%
10	BLAST_CB	1.44E-08	4.93E-12	1.20E-13	8.95E-14	0.00E+00	0.00E+00	1.36E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-12	1.44E-08	0.00%
12	OVEN_1	2.69E-09	2.18E-09	5.43E-10	5.19E-09	0.00E+00	0.00E+00	1.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.99E-08	2.54E-08	0.00%
13	OVEN_2	2.14E-08	1.73E-08	4.32E-09	4.12E-08	0.00E+00	0.00E+00	1.17E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.58E-07	2.01E-07	0.02%
14	OVEN_3	8.08E-09	6.54E-09	1.63E-09	1.56E-08	0.00E+00	0.00E+00	4.42E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.98E-08	7.60E-08	0.01%
15	CADMIUM	7.14E-08	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	0.00E+00	0.00E+00	7.14E-08	0.01%
16	ANODE_LN	1.27E-08	2.19E-10	8.41E-12	0.00E+00	0.00E+00	0.00E+00	9.34E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.34E-09	2.22E-08	0.00%
17	PLATE_RM	3.15E-05	4.83E-07	1.85E-08	0.00E+00	0.00E+00	0.00E+00	2.06E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-05	5.26E-05	6.16%
18	ANODE_RM	4.56E-04	7.80E-06	2.99E-07	0.00E+00	0.00E+00	0.00E+00	3.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.32E-04	7.97E-04	93.28%
Total		4.91E-04	8.41E-06	3.43E-07	2.29E-07	0.00E+00	0.00E+00	3.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-04	8.54E-04	100%

Table 8a. MEIR Cancer Risk By Substance and Exposure Pathway

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 2229 | UTME 386756 | UTMN 3753797

Chemical Name	CAS #	Concentration ($\mu g/m^3$)	Inhalation	Soil	Dermal	Mother's Milk	Water	Fish	Homegrown Produce	Beef	Dairy	Pig	Chicken	EGG	Oral Subtotal	Total	Contribution
Silica, Crystln	1175	0.1506259	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Formaldehyde	50000	0.001477585	2.14E-08	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	0.00E+00	0.00E+00	2.14E-08	0.00%
Methanol	67561	0.01599665	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Isopropyl Alcoh	67630	0.1072545	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
n-Butyl Alcohol	71363	0.0539128	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
sec-Butyl Alcoh	78922	2.217581	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
MEK	78933	0.9505639	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
1,2,4TriMeBenze	95636	0.04451995	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Ethyl Benzene	100414	0.136618	8.20E-07	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	0.00E+00	0.00E+00	8.20E-07	0.12%
PGME	107982	0.1991227	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
MIBK	108101	0.8552551	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
PGMEA	108656	0.02869269	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Toluene	108883	0.5009887	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Hexane	110543	0.04382914	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
EGBE	111762	0.0382115	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
DEGBE	112345	0.000542932	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Xylenes	1330207	0.4245899	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
EGPE	2807309	0.01710468	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Cr(VI)	18540299	0.001072513	3.78E-04	6.54E-06	2.51E-07	0.00E+00	0.00E+00	0.00E+00	2.78E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-04	6.63E-04	98.38%
PAHs-w/o	1151	1.19E-05	2.27E-08	8.28E-08	2.06E-08	1.97E-07	0.00E+00	0.00E+00	5.60E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.57E-07	8.83E-07	0.13%
Benzene	71432	0.000692474	4.78E-08	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	0.00E+00	0.00E+00	4.78E-08	0.01%
Acetaldehyde	75070	0.000370115	2.55E-09	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	0.00E+00	0.00E+00	2.55E-09	0.00%
Naphthalene	91203	3.58E-05	2.97E-09	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	0.00E+00	0.00E+00	2.97E-09	0.00%
Acrolein	107028	0.000322358	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
NH3	7664417	2.149056	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Lead	7439921	1.88E-08	3.85E-13	4.60E-12	1.12E-13	8.35E-14	0.00E+00	0.00E+00	1.27E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-12	6.45E-12	0.00%
Nickel	7440020	0.007763121	4.88E-06	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	0.00E+00	0.00E+00	4.88E-06	0.72%
Copper	7440508	3.57E-07	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Cadmium	7440439	0.000409928	4.24E-06	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	0.00E+00	0.00E+00	4.24E-06	0.63%
Sodium Hydroxid	1310732	0.001268177	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
HCl	7647010	0.01580398	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
HF	7664393	0.6600599	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Sulfuric Acid	7664939	0.1047147	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Nitric Acid	7697372	0.03610149	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Total			3.88E-04	6.62E-06	2.71E-07	1.97E-07	0.00E+00	0.00E+00	2.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-04	6.73E-04	100.00%

Table 8b. MEIR Cancer Risk By Source and Exposure Pathway

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 2229 | UTME 386756 | UTMN 3753797

Source ID	Source Name	Inhalation	Soil	Dermal	Mother's Milk	Water	Fish	Homegrown Produce	Beef	Dairy	Pig	Chicken	EGG	Oral Subtotal	Total	Contribution
1	SPRAY_BOOTH_1	5.85E-07	6.89E-09	2.64E-10	0.00E+00	0.00E+00	0.00E+00	2.93E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-07	8.85E-07	0.13%
2	SPRAY_BOOTH_2	7.00E-07	8.24E-09	3.16E-10	0.00E+00	0.00E+00	0.00E+00	3.51E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.51E-07	1.06E-06	0.16%
3	SPRAY_BOOTH_3	8.42E-07	7.59E-09	2.91E-10	0.00E+00	0.00E+00	0.00E+00	3.23E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-07	1.17E-06	0.17%
4	SPRAY_BOOTH_4_1	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
5	SPRAY_BOOTH_4_2	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
6	SPRAY_BOOTH_4_3	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
7	SPRAY_BOOTH_4_4	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
8	HEATER	7.60E-09	6.15E-09	1.53E-09	1.46E-08	0.00E+00	0.00E+00	4.16E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-08	7.16E-08	0.01%
9	BOILERS	6.63E-08	5.37E-08	1.34E-08	1.28E-07	0.00E+00	0.00E+00	3.63E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-07	6.24E-07	0.09%
10	BLAST_CB	1.35E-08	4.60E-12	1.12E-13	8.35E-14	0.00E+00	0.00E+00	1.27E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-12	1.35E-08	0.00%
12	OVEN_1	2.35E-09	1.90E-09	4.74E-10	4.52E-09	0.00E+00	0.00E+00	1.29E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-08	2.21E-08	0.00%
13	OVEN_2	1.78E-08	1.44E-08	3.60E-09	3.43E-08	0.00E+00	0.00E+00	9.77E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-07	1.68E-07	0.02%
14	OVEN_3	8.17E-09	6.61E-09	1.65E-09	1.57E-08	0.00E+00	0.00E+00	4.48E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.05E-08	7.69E-08	0.01%
15	CADMIUM	9.92E-08	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	0.00E+00	0.00E+00	9.92E-08	0.01%
16	ANODE_LN	1.17E-08	2.03E-10	7.78E-12	0.00E+00	0.00E+00	0.00E+00	8.64E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.64E-09	2.06E-08	0.00%
17	PLATE_RM	3.92E-05	6.02E-07	2.31E-08	0.00E+00	0.00E+00	0.00E+00	2.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-05	6.55E-05	9.73%
18	ANODE_RM	3.46E-04	5.91E-06	2.27E-07	0.00E+00	0.00E+00	0.00E+00	2.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-04	6.04E-04	89.65%
Total		3.88E-04	6.62E-06	2.71E-07	1.97E-07	0.00E+00	0.00E+00	2.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-04	6.73E-04	100%

Table 9a. MEIW Cancer Risk By Substance and Exposure Pathway

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 2228 | UTME 386751 | UTMN 3753797

Chemical Name	CAS #	Concentration ($\mu g/m^3$)	Inhalation	Soil	Dermal	Mother's Milk	Water	Fish	Homegrown Produce	Beef	Dairy	Pig	Chicken	EGG	Oral Subtotal	Total	Contribution
Silica, Crystln	1175	1.44E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Formaldehyde	50000	1.41E-03	3.50E-09	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	0.00E+00	0.00E+00	3.50E-09	0.01%
Methanol	67561	1.52E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Isopropyl Alcoh	67630	1.03E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
n-Butyl Alcohol	71363	5.19E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
sec-Butyl Alcoh	78922	2.13E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
MEK	78933	9.14E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
1,2,4TriMeBenze	95636	4.26E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Ethyl Benzene	100414	1.31E-01	1.35E-07	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	0.00E+00	0.00E+00	1.35E-07	0.30%
PGME	107982	1.91E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
MIBK	108101	8.22E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
PGMEA	108656	2.75E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Toluene	108883	4.81E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Hexane	110543	4.22E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
EGBE	111762	3.65E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
DEGBE	112345	5.20E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Xylenes	1330207	4.08E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
EGPE	2807309	1.64E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Cr(VI)	18540299	1.06E-03	4.20E-05	8.90E-07	6.17E-08	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	4.30E-05	97.15%
PAHs-w/o	1151	1.14E-05	3.88E-09	1.66E-08	1.43E-08	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	3.48E-08	0.08%
Benzene	71432	6.62E-04	7.82E-09	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	0.00E+00	0.00E+00	7.82E-09	0.02%
Acetaldehyde	75070	3.54E-04	4.18E-10	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	0.00E+00	0.00E+00	4.18E-10	0.00%
Naphthalene	91203	3.42E-05	4.85E-10	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	0.00E+00	0.00E+00	4.85E-10	0.00%
Acrolein	107028	3.08E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
NH3	7664417	2.05E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Lead	7439921	1.92E-08	1.91E-13	8.35E-13	8.68E-14	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	1.11E-12	0.00%
Nickel	7440020	7.72E-03	5.43E-07	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	0.00E+00	0.00E+00	5.43E-07	1.23%
Copper	7440508	3.66E-07	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Cadmium	7440439	3.25E-04	5.36E-07	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	0.00E+00	0.00E+00	5.36E-07	1.21%
Sodium Hydroxid	1310732	1.26E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
HCl	7647010	6.65E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
HF	7664393	6.65E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Sulfuric Acid	7664939	1.06E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Nitric Acid	7697372	3.57E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
Total			4.33E-05	9.07E-07	7.61E-08	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	4.42E-05	100.00%

Table 9b. MEIW Cancer Risk By Source and Exposure Pathway

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 2228 | UTME 386751 | UTMN 3753797

Source ID	Source Name	Inhalation	Soil	Dermal	Mother's Milk	Water	Fish	Homegrown Produce	Beef	Dairy	Pig	Chicken	EGG	Oral Subtotal	Total	Contribution
1	SPRAY_BOOTH_1	9.69E-08	1.40E-09	9.68E-11	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	9.84E-08	0.22%
2	SPRAY_BOOTH_2	1.15E-07	1.66E-09	1.15E-10	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	1.17E-07	0.26%
3	SPRAY_BOOTH_3	1.38E-07	1.52E-09	1.05E-10	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	1.39E-07	0.32%
4	SPRAY_BOOTH_4_1	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
5	SPRAY_BOOTH_4_2	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
6	SPRAY_BOOTH_4_3	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
7	SPRAY_BOOTH_4_4	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00%
8	HEATER	1.34E-09	1.31E-09	1.14E-09	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	3.79E-09	0.01%
9	BOILERS	1.07E-08	1.05E-08	9.08E-09	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	3.03E-08	0.07%
10	BLAST_CB	4.72E-09	8.35E-13	8.68E-14	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	4.72E-09	0.01%
12	OVEN_1	4.00E-10	3.92E-10	3.40E-10	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	1.13E-09	0.00%
13	OVEN_2	3.20E-09	3.14E-09	2.72E-09	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	9.05E-09	0.02%
14	OVEN_3	1.26E-09	1.24E-09	1.07E-09	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	3.57E-09	0.01%
15	CADMIUM	1.16E-08	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	0.00E+00	0.00E+00	1.16E-08	0.03%
16	ANODE_LN	1.37E-09	2.91E-11	2.01E-12	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	1.40E-09	0.00%
17	PLATE_RM	4.97E-06	9.32E-08	6.46E-09	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	5.07E-06	11.45%
18	ANODE_RM	3.79E-05	7.92E-07	5.49E-08	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	3.88E-05	87.59%
Total		4.33E-05	9.07E-07	7.61E-08	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	4.42E-05	100%

Table 10a. PMI Chronic Hazard By Substance

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 3837 | UTME 386749.6 | UTMN 3753792.1

Chemical Name	CAS #	Concentration ($\mu g/m^3$)	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
Silica, Crystln	1175	1.71E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.71E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.71E-02
Formaldehyde	50000	1.68E-03	0.00E+00	0.00E+00	0.00E+00	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	1.86E-04
Methanol	67561	1.76E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.40E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.40E-06
Isopropyl Alcoh	67630	1.23E-01	0.00E+00	0.00E+00	0.00E+00	1.76E-05	0.00E+00	1.76E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-05
n-Butyl Alcohol	71363	6.18E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
sec-Butyl Alcoh	78922	2.54E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MEK	78933	1.09E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,4TriMeBenze	95636	5.04E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ethyl Benzene	100414	1.56E-01	0.00E+00	0.00E+00	0.00E+00	7.80E-05	7.80E-05	7.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.80E-05	0.00E+00	0.00E+00	7.80E-05
PGME	107982	2.27E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-05
MIBK	108101	9.79E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PGMEA	108656	3.27E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Toluene	108883	5.73E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-03
Hexane	110543	5.03E-02	0.00E+00	7.18E-06	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	0.00E+00	7.18E-06
EGBE	111762	4.33E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.28E-04
DEGBE	112345	6.16E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xylenes	1330207	4.86E-01	0.00E+00	6.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.94E-04	0.00E+00	6.94E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.94E-04
EGPE	2807309	1.96E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cr(VI)	18540299	1.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-02	0.00E+00	1.94E-02
PAHs-w/o	1151	1.36E-05	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzene	71432	7.86E-04	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	0.00E+00	2.62E-04	0.00E+00	2.62E-04
Acetaldehyde	75070	4.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-06
Naphthalene	91203	4.07E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.52E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.52E-06
Acrolein	107028	3.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-03
NH3	7664417	2.44E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-02
Lead	7439921	2.01E-08	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nickel	7440020	9.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.42E-02	7.12E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.12E-01	0.00E+00	7.12E-01
Copper	7440508	3.83E-07	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cadmium	7440439	3.28E-04	0.00E+00	0.00E+00	0.00E+00	3.44E-02	0.00E+00	0.00E+00	1.64E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.44E-02
Sodium Hydroxid	1310732	1.39E-03	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
HCl	7647010	1.27E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-03
HF	7664393	8.71E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.22E-02	0.00E+00	0.00E+00	3.99E-01	0.00E+00	0.00E+00	0.00E+00	3.99E-01
Sulfuric Acid	7664939	1.38E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-01
Nitric Acid	7697372	4.58E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total			0.00E+00	7.01E-04	0.00E+00	3.45E-02	1.10E-04	1.43E-02	1.01E+00	0.00E+00	2.06E-03	3.99E-01	7.80E-05	7.32E-01	0.00E+00	1.38E+00

Table 10b. PMI Chronic Hazard By Source

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 3837 | UTME 386749.6 | UTMN 3753792.1

Source ID	Source Name	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
1	SPRAY_BOOTH_1	0.00E+00	1.80E-04	0.00E+00	2.41E-05	2.59E-05	2.42E-05	7.69E-03	0.00E+00	5.68E-04	0.00E+00	1.80E-05	1.86E-05	0.00E+00	7.69E-03
2	SPRAY_BOOTH_2	0.00E+00	2.33E-04	0.00E+00	2.72E-05	2.88E-05	2.75E-05	9.93E-03	0.00E+00	6.09E-04	0.00E+00	2.15E-05	2.22E-05	0.00E+00	9.93E-03
3	SPRAY_BOOTH_3	0.00E+00	2.84E-04	0.00E+00	4.38E-05	5.53E-05	4.41E-05	4.07E-02	0.00E+00	8.69E-04	0.00E+00	3.81E-05	2.01E-05	0.00E+00	4.07E-02
4	SPRAY_BOOTH_4_1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.37E-07
5	SPRAY_BOOTH_4_2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.19E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.19E-07
6	SPRAY_BOOTH_4_3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.09E-07
7	SPRAY_BOOTH_4_4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.49E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.49E-07
8	HEATER	0.00E+00	2.88E-07	0.00E+00	3.46E-08	3.46E-08	3.46E-08	9.93E-04	0.00E+00	9.14E-07	0.00E+00	3.46E-08	1.94E-05	0.00E+00	9.93E-04
9	BOILERS	0.00E+00	2.53E-06	0.00E+00	3.04E-07	3.04E-07	3.04E-07	8.73E-03	0.00E+00	8.03E-06	0.00E+00	3.04E-07	1.70E-04	0.00E+00	8.73E-03
10	BLAST_CB	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E-05	1.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-03	0.00E+00	1.64E-03
12	OVEN_1	0.00E+00	9.06E-08	0.00E+00	1.08E-08	1.08E-08	1.08E-08	3.12E-04	0.00E+00	2.87E-07	0.00E+00	1.08E-08	6.08E-06	0.00E+00	3.12E-04
13	OVEN_2	0.00E+00	7.19E-07	0.00E+00	8.62E-08	8.62E-08	8.62E-08	2.48E-03	0.00E+00	2.28E-06	0.00E+00	8.62E-08	4.83E-05	0.00E+00	2.48E-03
14	OVEN_3	0.00E+00	2.72E-07	0.00E+00	3.25E-08	3.25E-08	3.25E-08	9.35E-04	0.00E+00	8.60E-07	0.00E+00	3.25E-08	1.82E-05	0.00E+00	9.35E-04
15	CADMIUM	0.00E+00	0.00E+00	0.00E+00	7.22E-04	0.00E+00	0.00E+00	3.45E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.22E-04
16	ANODE_LN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-07	0.00E+00	5.13E-07
17	PLATE_RM	0.00E+00	0.00E+00	0.00E+00	3.36E-02	0.00E+00	6.04E-04	4.80E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-02	0.00E+00	4.80E-02
18	ANODE_RM	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-02	8.87E-01	0.00E+00	0.00E+00	3.99E-01	0.00E+00	6.98E-01	0.00E+00	8.87E-01
Total		0.00E+00	8.97E-02	0.00E+00	6.59E+00	1.46E-02	8.53E-01	6.66E+01	0.00E+00	2.58E-01	2.10E+01	1.04E-02	4.32E+01	0.00E+00	6.67E+01

Table 11a. MEIR Chronic Hazard By Substance

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 2229 | UTME 386756 | UTMN 3753797

Chemical Name	CAS #	Concentration ($\mu g/m^3$)	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
Silica, Crystln	1175	1.51E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-02
Formaldehyde	50000	1.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E-04
Methanol	67561	1.60E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-06
Isopropyl Alcoh	67630	1.07E-01	0.00E+00	0.00E+00	0.00E+00	1.53E-05	0.00E+00	1.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-05
n-Butyl Alcohol	71363	5.39E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
sec-Butyl Alcoh	78922	2.22E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MEK	78933	9.51E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,4TriMeBenze	95636	4.45E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ethyl Benzene	100414	1.37E-01	0.00E+00	0.00E+00	0.00E+00	6.83E-05	6.83E-05	6.83E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-05	0.00E+00	0.00E+00	6.83E-05
PGME	107982	1.99E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.84E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.84E-05
MIBK	108101	8.55E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PGMEA	108656	2.87E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Toluene	108883	5.01E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03
Hexane	110543	4.38E-02	0.00E+00	6.26E-06	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	0.00E+00	6.26E-06
EGBE	111762	3.82E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.66E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.66E-04
DEGBE	112345	5.43E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xylenes	1330207	4.25E-01	0.00E+00	6.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-04	0.00E+00	6.07E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-04
EGPE	2807309	1.71E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cr(VI)	18540299	1.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-02	0.00E+00	1.53E-02
PAHs-w/o	1151	1.19E-05	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzene	71432	6.92E-04	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	0.00E+00	2.31E-04	0.00E+00	2.31E-04
Acetaldehyde	75070	3.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.64E-06
Naphthalene	91203	3.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-06
Acrolein	107028	3.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.21E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.21E-04
NH3	7664417	2.15E+00	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	1.07E-02
Lead	7439921	1.88E-08	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nickel	7440020	7.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-02	5.55E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.55E-01	0.00E+00	5.55E-01
Copper	7440508	3.57E-07	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cadmium	7440439	4.10E-04	0.00E+00	0.00E+00	0.00E+00	4.29E-02	0.00E+00	0.00E+00	2.05E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.29E-02
Sodium Hydroxid	1310732	1.27E-03	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
HCl	7647010	1.58E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-03
HF	7664393	6.60E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.71E-02	0.00E+00	0.00E+00	3.02E-01	0.00E+00	0.00E+00	0.00E+00	3.02E-01
Sulfuric Acid	7664939	1.05E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-01
Nitric Acid	7697372	3.61E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total			0.00E+00	6.13E-04	0.00E+00	4.30E-02	9.68E-05	1.12E-02	7.97E-01	0.00E+00	1.80E-03	3.02E-01	6.83E-05	5.70E-01	0.00E+00	1.09E+00

Table 11b. MEIR Chronic Hazard By Source

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 2229 | UTME 386756 | UTMN 3753797

Source ID	Source Name	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
1	SPRAY_BOOTH_1	0.00E+00	1.56E-04	0.00E+00	2.09E-05	2.24E-05	2.10E-05	6.66E-03	0.00E+00	4.91E-04	0.00E+00	1.56E-05	1.61E-05	0.00E+00	6.66E-03
2	SPRAY_BOOTH_2	0.00E+00	2.03E-04	0.00E+00	2.36E-05	2.50E-05	2.39E-05	8.62E-03	0.00E+00	5.28E-04	0.00E+00	1.87E-05	1.93E-05	0.00E+00	8.62E-03
3	SPRAY_BOOTH_3	0.00E+00	2.51E-04	0.00E+00	3.87E-05	4.89E-05	3.90E-05	3.60E-02	0.00E+00	7.69E-04	0.00E+00	3.37E-05	1.78E-05	0.00E+00	3.60E-02
4	SPRAY_BOOTH_4_1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.46E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.46E-07
5	SPRAY_BOOTH_4_2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.36E-07
6	SPRAY_BOOTH_4_3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.41E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.41E-07
7	SPRAY_BOOTH_4_4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.80E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.80E-07
8	HEATER	0.00E+00	2.56E-07	0.00E+00	3.06E-08	3.06E-08	3.06E-08	8.80E-04	0.00E+00	8.10E-07	0.00E+00	3.06E-08	1.72E-05	0.00E+00	8.80E-04
9	BOILERS	0.00E+00	2.23E-06	0.00E+00	2.67E-07	2.67E-07	2.67E-07	7.68E-03	0.00E+00	7.06E-06	0.00E+00	2.67E-07	1.50E-04	0.00E+00	7.68E-03
10	BLAST_CB	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-05	1.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E-03	0.00E+00	1.53E-03
12	OVEN_1	0.00E+00	7.90E-08	0.00E+00	9.46E-09	9.46E-09	9.46E-09	2.72E-04	0.00E+00	2.50E-07	0.00E+00	9.46E-09	5.30E-06	0.00E+00	2.72E-04
13	OVEN_2	0.00E+00	6.00E-07	0.00E+00	7.18E-08	7.18E-08	7.18E-08	2.06E-03	0.00E+00	1.90E-06	0.00E+00	7.18E-08	4.02E-05	0.00E+00	2.06E-03
14	OVEN_3	0.00E+00	2.75E-07	0.00E+00	3.29E-08	3.29E-08	3.29E-08	9.46E-04	0.00E+00	8.70E-07	0.00E+00	3.29E-08	1.84E-05	0.00E+00	9.46E-04
15	CADMIUM	0.00E+00	0.00E+00	0.00E+00	1.00E-03	0.00E+00	0.00E+00	4.79E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E-03
16	ANODE_LN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.75E-07	0.00E+00	4.75E-07
17	PLATE_RM	0.00E+00	0.00E+00	0.00E+00	4.19E-02	0.00E+00	7.52E-04	5.98E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.90E-02	0.00E+00	5.98E-02
18	ANODE_RM	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-02	6.72E-01	0.00E+00	0.00E+00	3.02E-01	0.00E+00	5.29E-01	0.00E+00	6.72E-01
Total		0.00E+00	9.66E-02	0.00E+00	6.59E+00	1.56E-02	6.19E-01	5.16E+01	0.00E+00	2.79E-01	1.41E+01	1.11E-02	3.11E+01	0.00E+00	5.17E+01

Table 12a. MEIW Chronic Hazard By Substance

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 2228 | UTME 386751 | UTMN 3753797

Chemical Name	CAS #	Concentration ($\mu g/m^3$)	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
Silica, Crystln	1175	1.44E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.81E-02
Formaldehyde	50000	1.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-04
Methanol	67561	1.52E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.81E-06
Isopropyl Alcoh	67630	1.03E-01	0.00E+00	0.00E+00	0.00E+00	1.47E-05	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	1.47E-05
n-Butyl Alcohol	71363	5.19E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
sec-Butyl Alcoh	78922	2.13E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MEK	78933	9.14E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,4TriMeBenze	95636	4.26E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ethyl Benzene	100414	1.31E-01	0.00E+00	0.00E+00	0.00E+00	6.56E-05	6.56E-05	6.56E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.56E-05	0.00E+00	0.00E+00	6.56E-05
PGME	107982	1.91E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.73E-05
MIBK	108101	8.22E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PGMEA	108656	2.75E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Toluene	108883	4.81E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-03
Hexane	110543	4.22E-02	0.00E+00	6.03E-06	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	0.00E+00	6.03E-06
EGBE	111762	3.65E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.46E-04
DEGBE	112345	5.20E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xylenes	1330207	4.08E-01	0.00E+00	5.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-04	0.00E+00	5.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-04
EGPE	2807309	1.64E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cr(VI)	18540299	1.06E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.88E-04	0.00E+00	5.30E-03
PAHs-w/o	1151	1.14E-05	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzene	71432	6.62E-04	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	0.00E+00	2.21E-04	0.00E+00	2.21E-04
Acetaldehyde	75070	3.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E-06
Naphthalene	91203	3.42E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-06
Acrolein	107028	3.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.80E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.80E-04
NH3	7664417	2.05E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-02
Lead	7439921	1.92E-08	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nickel	7440020	7.72E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.82E-03	5.51E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.51E-01	0.00E+00	5.51E-01
Copper	7440508	3.66E-07	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cadmium	7440439	3.25E-04	0.00E+00	0.00E+00	0.00E+00	1.95E-02	0.00E+00	0.00E+00	1.63E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-02
Sodium Hydroxid	1310732	1.16E-03	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
HCl	7647010	1.26E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-03
HF	7664393	6.65E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.75E-02	0.00E+00	0.00E+00	1.42E-01	0.00E+00	0.00E+00	0.00E+00	1.42E-01
Sulfuric Acid	7664939	1.06E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-01
Nitric Acid	7697372	3.57E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total			0.00E+00	5.89E-04	0.00E+00	1.96E-02	9.29E-05	3.90E-03	7.88E-01	0.00E+00	1.73E-03	1.42E-01	6.56E-05	5.52E-01	0.00E+00	8.87E-01

Table 12b. MEIW Chronic Hazard By Source

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 2228 | UTME 386751 | UTMN 3753797

Source ID	Source Name	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
1	SPRAY_BOOTH_1	0.00E+00	1.51E-04	0.00E+00	2.02E-05	2.17E-05	2.03E-05	6.44E-03	0.00E+00	4.76E-04	0.00E+00	1.51E-05	2.98E-07	0.00E+00	6.44E-03
2	SPRAY_BOOTH_2	0.00E+00	1.95E-04	0.00E+00	2.27E-05	2.41E-05	2.30E-05	8.30E-03	0.00E+00	5.09E-04	0.00E+00	1.80E-05	3.54E-07	0.00E+00	8.30E-03
3	SPRAY_BOOTH_3	0.00E+00	2.40E-04	0.00E+00	3.70E-05	4.67E-05	3.72E-05	3.44E-02	0.00E+00	7.34E-04	0.00E+00	3.21E-05	3.24E-07	0.00E+00	3.44E-02
4	SPRAY_BOOTH_4_1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.04E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.04E-07
5	SPRAY_BOOTH_4_2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.99E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.99E-07
6	SPRAY_BOOTH_4_3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.01E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.01E-07
7	SPRAY_BOOTH_4_4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.37E-07
8	HEATER	0.00E+00	2.60E-07	0.00E+00	3.12E-08	3.12E-08	3.12E-08	8.96E-04	0.00E+00	8.25E-07	0.00E+00	3.12E-08	1.75E-05	0.00E+00	8.96E-04
9	BOILERS	0.00E+00	2.08E-06	0.00E+00	2.49E-07	2.49E-07	2.49E-07	7.16E-03	0.00E+00	6.59E-06	0.00E+00	2.49E-07	1.40E-04	0.00E+00	7.16E-03
10	BLAST_CB	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-05	1.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-03	0.00E+00	1.57E-03
12	OVEN_1	0.00E+00	7.78E-08	0.00E+00	9.32E-09	9.32E-09	9.32E-09	2.68E-04	0.00E+00	2.46E-07	0.00E+00	9.32E-09	5.22E-06	0.00E+00	2.68E-04
13	OVEN_2	0.00E+00	6.22E-07	0.00E+00	7.45E-08	7.45E-08	7.45E-08	2.14E-03	0.00E+00	1.97E-06	0.00E+00	7.45E-08	4.18E-05	0.00E+00	2.14E-03
14	OVEN_3	0.00E+00	2.45E-07	0.00E+00	2.94E-08	2.94E-08	2.94E-08	8.44E-04	0.00E+00	7.77E-07	0.00E+00	2.94E-08	1.65E-05	0.00E+00	8.44E-04
15	CADMIUM	0.00E+00	0.00E+00	0.00E+00	4.22E-04	0.00E+00	0.00E+00	3.51E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-04
16	ANODE_LN	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.76E-09	0.00E+00	1.79E-07
17	PLATE_RM	0.00E+00	0.00E+00	0.00E+00	1.91E-02	0.00E+00	2.07E-04	4.76E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-02	0.00E+00	4.76E-02
18	ANODE_RM	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-03	6.78E-01	0.00E+00	0.00E+00	1.42E-01	0.00E+00	5.20E-01	0.00E+00	6.78E-01
Total		0.00E+00	9.67E-02	0.00E+00	3.78E+00	1.57E-02	2.20E-01	5.09E+01	0.00E+00	2.80E-01	6.45E+00	1.11E-02	2.97E+01	0.00E+00	5.09E+01

Table 13a. PMI Acute Hazard By Substance

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 3836 | UTME 386769.6 | UTMN 3753792.1

Chemical Name	CAS #	Concentration ($\mu g/m^3$)	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
Silica, Crystln	1175	2.41E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Formaldehyde	50000	2.06E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.74E-04
Methanol	67561	2.35E-01	0.00E+00	8.40E-06	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	0.00E+00	8.40E-06
Isopropyl Alcoh	67630	1.76E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.50E-04	0.00E+00	5.50E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.50E-04
n-Butyl Alcohol	71363	8.86E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
sec-Butyl Alcoh	78922	3.65E+01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MEK	78933	1.55E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03	0.00E+00	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-03
1,2,4TriMeBenze	95636	6.98E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ethyl Benzene	100414	2.22E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PGME	107982	3.22E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MIBK	108101	1.40E+01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PGMEA	108656	4.59E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Toluene	108883	8.15E+00	0.00E+00	1.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-03	0.00E+00	1.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-03
Hexane	110543	7.18E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EGBE	111762	5.98E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-04	0.00E+00	1.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-04
DEGBE	112345	9.24E-03	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xylenes	1330207	6.95E+00	0.00E+00	3.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-04	0.00E+00	3.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-04
EGPE	2807309	2.82E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cr(VI)	18540299	1.50E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PAHs-w/o	1151	1.66E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzene	71432	9.63E-03	0.00E+00	0.00E+00	3.57E-04	0.00E+00	0.00E+00	3.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.57E-04	0.00E+00	3.57E-04
Acetaldehyde	75070	5.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-05	0.00E+00	1.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-05
Naphthalene	91203	4.98E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Acrolein	107028	4.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-03	0.00E+00	1.79E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-03
NH3	7664417	2.99E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.34E-03	0.00E+00	9.34E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.34E-03
Lead	7439921	3.12E-05	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nickel	7440020	5.79E-01	0.00E+00	0.00E+00	2.89E+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	0.00E+00	2.89E+00
Copper	7440508	5.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.93E-06
Cadmium	7440439	1.53E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sodium Hydroxid	1310732	1.90E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-03	2.37E-03	2.37E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-03
HCl	7647010	9.22E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.39E-04	0.00E+00	4.39E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.39E-04
HF	7664393	3.04E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-02	0.00E+00	1.27E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-02
Sulfuric Acid	7664939	9.97E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.31E-01
Nitric Acid	7697372	2.94E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.42E-03
Total			0.00E+00	1.63E-03	2.89E+00	0.00E+00	0.00E+00	3.57E-04	8.31E-01	2.37E-03	1.27E-02	0.00E+00	0.00E+00	3.57E-04	0.00E+00	2.89E+00

Table 13b. PMI Acute Hazard By Source

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 3836 | UTME 386769.6 | UTMN 3753792.1

Source ID	Source Name	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
1	SPRAY_BOOTH_1	0.00E+00	5.41E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03	0.00E+00	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-03
2	SPRAY_BOOTH_2	0.00E+00	5.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-03	0.00E+00	1.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-03
3	SPRAY_BOOTH_3	0.00E+00	8.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-03	0.00E+00	1.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-03
4	SPRAY_BOOTH_4_1	0.00E+00	1.78E-06	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	0.00E+00	1.78E-06
5	SPRAY_BOOTH_4_2	0.00E+00	1.73E-06	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	0.00E+00	1.73E-06
6	SPRAY_BOOTH_4_3	0.00E+00	1.72E-06	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	0.00E+00	1.72E-06
7	SPRAY_BOOTH_4_4	0.00E+00	1.78E-06	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	0.00E+00	1.78E-06
8	HEATER	0.00E+00	8.96E-07	3.11E-05	0.00E+00	0.00E+00	3.11E-05	9.71E-04	0.00E+00	1.00E-03	0.00E+00	0.00E+00	3.11E-05	0.00E+00	1.00E-03
9	BOILERS	0.00E+00	5.49E-06	1.90E-04	0.00E+00	0.00E+00	1.90E-04	5.96E-03	0.00E+00	6.15E-03	0.00E+00	0.00E+00	1.90E-04	0.00E+00	6.15E-03
10	BLAST_CB	0.00E+00	0.00E+00	1.78E-01	0.00E+00	0.00E+00	0.00E+00	5.93E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.78E-01
12	OVEN_1	0.00E+00	3.02E-07	1.05E-05	0.00E+00	0.00E+00	1.05E-05	3.28E-04	0.00E+00	3.39E-04	0.00E+00	0.00E+00	1.05E-05	0.00E+00	3.39E-04
13	OVEN_2	0.00E+00	2.32E-06	8.04E-05	0.00E+00	0.00E+00	8.04E-05	2.51E-03	0.00E+00	2.60E-03	0.00E+00	0.00E+00	8.04E-05	0.00E+00	2.60E-03
14	OVEN_3	0.00E+00	1.28E-06	4.44E-05	0.00E+00	0.00E+00	4.44E-05	1.39E-03	0.00E+00	1.44E-03	0.00E+00	0.00E+00	4.44E-05	0.00E+00	1.44E-03
15	CADMIUM	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	ANODE_LN	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	PLATE_RM	0.00E+00	0.00E+00	2.47E+00	0.00E+00	0.00E+00	0.00E+00	3.97E-03	1.96E-03	2.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E+00
18	ANODE_RM	0.00E+00	0.00E+00	2.46E-01	0.00E+00	0.00E+00	0.00E+00	8.46E-01	4.15E-04	1.31E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.46E-01
Total		0.00E+00	3.04E-01	2.21E+02	0.00E+00	0.00E+00	5.88E-02	1.18E+02	1.70E-01	4.41E+00	0.00E+00	0.00E+00	5.88E-02	0.00E+00	3.06E+02

Table 14a. MEIR Acute Hazard By Substance

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 2231 | UTME 386766 | UTMN 3753797

Chemical Name	CAS #	Concentration ($\mu g/m^3$)	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
Silica, Crystln	1175	2.39E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Formaldehyde	50000	1.67E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.04E-04
Methanol	67561	2.29E-01	0.00E+00	8.17E-06	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	0.00E+00	8.17E-06
Isopropyl Alcoh	67630	1.74E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.43E-04	0.00E+00	5.43E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.43E-04
n-Butyl Alcohol	71363	8.72E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
sec-Butyl Alcoh	78922	3.60E+01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MEK	78933	1.53E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03	0.00E+00	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03
1,2,4TriMeBenze	95636	6.97E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ethyl Benzene	100414	2.19E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PGME	107982	3.19E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MIBK	108101	1.39E+01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PGMEA	108656	4.56E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Toluene	108883	8.05E+00	0.00E+00	1.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03	0.00E+00	1.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03
Hexane	110543	7.04E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EGBE	111762	5.98E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-04	0.00E+00	1.27E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.27E-04
DEGBE	112345	8.74E-03	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xylenes	1330207	6.87E+00	0.00E+00	3.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-04	0.00E+00	3.12E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.12E-04
EGPE	2807309	2.80E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cr(VI)	18540299	1.36E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PAHs-w/o	1151	1.35E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzene	71432	7.81E-03	0.00E+00	0.00E+00	2.89E-04	0.00E+00	0.00E+00	2.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.89E-04	0.00E+00	2.89E-04
Acetaldehyde	75070	4.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.88E-06	0.00E+00	8.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.88E-06
Naphthalene	91203	4.04E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Acrolein	107028	3.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03	0.00E+00	1.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03
NH3	7664417	2.42E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.57E-03	0.00E+00	7.57E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.57E-03
Lead	7439921	3.04E-05	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nickel	7440020	4.68E-01	0.00E+00	0.00E+00	2.34E+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	0.00E+00	2.34E+00
Copper	7440508	5.77E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.77E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.77E-06
Cadmium	7440439	1.18E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sodium Hydroxid	1310732	1.56E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-03	1.96E-03	1.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-03
HCl	7647010	7.11E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-04	0.00E+00	3.38E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-04
HF	7664393	3.27E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-02	0.00E+00	1.36E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-02
Sulfuric Acid	7664939	1.07E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.96E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.96E-01
Nitric Acid	7697372	2.76E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-03
Total			0.00E+00	1.61E-03	2.34E+00	0.00E+00	0.00E+00	2.89E-04	8.96E-01	1.96E-03	1.36E-02	0.00E+00	0.00E+00	2.89E-04	0.00E+00	2.34E+00

Table 14b. MEIR Acute Hazard By Source

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 2231 | UTME 386766 | UTMN 3753797

Source ID	Source Name	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
1	SPRAY_BOOTH_1	0.00E+00	5.20E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-03	0.00E+00	1.05E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-03
2	SPRAY_BOOTH_2	0.00E+00	5.92E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-03	0.00E+00	1.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-03
3	SPRAY_BOOTH_3	0.00E+00	8.04E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-03	0.00E+00	1.56E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-03
4	SPRAY_BOOTH_4_1	0.00E+00	1.73E-06	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	0.00E+00	1.73E-06
5	SPRAY_BOOTH_4_2	0.00E+00	1.65E-06	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	0.00E+00	1.65E-06
6	SPRAY_BOOTH_4_3	0.00E+00	1.68E-06	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	0.00E+00	1.68E-06
7	SPRAY_BOOTH_4_4	0.00E+00	1.73E-06	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	0.00E+00	1.73E-06
8	HEATER	0.00E+00	8.30E-07	2.88E-05	0.00E+00	0.00E+00	2.88E-05	9.00E-04	0.00E+00	9.29E-04	0.00E+00	0.00E+00	2.88E-05	0.00E+00	9.29E-04
9	BOILERS	0.00E+00	4.22E-06	1.46E-04	0.00E+00	0.00E+00	1.46E-04	4.58E-03	0.00E+00	4.73E-03	0.00E+00	0.00E+00	1.46E-04	0.00E+00	4.73E-03
10	BLAST_CB	0.00E+00	0.00E+00	1.73E-01	0.00E+00	0.00E+00	0.00E+00	5.77E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-01
12	OVEN_1	0.00E+00	2.93E-07	1.01E-05	0.00E+00	0.00E+00	1.01E-05	3.17E-04	0.00E+00	3.28E-04	0.00E+00	0.00E+00	1.01E-05	0.00E+00	3.28E-04
13	OVEN_2	0.00E+00	2.32E-06	8.04E-05	0.00E+00	0.00E+00	8.04E-05	2.51E-03	0.00E+00	2.60E-03	0.00E+00	0.00E+00	8.04E-05	0.00E+00	2.60E-03
14	OVEN_3	0.00E+00	6.77E-07	2.35E-05	0.00E+00	0.00E+00	2.35E-05	7.34E-04	0.00E+00	7.58E-04	0.00E+00	0.00E+00	2.35E-05	0.00E+00	7.58E-04
15	CADMIUM	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	ANODE_LN	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	PLATE_RM	0.00E+00	0.00E+00	1.90E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-03	1.51E-03	1.85E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E+00
18	ANODE_RM	0.00E+00	0.00E+00	2.65E-01	0.00E+00	0.00E+00	0.00E+00	9.12E-01	4.47E-04	1.41E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.12E-01
Total		0.00E+00	3.25E-01	2.14E+02	0.00E+00	0.00E+00	5.88E-02	9.15E+01	1.57E-01	4.04E+00	0.00E+00	0.00E+00	5.88E-02	0.00E+00	2.79E+02

Table 15a. MEIW Acute Hazard By Substance

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 2228 | UTME 386751 | UTMN 3753797

Chemical Name	CAS #	Concentration ($\mu g/m^3$)	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
Silica, Crystln	1175	2.35E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Formaldehyde	50000	1.41E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-04
Methanol	67561	1.97E-01	0.00E+00	7.04E-06	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	0.00E+00	7.04E-06
Isopropyl Alcoh	67630	1.73E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-04	0.00E+00	5.40E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-04
n-Butyl Alcohol	71363	8.74E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
sec-Butyl Alcoh	78922	3.55E+01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MEK	78933	1.52E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03	0.00E+00	1.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03
1,2,4TriMeBenze	95636	6.86E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ethyl Benzene	100414	2.16E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PGME	107982	3.16E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MIBK	108101	1.36E+01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PGMEA	108656	4.51E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Toluene	108883	7.98E+00	0.00E+00	1.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-03	0.00E+00	1.60E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-03
Hexane	110543	7.10E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EGBE	111762	5.89E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04	0.00E+00	1.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-04
DEGBE	112345	9.23E-03	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xylenes	1330207	6.74E+00	0.00E+00	3.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-04	0.00E+00	3.06E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-04
EGPE	2807309	2.69E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cr(VI)	18540299	1.43E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PAHs-w/o	1151	1.14E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzene	71432	6.60E-03	0.00E+00	0.00E+00	2.44E-04	0.00E+00	0.00E+00	2.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.44E-04	0.00E+00	2.44E-04
Acetaldehyde	75070	3.53E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.50E-06	0.00E+00	7.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.50E-06
Naphthalene	91203	3.41E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Acrolein	107028	3.07E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-03	0.00E+00	1.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-03
NH3	7664417	2.05E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-03	0.00E+00	6.40E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-03
Lead	7439921	2.40E-05	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nickel	7440020	3.13E-01	0.00E+00	0.00E+00	1.57E+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	0.00E+00	1.57E+00
Copper	7440508	4.57E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.57E-06
Cadmium	7440439	6.37E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sodium Hydroxid	1310732	1.19E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-03	1.49E-03	1.49E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-03
HCl	7647010	3.84E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-04	0.00E+00	1.83E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-04
HF	7664393	4.97E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-02	0.00E+00	2.07E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-02
Sulfuric Acid	7664939	1.63E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E+00
Nitric Acid	7697372	3.17E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-03
Total			0.00E+00	1.60E-03	1.57E+00	0.00E+00	0.00E+00	2.44E-04	1.36E+00	1.49E-03	2.07E-02	0.00E+00	0.00E+00	2.44E-04	0.00E+00	1.57E+00

Table 15b. MEIW Acute Hazard By Source

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 2228 | UTME 386751 | UTMN 3753797

Source ID	Source Name	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
1	SPRAY_BOOTH_1	0.00E+00	5.84E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03	0.00E+00	1.18E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-03
2	SPRAY_BOOTH_2	0.00E+00	5.22E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-03	0.00E+00	1.02E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-03
3	SPRAY_BOOTH_3	0.00E+00	7.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-03	0.00E+00	1.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-03
4	SPRAY_BOOTH_4_1	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-06
5	SPRAY_BOOTH_4_2	0.00E+00	1.40E-06	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	0.00E+00	1.40E-06
6	SPRAY_BOOTH_4_3	0.00E+00	1.34E-06	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	0.00E+00	1.34E-06
7	SPRAY_BOOTH_4_4	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.48E-06
8	HEATER	0.00E+00	7.62E-07	2.64E-05	0.00E+00	0.00E+00	2.64E-05	8.26E-04	0.00E+00	8.54E-04	0.00E+00	0.00E+00	2.64E-05	0.00E+00	8.54E-04
9	BOILERS	0.00E+00	3.05E-06	1.06E-04	0.00E+00	0.00E+00	1.06E-04	3.30E-03	0.00E+00	3.41E-03	0.00E+00	0.00E+00	1.06E-04	0.00E+00	3.41E-03
10	BLAST_CB	0.00E+00	0.00E+00	1.37E-01	0.00E+00	0.00E+00	0.00E+00	4.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.37E-01
12	OVEN_1	0.00E+00	2.27E-07	7.87E-06	0.00E+00	0.00E+00	7.87E-06	2.46E-04	0.00E+00	2.54E-04	0.00E+00	0.00E+00	7.87E-06	0.00E+00	2.54E-04
13	OVEN_2	0.00E+00	2.28E-06	7.91E-05	0.00E+00	0.00E+00	7.91E-05	2.47E-03	0.00E+00	2.56E-03	0.00E+00	0.00E+00	7.91E-05	0.00E+00	2.56E-03
14	OVEN_3	0.00E+00	7.29E-07	2.53E-05	0.00E+00	0.00E+00	2.53E-05	7.90E-04	0.00E+00	8.16E-04	0.00E+00	0.00E+00	2.53E-05	0.00E+00	8.16E-04
15	CADMIUM	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	ANODE_LN	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	PLATE_RM	0.00E+00	0.00E+00	1.03E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-03	8.15E-04	9.98E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E+00
18	ANODE_RM	0.00E+00	0.00E+00	4.01E-01	0.00E+00	0.00E+00	0.00E+00	1.38E+00	6.79E-04	2.14E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E+00
Total		0.00E+00	3.26E-01	2.13E+02	0.00E+00	0.00E+00	5.88E-02	8.82E+01	1.55E-01	3.99E+00	0.00E+00	0.00E+00	5.88E-02	0.00E+00	2.76E+02

Table 16a. PMI 8-Hour Chronic Hazard By Substance

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 3837 | UTME 386749.6 | UTMN 3753792.1

Chemical Name	CAS #	Concentration ($\mu g/m^3$)	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
Silica, Crystln	1175	4.86E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Formaldehyde	50000	1.09E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-04
Methanol	67561	9.79E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Isopropyl Alcoh	67630	1.56E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
n-Butyl Alcohol	71363	5.73E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
sec-Butyl Alcoh	78922	6.16E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MEK	78933	2.27E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,4TriMeBenze	95636	1.71E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ethyl Benzene	100414	2.54E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PGME	107982	5.03E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MIBK	108101	3.27E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PGMEA	108656	4.33E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Toluene	108883	1.96E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-03
Hexane	110543	5.04E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EGBE	111762	1.23E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.54E-04
DEGBE	112345	1.76E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xylenes	1330207	1.36E-03	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EGPE	2807309	6.18E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cr(VI)	18540299	1.68E-03	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PAHs-w/o	1151	2.44E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzene	71432	4.20E-04	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	0.00E+00	5.50E-04	0.00E+00	5.50E-04
Acetaldehyde	75070	1.36E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.94E-06
Naphthalene	91203	4.07E-05	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Acrolein	107028	7.86E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-03
NH3	7664417	3.66E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead	7439921	9.97E-03	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nickel	7440020	3.83E-07	0.00E+00	0.00E+00	2.27E-01	0.00E+00	0.00E+00	0.00E+00	2.27E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.27E-01
Copper	7440508	2.01E-08	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cadmium	7440439	3.28E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sodium Hydroxid	1310732	1.38E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
HCl	7647010	1.39E-03	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
HF	7664393	1.27E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sulfuric Acid	7664939	4.58E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nitric Acid	7697372	8.71E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total			0.00E+00	0.00E+00	2.27E-01	0.00E+00	0.00E+00	0.00E+00	2.29E-01	0.00E+00	1.45E-03	0.00E+00	0.00E+00	5.50E-04	0.00E+00	2.31E-01

Table 16b. PMI 8-Hour Chronic Hazard By Source

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 3837 | UTME 386749.6 | UTMN 3753792.1

Source ID	Source Name	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
1	SPRAY_BOOTH_1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-05	0.00E+00	4.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-04
2	SPRAY_BOOTH_2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.16E-05	0.00E+00	4.01E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.01E-04
3	SPRAY_BOOTH_3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.14E-04	0.00E+00	6.25E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.25E-04
4	SPRAY_BOOTH_4_1	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	SPRAY_BOOTH_4_2	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	SPRAY_BOOTH_4_3	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	SPRAY_BOOTH_4_4	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	HEATER	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E-04	0.00E+00	6.72E-07	0.00E+00	0.00E+00	4.07E-05	0.00E+00	1.10E-04
9	BOILERS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.67E-04	0.00E+00	5.90E-06	0.00E+00	0.00E+00	3.57E-04	0.00E+00	9.67E-04
10	BLAST_CB	0.00E+00	0.00E+00	1.61E-03	0.00E+00	0.00E+00	0.00E+00	1.61E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-03
12	OVEN_1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-05	0.00E+00	2.11E-07	0.00E+00	0.00E+00	1.28E-05	0.00E+00	3.46E-05
13	OVEN_2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.75E-04	0.00E+00	1.67E-06	0.00E+00	0.00E+00	1.01E-04	0.00E+00	2.75E-04
14	OVEN_3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-04	0.00E+00	6.32E-07	0.00E+00	0.00E+00	3.83E-05	0.00E+00	1.04E-04
15	CADMIUM	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	ANODE_LN	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	PLATE_RM	0.00E+00	0.00E+00	1.37E-02	0.00E+00	0.00E+00	0.00E+00	1.37E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.37E-02
18	ANODE_RM	0.00E+00	0.00E+00	2.12E-01	0.00E+00	0.00E+00	0.00E+00	2.12E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.12E-01
Total		0.00E+00	0.00E+00	2.12E-01	0.00E+00	0.00E+00	0.00E+00	2.12E-01	0.00E+00	6.25E-04	0.00E+00	0.00E+00	3.57E-04	0.00E+00	2.30E-01

Table 17a. MEIW 8-Hour Chronic Hazard By Substance

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 2228 | UTME 386751 | UTMN 3753797

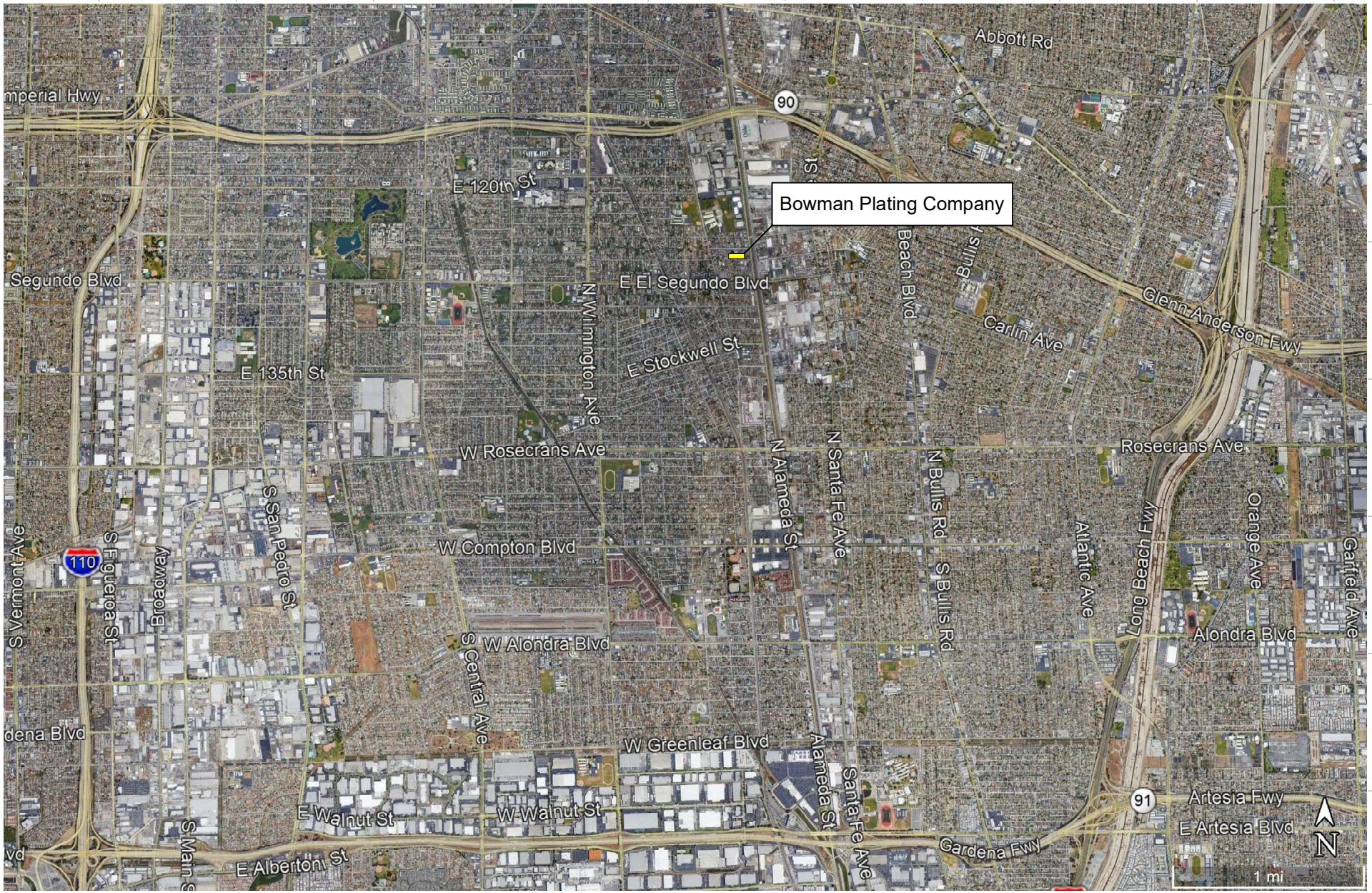
Chemical Name	CAS #	Concentration ($\mu g/m^3$)	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
Silica, Crystln	1175	1.44E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Formaldehyde	50000	1.41E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-04
Methanol	67561	1.52E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Isopropyl Alcoh	67630	1.03E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
n-Butyl Alcohol	71363	5.19E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
sec-Butyl Alcoh	78922	2.13E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MEK	78933	9.14E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,4TriMeBenze	95636	4.26E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ethyl Benzene	100414	1.31E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PGME	107982	1.91E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MIBK	108101	8.22E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PGMEA	108656	2.75E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Toluene	108883	4.81E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-03
Hexane	110543	4.22E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EGBE	111762	3.65E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.68E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.68E-04
DEGBE	112345	5.20E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xylenes	1330207	4.08E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EGPE	2807309	1.64E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cr(VI)	18540299	1.06E-03	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PAHs-w/o	1151	1.14E-05	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzene	71432	6.62E-04	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	0.00E+00	4.63E-04	0.00E+00	4.63E-04
Acetaldehyde	75070	3.54E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-06
Naphthalene	91203	3.42E-05	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Acrolein	107028	3.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.24E-04
NH3	7664417	2.05E+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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead	7439921	1.92E-08	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nickel	7440020	7.72E-03	0.00E+00	0.00E+00	1.77E-01	0.00E+00	0.00E+00	0.00E+00	1.77E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-01
Copper	7440508	3.66E-07	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cadmium	7440439	3.25E-04	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sodium Hydroxid	1310732	1.16E-03	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
HCl	7647010	1.26E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
HF	7664393	6.65E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sulfuric Acid	7664939	1.06E-01	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nitric Acid	7697372	3.57E-02	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total			0.00E+00	0.00E+00	1.77E-01	0.00E+00	0.00E+00	0.00E+00	1.79E-01	0.00E+00	1.22E-03	0.00E+00	0.00E+00	4.63E-04	0.00E+00	1.80E-01

Table 17b. MEIW 8-Hour Chronic Hazard By Source

Bowman Plating, Compton, CA
Facility ID # 018989
Receptor 2228 | UTME 386751 | UTMN 3753797

Source ID	Source Name	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	MAX
1	SPRAY_BOOTH_1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-05	0.00E+00	3.48E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-04
2	SPRAY_BOOTH_2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-05	0.00E+00	3.35E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-04
3	SPRAY_BOOTH_3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.34E-04	0.00E+00	5.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.28E-04
4	SPRAY_BOOTH_4_1	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5	SPRAY_BOOTH_4_2	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	SPRAY_BOOTH_4_3	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	SPRAY_BOOTH_4_4	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	HEATER	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.93E-05	0.00E+00	6.06E-07	0.00E+00	0.00E+00	3.67E-05	0.00E+00	9.93E-05
9	BOILERS	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.94E-04	0.00E+00	4.84E-06	0.00E+00	0.00E+00	2.93E-04	0.00E+00	7.94E-04
10	BLAST_CB	0.00E+00	0.00E+00	1.54E-03	0.00E+00	0.00E+00	0.00E+00	1.54E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-03
12	OVEN_1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-05	0.00E+00	1.81E-07	0.00E+00	0.00E+00	1.10E-05	0.00E+00	2.97E-05
13	OVEN_2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.37E-04	0.00E+00	1.45E-06	0.00E+00	0.00E+00	8.77E-05	0.00E+00	2.37E-04
14	OVEN_3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.36E-05	0.00E+00	5.71E-07	0.00E+00	0.00E+00	3.46E-05	0.00E+00	9.36E-05
15	CADMIUM	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
16	ANODE_LN	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
17	PLATE_RM	0.00E+00	0.00E+00	1.36E-02	0.00E+00	0.00E+00	0.00E+00	1.36E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-02
18	ANODE_RM	0.00E+00	0.00E+00	1.62E-01	0.00E+00	0.00E+00	0.00E+00	1.62E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-01
Total		0.00E+00	0.00E+00	1.77E-01	0.00E+00	0.00E+00	0.00E+00	1.79E-01	0.00E+00	1.22E-03	0.00E+00	0.00E+00	4.63E-04	0.00E+00	1.79E-01

APPENDIX B. FIGURES



Modified by South Coast AQMD

BOWMAN PLATING COMPANY, INC.

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description: Location Map

Scale	Date	Figure
N/A	November 2022	1

Modified by South Coast AQMD

BOWMAN PLATING COMPANY, INC.

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description: Vicinity Map

Scale	Date	Figure
N/A	November 2022	2

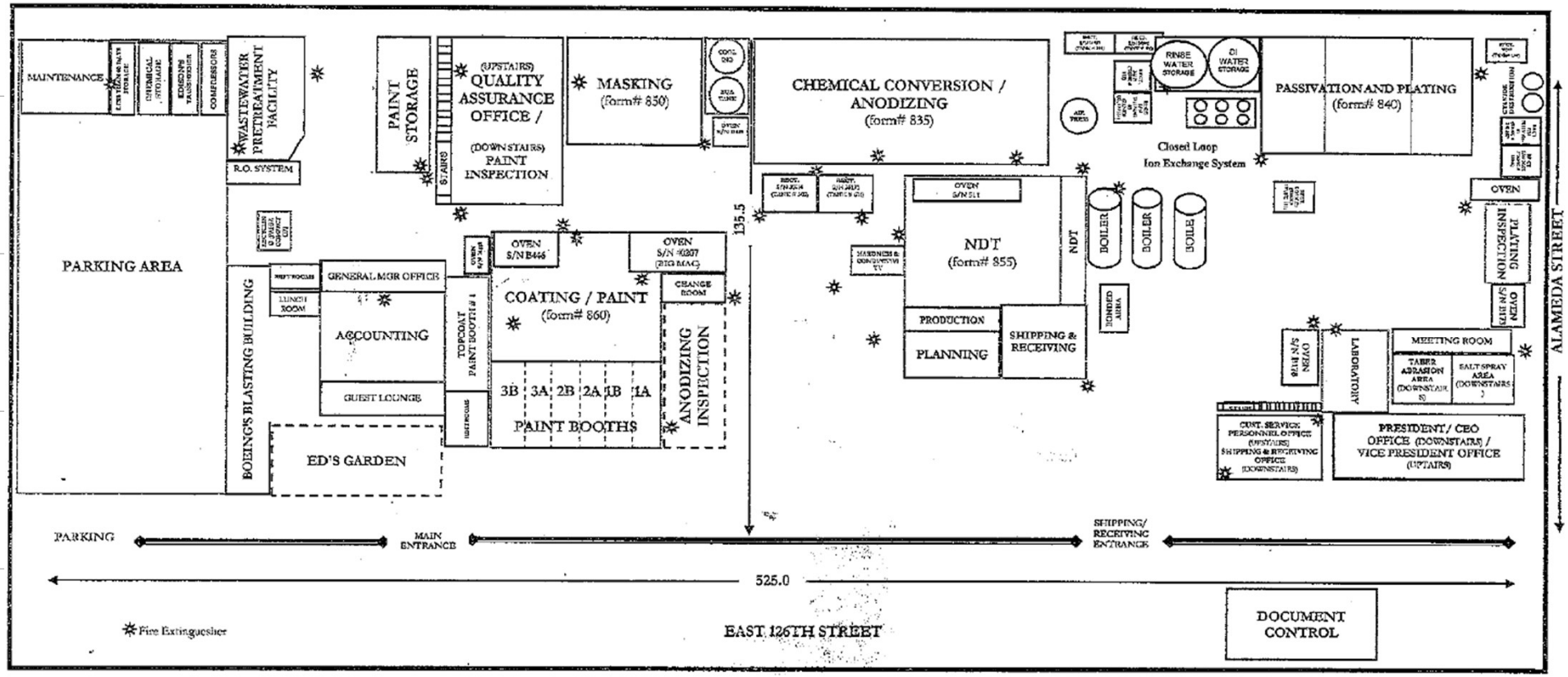
Modified by South Coast AQMD

BOWMAN PLATING COMPANY, INC.

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description: Site Plot Plan

Scale	Date	Figure
N/A	November 2022	3a



Modified by South Coast AQMD

BOWMAN PLATING COMPANY, INC.

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description: General Facility Layout

Scale	Date	Figure
N/A	November 2022	3b

Emission Sources/Stack Locations

1 – Spray Booth 1
2 – Spray Booth 2
3 – Spray Booth 3
4 – Spray Booth 4-1
5 – Spray Booth 4-2
6 – Spray Booth 4-3
7 – Spray Booth 4-4
8 – Spray Booth 4 Heater
9 – Boiler 1, 2 & 3
10 – Abrasive Blasting Cabinet Baghouse
11 – Abrasive Blasting Room Baghouse
12 – Oven 1
13 – Oven 2
14 – Oven 3
15 – Cadmium Tank Scrubber
16 – Anodizing Line Scrubber
17 – Plating Room (area)
18 – Anodizing Room (area)

Legend

Facility Boundary
Area Source
Source ID

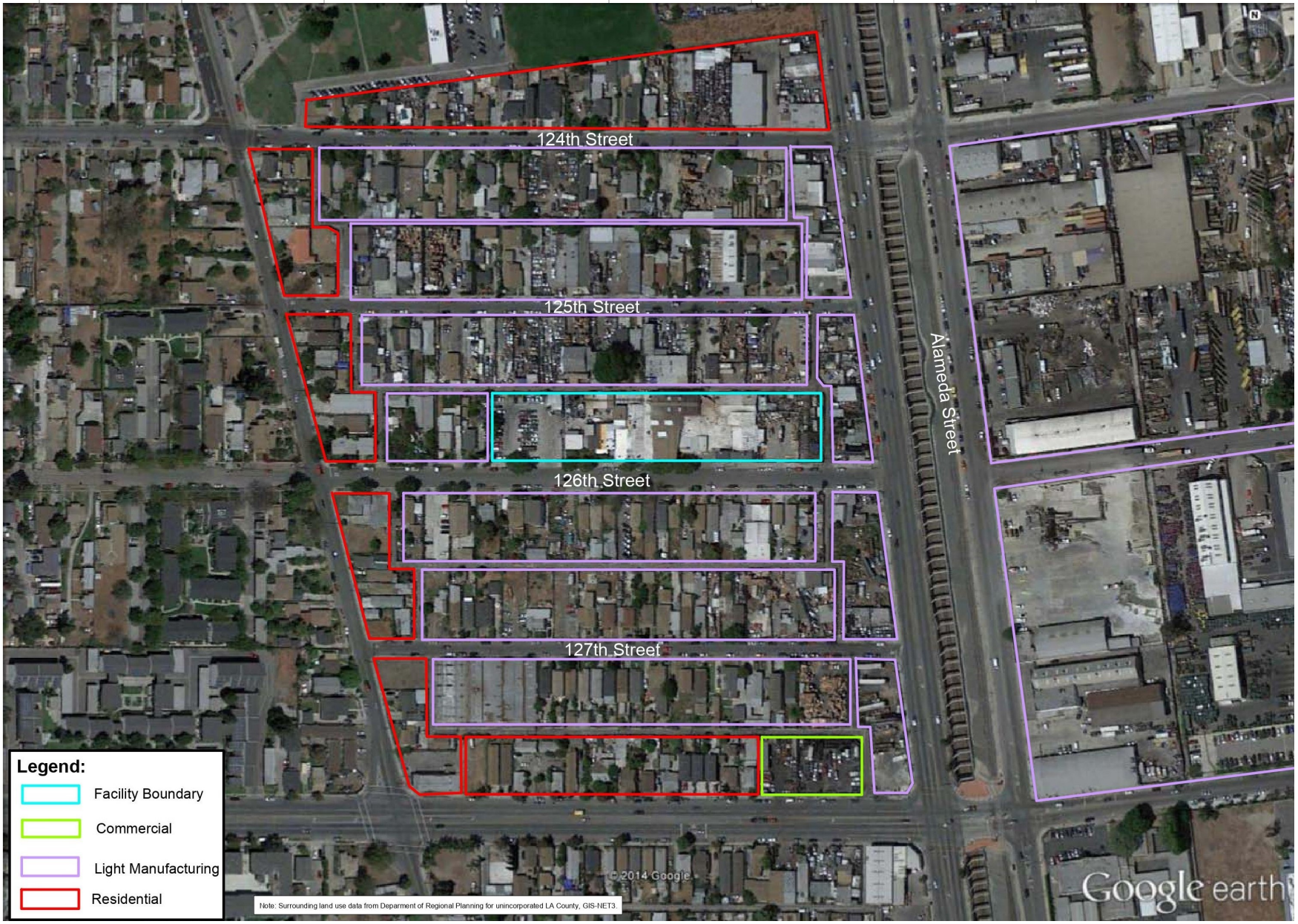
Modified by South Coast AQMD

BOWMAN PLATING COMPANY, INC.

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description: Emission Sources/Stack Locations

Scale	Date	Figure
N/A	November 2022	4



Modified by South Coast AQMD

BOWMAN PLATING COMPANY, INC.

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description: Zoning Map

Scale	Date	Figure
N/A	November 2022	5a

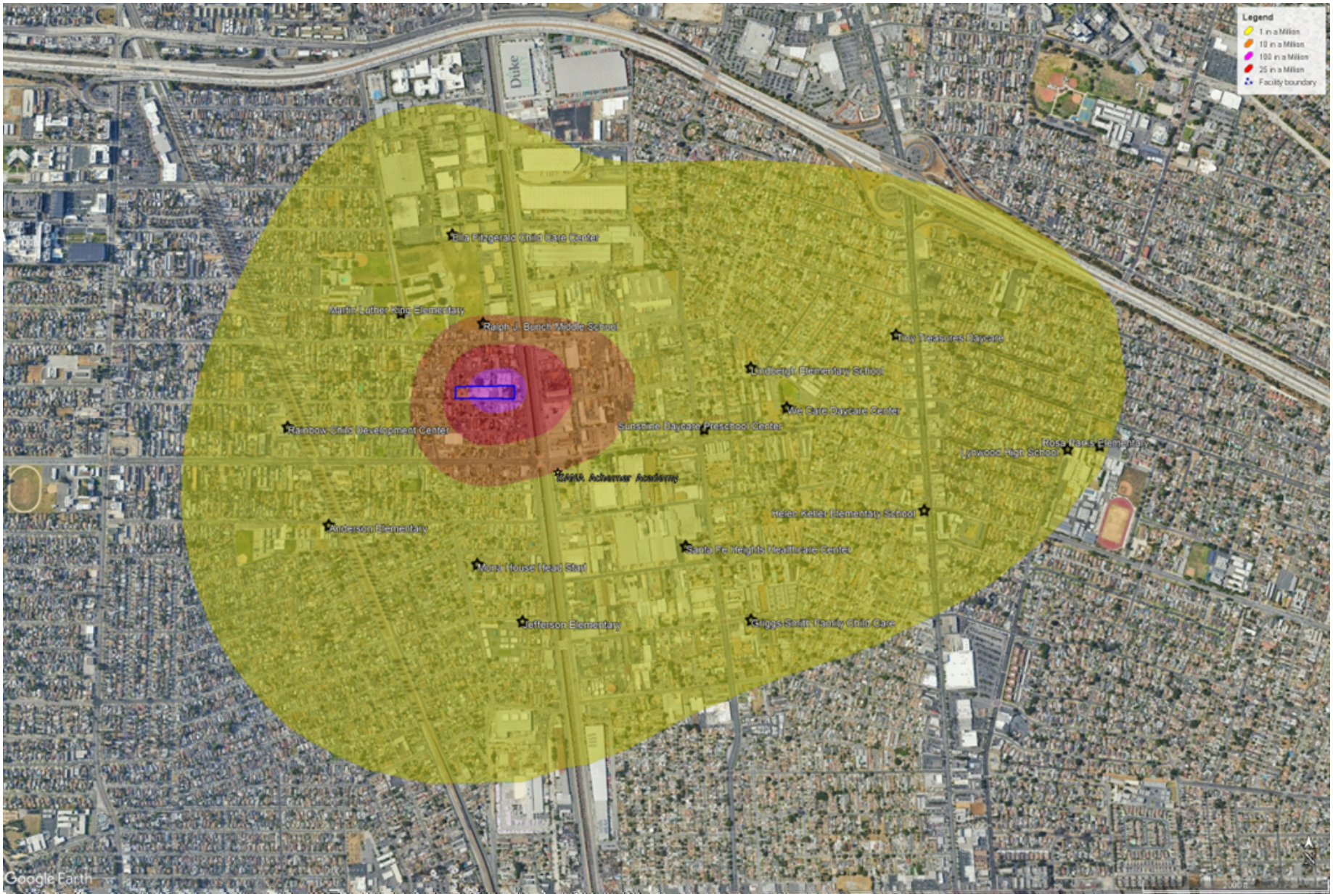
Modified by South Coast AQMD

BOWMAN PLATING COMPANY, INC.

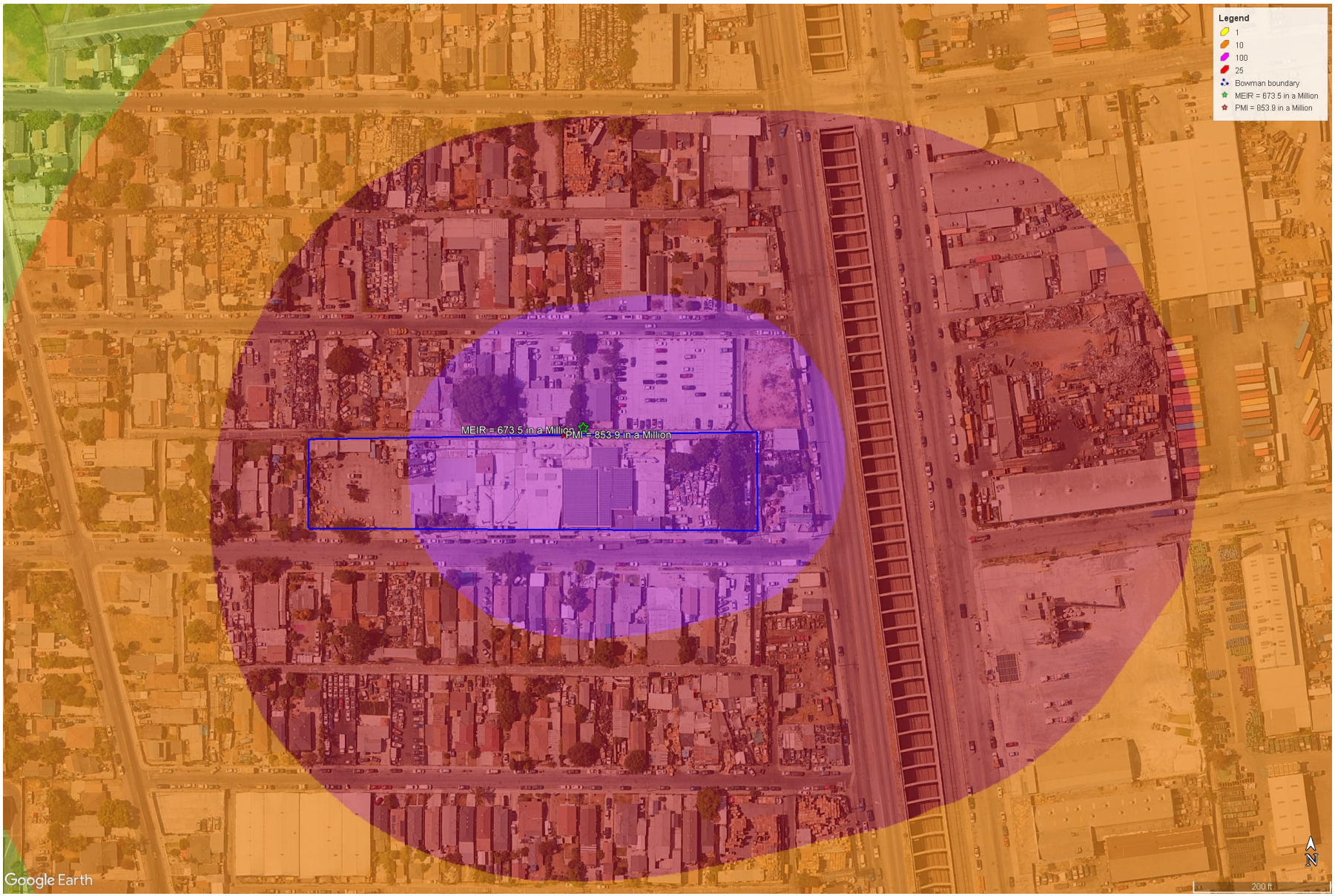
Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description: Surrounding Land Use

Scale	Date	Figure
N/A	November 2022	5b



Modified by South Coast AQMD	BOWMAN PLATING COMPANY, INC.	Bowman Plating Company 2631 E. 126th Street Compton, CA 90222	Description: Cancer Risk Isopleths - Resident Scale: N/A Date: November 2022 Figure: 6a



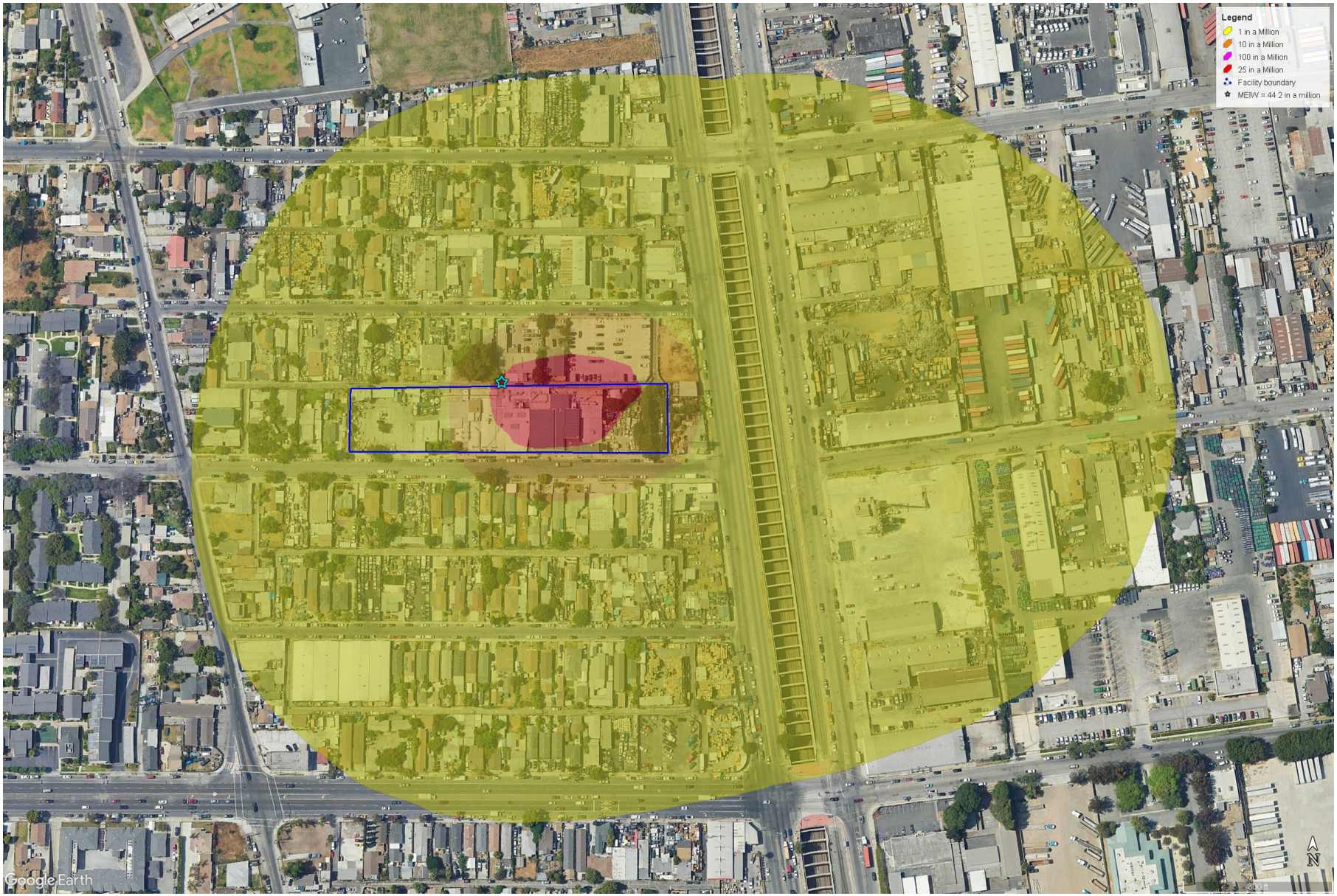
Modified by South Coast AQMD

BOWMAN PLATING COMPANY, INC.

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description
Cancer Risk Isopleths - Resident

Scale	Date	Figure
N/A	November 2022	6b



Modified by South Coast AQMD

BOWMAN PLATING COMPANY, INC.

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description: Cancer Risk Isopleths - Worker

Scale	Date	Figure
N/A	November 2022	7

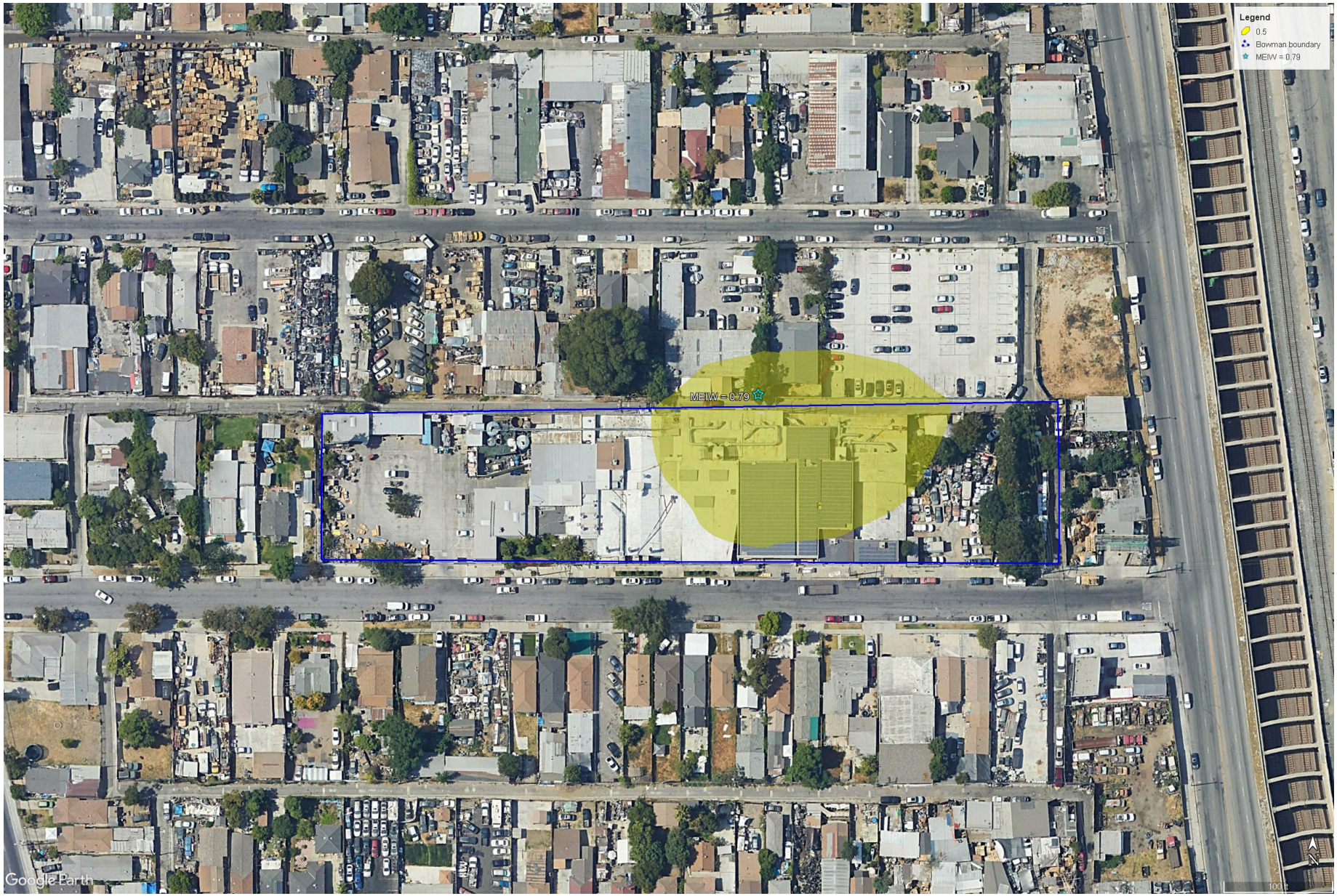
Modified by South Coast AQMD

BOWMAN PLATING COMPANY, INC.

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description: Chronic Hazard - Resident

Scale	Date	Figure
N/A	November 2022	8a



Modified by South Coast AQMD	BOWMAN PLATING COMPANY, INC.	Bowman Plating Company 2631 E. 126th Street Compton, CA 90222	Description: Chronic Hazard - Worker Scale: N/A Date: November 2022 Figure: 8b

Modified by South Coast AQMD

BOWMAN PLATING COMPANY, INC.

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description: Chronic 8-Hour Hazard

Scale	Date	Figure
N/A	November 2022	9

Modified by South Coast AQMD

BOWMAN PLATING COMPANY, INC.

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description: Acute Hazard

Scale	Date	Figure
N/A	November 2022	10

APPENDIX C. SCAQMD CORRESPONDENCE

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

Via Email and CERTIFIED RETURN RECEIPT to addressee

September 16, 2022

Dan Cunningham
Bowman Plating Co. Inc.
2631 East 126th Street
Compton, CA 90222-1599

Subject: Rejection of the AB 2588 Health Risk Assessment (HRA) for **Bowman Plating Co. Inc.** (South Coast AQMD Facility ID No. **18989**)

Dear Mr. Cunningham:

In a letter dated June 30, 2022, South Coast Air Quality Management District (South Coast AQMD) notified Bowman Plating Co. Inc. (Bowman) that the facility is required to submit a Health Risk Assessment (HRA) in accordance with the State of California's Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) and South Coast AQMD Rule 1402. The HRA is required to be based on the Air Toxics Inventory Report (ATIR) that was conditionally approved in that same letter. We received the HRA on August 1, 2022.

South Coast AQMD is rejecting the HRA submitted on August 1, 2022. The HRA was not prepared in accordance with the most current version of South Coast AQMD AB 2588 and Rule 1402 Supplemental Guidelines. In addition, some information provided in the HRA was either incomplete and/or not accurate. The details on these deficiencies are provided as an attachment to this letter. Please be advised that pursuant to Rule 1402 (e)(2)(C), all the deficiencies identified must be addressed in a revised HRA and submitted to South Coast AQMD within 60 days of this letter, or by **November 15, 2022**. However, South Coast AQMD encourages Bowman to submit the revised HRA sooner, if possible. If all deficiencies are not addressed in the revised HRA by November 15, 2022, then South Coast AQMD staff has the option of modifying the HRA and approving it as modified, in accordance with Rule 1402 (e)(2)(D). Your facility will then be charged a Special Review Fee according to Rule 307.1 (d)(3).

If you have any questions regarding the contents of this letter or need any assistance with the upcoming submittal, please contact either Matthew Lee, Air Quality Engineer II, at (909) 396-2053, or myself at (909) 396-3524.

Sincerely,

Eugene Kang
Planning & Rules Manager
Planning, Rule Development & Implementation

EK:VM:TT:ML

Attachment: List of Identified Deficiencies in HRA

cc: Kimberly Pham, Bowman Plating Co. Inc.
Barry Groveman, Groveman Hiete LLP
Ryan Hiete, Groveman Hiete LLP
Shailesh Patel, Trinity Consultants
Steven Walters, Trinity Consultants

Attachment A – List of Identified Deficiencies with HRA

1. The variable emissions factors were incorrectly calculated for all four scenarios using variable emissions. The factors in each of the four scenarios did not total to the number of factors for each specific scenario (e.g., for the HRDOW7 scenario used for the anodizing room and anodizing line, the sum of the factors was 144 rather than 168, which is expected when using unit emission rate). Furthermore, when used, the variable emissions factors for Saturday were 2.67 times and 4 times the weekday factors. This is incorrect as it indicates hourly emission rates on Saturday were many times greater than those during a standard weekday.
2. Staff believes that incorrect worker adjustment factors were applied to the evaluations for variable emissions, but were unable to verify the calculations. Therefore, when resubmitting the HRA, the inputs and calculations for worker adjustment factor shall be provided, along with an explanation for value selected for each applicable worker adjustment factor calculation.
3. The Hawthorne station meteorological data was used for AERMOD modeling. In Bowman's previous HRA, staff determined that meteorological data from the Compton station was most appropriate (see Bowman's approved 2013 HRA). The Compton meteorological data shall again be used in this HRA, and the data files are attached to the email. Note that the base elevation for the Compton station is 22 meters.
4. There appears to be a residence located to the immediate north of the facility at UTM coordinates 386759 m E, 3753800 m N. The resubmitted HRA shall include and evaluate this residential receptor.
5. HARP ADMRT version 22094 was used. HARP ADMRT version 22118 was released on April 28, 2022 and shall be used, as it was the most recent version at the time of submittal of the HRA.
6. The resubmitted HRA shall provide a terrain map with an increased extent to comprise the entire receptor domain. Alternatively, the receptors outside of the coverage of the terrain map shall be deleted from the project as they are outside of zone of impact.
7. Missing definition of 8-hour chronic health impact, as required under the *AB 2588 and Rule 1402 Supplemental Guidelines (Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act), October 2020* (henceforth referred to as *Supplemental Guidelines*). See requirements listed in Appendix B, Section I. Table of Contents.
8. Missing description of emission control equipment and efficiency by source and by substance, or the emissions inventory methods indicating whether emissions are measured or estimated as required under the *Supplemental Guidelines.* See requirements listed in Appendix B, Section III. B.2.
9. Facility total annual average emissions and maximum one-hour emissions for each substance were only reported in lb/hr and not g/s. See same requirement from *Supplemental Guidelines* above.
10. Missing tables summarizing the annual average concentrations and maximum one-hour, chronic 8-hour concentrations for the PMI, MEIR, MEIW, and sensitive receptors. See requirement from *Supplemental Guidelines*, Appendix B, Section III. B.3.

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

Via Email and CERTIFIED RETURN RECEIPT to Addressee

May 13, 2022

Dan Cunningham
Bowman Plating Co. Inc.
2631 East 126th Street
Compton, CA 90222-1599

Subject: Revised Air Toxics Inventory Report Request for Supporting Documents for Bowman Plating Co. Inc. (South Coast AQMD ID# **18989**)

Dear Mr. Cunningham:

South Coast AQMD staff has reviewed the revised Air Toxics Inventory Report (ATIR) submitted by Bowman Plating Co. (Bowman) on April 5, 2022. The revised ATIR correctly used the approved source test hourly rate as instructed by South Coast AQMD staff in the Notice to Prepare Revised ATIR and HRA letter dated March 3, 2022. However, staff noted that the hours of operation for Tanks 314 and 321 was revised to 3,000 hours from the previously approved 5,920 hours. In Attachment B of the Notice to Prepare Revised ATIR and HRA, it states: "*3. Include the 5,920 and 2,968 hours for the Anodizing and Plating Buildings based on the electricity records you submitted to us on February 5, 2021.*" (Please see Attached).

Additionally, staff noted that some of the required elements of the ATIR requested in Attachment B were not reported including South Coast AQMD permit numbers for devices listed in the EIM file, annual process rates for each device and process in the EIM file, as well as maximum hourly process rates for each device and process in the EIM file.

Please provide South Coast AQMD with documentation supporting the revision of operating hours from 5,920 to 3,000 for Tanks 314 and 321 and a revised EIM file including all required elements within 10 days from date of this letter, or **May 24, 2022**. Failure to substantiate the revised operating hours will result in staff's rejection of the ATIR, followed by modifications and approval of the modified ATIR, pursuant to Rule 1402 (d)(4)(D). Bowman will then be required to prepare an HRA based on the approved modified ATIR.

Should you have any questions regarding the contents of this letter, do not hesitate to contact me at (909) 396-3524.

Sincerely,

Eugene Kang
Planning and Rules Manager, AB 2588 Program
Planning, Rule Development & Area Sources

EK:VM:ML

Attachment(s):
Attachment A – Notice to Prepare Revised ATIR and HRA

cc: Kimberly Pham, Bowman Plating Co. Inc.
Barry Groveman, Groveman Hiete LLP
Ryan Hiete, Groveman Hiete LLP
Shailesh Patel, Trinity Consultants
Steven Walters, Trinity Consultants

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

Via Email and CERTIFIED RETURN RECEIPT to Addressee

March 3, 2022

Dan Cunningham
Bowman Plating Co. Inc.
2631 East 126th Street
Compton, CA 90222-1599

Subject: RE: Notice to Prepare Revised Air Toxics Inventory Report (ATIR) & Notification to Prepare Health Risk Assessment (HRA) for **Bowman Plating Co. Inc.** (South Coast AQMD ID **18989**)

Dear Mr. Cunningham:

South Coast AQMD staff conducted source testing on April 27 and 28, 2021 (the "April 2021 Source Test"), to measure the uncontrolled exhaust emissions from the anodizing building. A simultaneous source test was to have been conducted for the outlet of the process tanks air pollution control system by Montrose Air Quality Services, LLC. This test was ultimately conducted on July 7, 9 and 12, 2021 (the "July 2021 Source Test").

This letter is to notify you that the April 2021 Source Test is complete, and the results have been evaluated by South Coast AQMD's Source Test Engineering staff. In accordance with South Coast AQMD Rule 1402 (d)(3)(F), Bowman is required to submit a revised ATIR incorporating the results of the source test within 30 days of this letter, or by **April 5, 2022**. In addition, based on the South Coast AQMD's assessment of the potential cancer risk resulting from the emissions measured during the April 2021 Source Test and consistent with Rule 1402 (e)(1), this letter is to further notify Bowman that it is required to prepare and submit an HRA within 90 days from the date of this letter, or **June 1, 2022**.

Background

On September 25, 2020, South Coast AQMD rejected the ATIR submitted by Bowman on August 28, 2020. The significant disagreement was regarding the capture efficiency of the air pollution control system venting tanks, including Tanks 314 and 321. To resolve this, Bowman and South Coast AQMD staff reached an agreement that included conducting a source test at the inlets of the air pollution control system to measure the emissions from this equipment under normal operating conditions, but at capacities representative of 2019 production data. The results of this source test would be incorporated into the ATIR for the 2019 inventory year. That source test was conducted by South Coast AQMD staff on April 27 and 28, 2021 (see Attachment A). The July 2021 Source

Test performed by Montrose Air Quality Services, LLC involved testing at the outlet of the newly constructed air pollution control system for the anodizing room. The intent of this source test was to demonstrate the efficacy of the control equipment for permitting purposes.

In accordance with Rule 1402 (d)(3)(F), Bowman is required to submit a revised ATIR incorporating the April 2021 Source Test results within 30 days, or no later than **April 5, 2022**. The revised ATIR shall also correct the deficiencies described in Attachment B (List of Required Corrections for ATIR Resubmittal) to this letter. If Bowman fails to make the corrections required in the revised ATIR, South Coast AQMD will then make the corrections and approve the modified version.

In accordance with Rule 1402 (e)(1), South Coast AQMD is also requiring Bowman to prepare and submit an HRA, as the result of the analysis indicates that emissions from the facility for the 2019 inventory year were at a level to potentially cause an exceedance of the Notification Risk Level for cancer risk. The HRA is due within 90 days, or no later than **June 1, 2022**.

Guidelines and Procedures for Preparing the HRA

The California Air Resources Board (CARB) has developed a "Hot Spots" Analysis and Reporting Program (HARP)[1] which streamlines the emissions inventory and risk assessment requirements of the "Hot Spots" Program into a single integrated analysis tool. You are required to perform the HRA using the HARP software, using the latest version of the software.

The U.S. EPA AERMOD[2] air quality dispersion model is used by HARP to estimate the concentration of pollutants released by the facility. In addition, South Coast AQMD provides guidance on preparing an HRA, as well as air dispersion modeling.[3] Meteorological data sets for South Coast AQMD are also available for download.[4]

The HRA must be prepared in accordance with *The Air Toxics Hot Spots Program Risk Assessments Guidelines (February 2015)* developed by the State of California Office of Environmental Health Hazard Assessment (OEHHA).[5]

Air emissions of any substances listed in Appendix A-1 of the OEHHA guidelines must be quantified and evaluated in the HRA. Please follow the detailed outline for the HRA report, which is contained in Appendix C of the South Coast AQMD supplemental guidelines mentioned above. Lastly, please also include a signed copy of the AB 2588 Air Toxics Document Certification & Submittal Form (Attachment C) along with your HRA submittal.

Process for Reviewing and Approving the HRA

The HRA will be reviewed by staff from both South Coast AQMD and OEHHA. You will be notified of the status of your HRA after it is returned to South Coast AQMD from OEHHA. An

[1] http://www.arb.ca.gov/toxics/harp/harp.htm
[2] https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models
[3] http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-supplemental-guidelines.pdf
http://www.aqmd.gov/home/air-quality/meteorological-data/modeling-guidance
[4] http://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/data-for-aermod
[5] https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

HRA that is not consistent with state and South Coast AQMD guidelines will be returned to the facility with a list of necessary corrections, prior to approval.

If the HRA shows that your facility poses a maximum individual lifetime cancer risk of ten in one million or greater, or the non-cancer health effects hazard index exceeds one, you will be required to provide public notice to all individuals exposed above notification levels. The determination of whether the facility is subject to notification will be made upon approval of the HRA. You will receive further information regarding the public notification process at that time.

In addition, if your facility poses a maximum individual lifetime cancer risk of 25 in a million or greater, cancer burden of 0.5 or greater, or non-cancer health effects hazard index of 3 or greater, you will be also subject to risk reduction provisions of Rule 1402 (f).

Further Assistance

If you have questions regarding the guidelines, the HARP software, or need any other assistance, please contact Matthew Lee, Air Quality Engineer II at (909) 396-2053, or Fortune Chen, Senior Air Quality Engineer, at (909) 396-2472.

Should you have any questions regarding the contents of this letter, do not hesitate to contact me at (909) 396-3524.

Sincerely,

Eugene Kang
Planning and Rules Manager, AB 2588 Program
Planning, Rule Development & Area Sources

EK:VM:FC:ML

Attachment(s):
- Attachment A –Source Test Report
- Attachment B – List of Required Corrections for ATIR Resubmittal
- Attachment C – AB 2588 Air Toxics Document Certification & Submittal Form

cc Sent Via Email Only:
- Jason Aspell, South Coast AQMD
- Mitch Haimov, South Coast AQMD
- Daphne Hsu, South Coast AQMD
- Ian MacMillan, South Coast AQMD
- Terrence Mann, South Coast AQMD
- Sarah Rees, South Coast AQMD
- Bill Welch, South Coast AQMD
- Kimberly Pham, Bowman Plating Co. Inc.
- Barry Groveman, Groveman Hiete LLP
- Ryan Hiete, Groveman Hiete LLP
- Shailesh Patel, Trinity Consultants
- Steven Walters, Trinity Consultants

South Coast
Air Quality Management District
South Coast AQMD
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SOURCE TEST REPORT

21-357

HEXAVALENT AND TOTAL CHROMIUM EMISSIONS
FROM BUILDING PTE
Bowman Plating Co., Inc.
2631 E 126th St.
Compton CA 90222

TESTED:	April 27 and 28, 2021
REPORT ISSUED:	October 19, 2021
REPORTED BY:	G. Brian Speaks Air Quality Engineer

REVIEWED BY:

William A Welch

Bill Welch
Source Testing Manager

SOURCE TEST ENGINEERING BRANCH

MONITORING & ANALYSIS DIVISION

TABLE OF CONTENTS

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, California 91765

Test No. 21-357 -3- Date: 4/27/2021 and 4/28/2021

TEST DETAILS

a. Firm ..... Bowman Plating Co. Inc.

b. Test Location ..... 2631 E. 126th St. Compton, CA 90222

c. Unit(s) Tested ..... Uncontrolled building PTE exhaust housing tanks 301, 310, & 314

d. Test Requested by ..... Tracy Goss, Planning and Rules Manager South Coast AQMD, (909) 396-3106

e. Reason for Test Request ..... Determine Total and Cr^{+6} Emissions from building housing chromic acid anodizing line

f. Date of Tests ..... April 27 - 28, 2021

g. Source Tests to Performed by ..... South Coast AQMD Source Test Engineering

h. Test Arrangements Made Through ..... Massoud Akhavi, Env. Compliance Manager

i. Source Tests to Observed by ..... Massoud Akhavi, Env. Compliance Manager

j. Company I.D. No. 18989

k. Permit No. G46872, G46953

EXECUTIVE SUMMARY

Bowman Plating Company, Inc. (Bowman Plating) conducts plating operations on aluminum aerospace parts that utilize a chromic acid anodizing tank (Tank #301) and two chromate seal tanks (Tanks #310 and #314). The tanks are vented to an Ultra-Low Particulate Arrestor (ULPA) Air Pollution Control System (APCS). The tank and control equipment have been issued Permits to Operate by the South Coast Air Quality Management District (South Coast AQMD). SCAQMD Rule 1469 required source testing for total and hexavalent chromium on the exhaust to atmosphere. Testing was conducted in 2019 by Montrose Air Quality Services (Montrose AQS) for the tanks and associated Air Pollution Control System (APCS). However, based on the design of the heated dichromate seal tank enclosure device and nature of operation of the heated tanks, the test results were deemed non-compliant. The design of the clamshell enclosure system and associated ventilation system lead to the loss of capture efficiency when the hood is opened in order to place parts in the tank. This is not an issue for the anodizing tank, because emissions are generated only while electrical current is being sent to the rectifier. In this case, the current is stopped prior to opening of the hood and removal of parts. The heated dichromate seal tanks, however, remain at temperature when the clamshell hood is opened to remove or insert parts. When the hood is open over these two tanks, fugitive emissions escape into the building.

Bowman Plating is in the process of fulfilling their AB 2588 emissions reporting requirement for 2019. In order to address the fugitive emissions in that occur in the building that houses the anodizing line (including heated tanks 321 and 314), Bowman Plating turned the anodizing line building in to a Permanent Total Enclosure (PTE) according to EPA Method 204. A test protocol was developed to simultaneously test the tank APCS and the fugitive emissions from the uncontrolled exhaust while operating the tanks at capacities representative of 2019 production data.

In order to accurately quantify the total facility emissions while duplicating 2019 operating conditions, a source test of the uncontrolled exhaust from the anodizing building was conducted while simultaneously testing the outlet of the process tanks APCS. Runs were completed in triplicate at the outlet of the APCS and each of the (2) exhaust outlets of the building PTE. The building PTE was verified according to EPA Method 204. The building PTE testing was conducted by South Coast AQMD Source Test Engineering, and the tank APCS exhaust was tested concurrently by Montrose AQS. Only the results of the uncontrolled building PTE exhaust are presented in this report. Emissions from the exhaust of the APCS will be issued in a separate source test evaluation of the Montrose AQS test report. A summary of hexavalent chromium emissions from the uncontrolled building PTE exhaust is presented in Table 1. A summary of total chromium emissions from the uncontrolled building PTE exhaust is presented in Table 2.

Table 1: Summary of Hexavalent Chromium Emission Results

Building PTE Uncontrolled Cr^{+6} Emissions			
3 Run Average	East Inlet	West Inlet	Total
Exhaust Sample Concentration (ng/M^3)	0.45	0.22	N/A
Mass Emissions Rate (mg/hr)	4.94	2.58	7.52
Mass Emission Rate (lb/hr)	1.09E-05	5.69E-06	1.66E-05
Exhaust Flow Rate (dscfm)	5199	5634	10833

Table 2: Summary of Total Chromium Emission Results

Building PTE Uncontrolled Cr_{Tot} Emissions			
3 Run Average	East Inlet	West Inlet	Total
Exhaust Sample Concentration (ng/M^3)	1.10	0.49	N/A
Mass Emissions Rate (mg/hr)	6.09	11.81	17.90
Mass Emission Rate (lb/hr)	2.60E-05	1.34E-05	3.94E-05
Exhaust Flow Rate (dscfm)	5199	5634	10833

INTRODUCTION

On April 27th and 28th, 2021, Engineers from the South Coast AQMD Source Test Engineering (STE) branch conducted triplicate run source testing for hexavalent and total chromium emissions from two (2) uncontrolled building PTE exhaust vents. Testing was performed at Bowman Plating Co., Inc. in Compton, CA. The objective of the testing was to quantify the fugitive hexavalent and total chromium emissions from processes in the building by measuring the uncontrolled exhaust from the building PTE while conducting operations representative of 2019 operating conditions.

The testing at each of the building PTE exhaust locations consisted of (3) concurrent 180-minute sampling runs. During each sampling period, the heated seal tanks were opened once per hour. All production activities and operational settings during the test were documented by Montrose AQS and verified periodically during testing by South Coast AQMD Source Test Engineering Staff.

RESULTS

Results of the hexavalent and total chromium emissions from the uncontrolled building PTE exhausts at the East and West sample locations are presented in Tables 3 and 4, below. Tank solution samples were collected from the anodizing and dichromate seal tanks and analyzed by South Coast AQMD for hexavalent chromium. Tank solution results are presented in Table 5 below. Montrose AQS recorded the process parameters during the test, including velocities for the building PTE which were verified by South Coast AQMD staff during testing. This information is presented in Table 6 below.

Table 3: Building PTE Uncontrolled Cr^{+6} Emissions

Building PTE Uncontrolled Cr^{+6} Emissions - East				
	Run 1	Run 2	Run 3	Average
Sample Date	4/27/2021	4/28/2021	4/28/2021	-
Moisture (%)	2.28	2.49	2.48	2.42
Exhaust Flow Rate (acfm)	5121	5861	4616	5199
Exhaust Flow Rate (dscfm)	5753	5539	4306	5199
Sample Volume (dscf)	64.343	69.698	55.928	63.323
Sample Time (min.)	180	180	180	180
Isokinetic Rate (%)	93.8	101.3	107.3	100.8
Mass Emissions Rate (mg/hr)	7.72	2.86	4.25	4.94
Mass Emission Rate (lb/hr)	1.70E-05	6.30E-06	9.37E-06	1.09E-05

Building PTE Uncontrolled Cr^{+6} Emissions - West				
	Run 1	Run 2	Run 3	Average
Sample Date	4/27/2021	4/28/2021	4/28/2021	-
Moisture (%)	2.08	2.21	2.09	2.13
Exhaust Flow Rate (acfm)	5556	6280	5893	5910
Exhaust Flow Rate (dscfm)	5327	6004	5571	5634
Sample Volume (dscf)	67.368	77.101	69.629	71.366
Sample Time (min.)	180	180	180	180
Isokinetic Rate (%)	100.8	102.2	99.8	100.9
Mass Emissions Rate (mg/hr)	1.61	3.92	2.21	2.58
Mass Emission Rate (lb/hr)	3.55E-06	8.65E-06	4.87E-06	5.69E-06

Table 4: Building PTE Uncontrolled Cr_{Tot} Emissions

Building PTE Uncontrolled Cr_{Tot} Emissions - East				
	Run 1	Run 2	Run 3	Average
Sample Date	4/27/2021	4/28/2021	4/28/2021	-
Moisture (%)	2.28	2.49	2.48	2.42
Exhaust Flow Rate (acfm)	5121	5861	4616	5199
Exhaust Flow Rate (dscfm)	5753	5539	4306	5199
Sample Volume (dscf)	64.343	69.698	55.928	63.323
Sample Time (min.)	180	180	180	180
Isokinetic Rate (%)	93.8	101.3	107.3	100.8
Mass Emissions Rate (mg/hr)	20.66	5.72	9.05	11.81
Mass Emission Rate (lb/hr)	4.55E-05	1.26E-05	2.00E-05	2.60E-05

Building PTE Uncontrolled Cr_{Tot} Emissions - West				
	Run 1	Run 2	Run 3	Average
Sample Date	4/27/2021	4/28/2021	4/28/2021	-
Moisture (%)	2.08	2.21	2.09	2.13
Exhaust Flow Rate (acfm)	5556	6280	5893	5910
Exhaust Flow Rate (dscfm)	5327	6004	5571	5634
Sample Volume (dscf)	67.368	77.101	69.629	71.366
Sample Time (min.)	180	180	180	180
Isokinetic Rate (%)	100.8	102.2	99.8	100.9
Mass Emissions Rate (mg/hr)	2.70	12.98	2.59	6.09
Mass Emission Rate (lb/hr)	5.96E-06	2.86E-05	5.71E-06	1.34E-05

Table 5: Tank Solution Results

	Tank 301	Tank 321	Tank 314
Cr^{+6} Concentration (ppmw)	44590	13135	63.8

Table 6: Process Parameters

	Run 1		Run 2		Run 3	
	Tank 321	Tank 314	Tank 321	Tank 314	Tank 321	Tank 314
Sample Date	4/27/2021		4/28/2021		4/28/2021	
Temp. (°F)	199.5	189.5	199.5	189.5	199.5	198.5
Freeboard (in.)	4	4	5	5	5	5
Polyballs (Y/N)	Y	Y	Y	Y	Y	Y
Time Open During Run (min.)	8	8	6	6	6	6

PTE South Curtain Velocity (fpm)	272	273	273
PTE East Door Ajar Velocity (fpm)	283	244	244

EQUIPMENT AND PROCESS DESCRIPTION

Bowman Plating conducts metal finishing operations on aluminum aerospace parts that involve a chromic acid anodizing tank (#301), and two sodium dichromate seal tanks (#314 and #321). The anodizing tank is equipped with clamshell type enclosed hood and utilizes no mist suppressant. The hood is vented to atmosphere through a two-stage mist eliminator and a prefilter/ULPA filter up on the roof. The seal tanks are side by side and equipped with a common clamshell type enclosed hood that is vented through a refrigerated condenser out to the two-stage mist eliminator.

Tank #301 is 21’ long, 28" wide, and 96" deep. The tank is heated by steam and served by a rectifier with a capacity of 48 volts and 2,500 amps. The tank utilizes no mist suppressant and has a dedicated amp-hour meter. Permit to Operate G46872 covers this equipment.

Tank #314 is 21’ long, about 36" wide, and 96" deep. The tank is heated by steam. Permit to Operate G46872 covers this equipment.

Tank #321 is 21’ long, 36" wide, and 96" deep. The tank is heated by steam. Permit to Operate G46872 covers this equipment.

The emissions from the anodizing tank are collected by a two-piece semicircular enclosed hood that covers the tank during anodizing and opens up to move the parts by way of an overhead crane. The hood is open on one end and vented from the opposite end to a vertical in-line mist eliminator that consists of a two separate 4-inch mesh pads. Each mesh pad has a spray header below it that is connected to a fresh water supply. The stages are washed periodically and drain into the anodizing tank. Each stage is equipped with a Magnehelic differential pressure gage.

The emissions from the two dichromate seal tanks are collected by a two-piece semicircular enclosed hood that covers both tanks during processing (see Figure 1) and opens up to move the parts by way of an overhead crane. The hood is open on one end and vented from the opposite end into a refrigerated condenser and then to a two-stage mist eliminator. The mist eliminator is vented through the ULPA filter.

The ULPA filter is equipped with two 24" x 24" x 4" prefilters and two 24" x 24" x 11.5" ULPA filters. The ULPA filters are rated at 99.999% efficiency for 0.3 micron particles. The ULPA filter stage is equipped with a Magnehelic differential gage. A 10-HP variable speed blower induces the draft in the filter and hoods and exhausts to the atmosphere at a rate of about 2,000 ACFM. Permit to Operate G46953 covers this equipment.

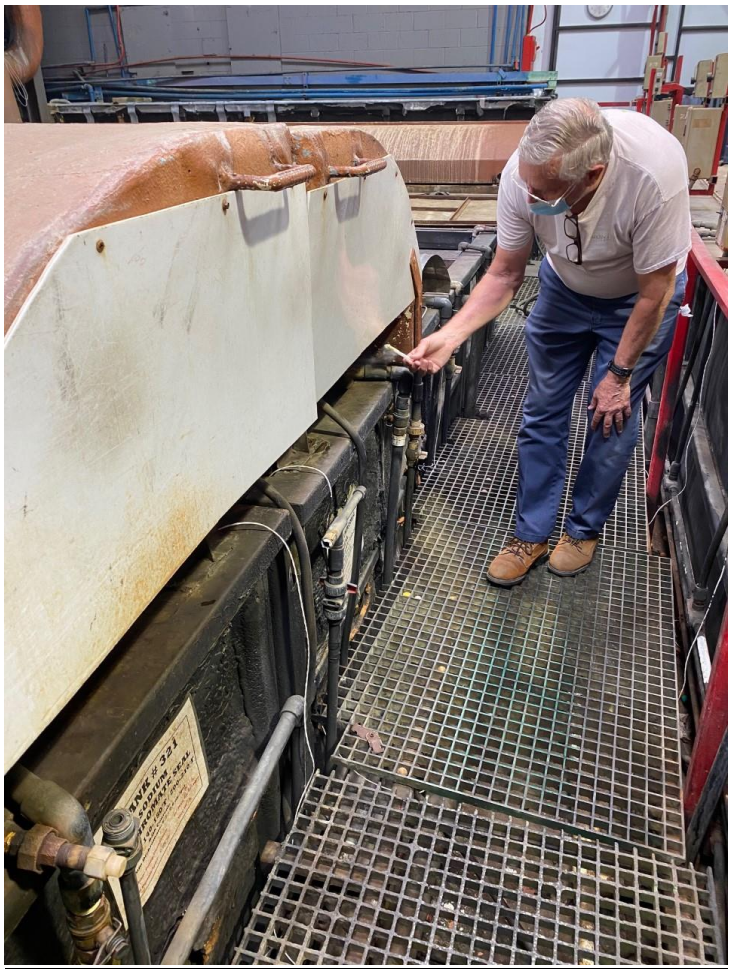


Figure 1 – Dual Clamshell Hood Over Tanks #314 and #321

SAMPLING AND ANALYTICAL PROCEDURES

Testing Methodology

Prior to source testing, Montrose AQS verified that the anodizing building enclosure meets the PTE requirements specified in EPA Method 204. This included verification that the flow to the PTE is inward, measurement of the inward velocity by hotwire anemometer, and documentation of the size and area of all natural draft openings (NDO's). This information was verified on site by South Coast AQMD staff.

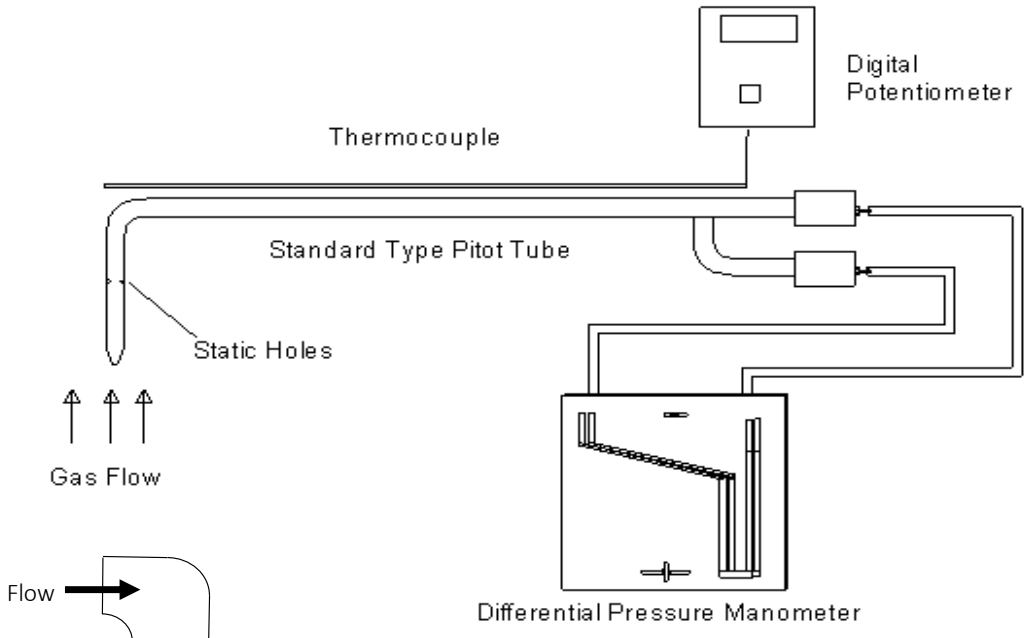
During the testing period, the facility operated all equipment in a fashion consistent with documented operating conditions for 2019. Parameters verified during testing include: tank hexavalent chromium concentrations, tank temperatures, tank freeboard, use of additional control measures such as polyballs, pressure drops across control system components, ventilation flow rates for the APCS and the building PTE exhaust, amperage and voltage applied to the anodizing tank, totalizer readings for the anodizing tank at the start and end of each test run, type and number of parts plated in anodizing tank during each run, and the number of times per hour and the duration that the clamshell hoods are opened for the heated tanks. Samples of tank solutions were collected for each of the two heated dichromate seal tanks and the chromic acid anodizing tank served by the APCS during testing and analyzed for hexavalent chromium and total chromium concentration.

Samples were acquired concurrently from each of two (2) building PTE exhaust ducts (see Figure 2) in order to determine fugitive emissions of hexavalent and total chromium within the building. Simultaneous sampling was conducted by Montrose AQS at the outlet of the tank APCS, with results documented in a separate report.

Flow Rate

The gas velocity within each sampling duct was measured during each sampling run at twenty-four (24) points within the duct cross section according to South Coast AQMD Methods 1.1 and 2.1. This was performed during sampling using a calibrated standard type Pitot tube with a differential pressure manometer, and a calibrated type "K" thermocouple with a potentiometer (Figure 3). The apparatus was checked for leaks both before and after use by introducing a pressure head and blocking the flow at the Pitot tip. An observation of the resulting stabilization in pressure at the manometer verified the absence of leaks in the system. The stack's access ports were located using the approach of South Coast AQMD Method 1.1 for ducts greater than 12 inches in diameter. Using this approach, the sampling/velocity access ports were located greater than two stack diameters downstream and one-half stack diameters upstream from flow disturbances. This configuration meets the South Coast AQMD Method 1.1 requirements for measurement site location.

Figure 2 – Building PTE Exhaust Sampling Locations



Traverse Point #	Distance from Inner Stack Wall (% of Dia.)
1, 13	2.1
2, 14	6.7
3, 15	11.8
4, 16	17.7
5, 17	25.0
6, 18	35.6
7,19	64.4
8, 20	75.0
9, 21	82.3
10,22	88.2
11,23	93.3
12, 24	97.9

Figure 3 – Traverse Point Diagram

The volumetric flow rate was calculated for each sampling run using the stack's cross-sectional area and average gas velocity. The flow rate was corrected to standard conditions using the stack temperature and pressure along with the barometric pressure measured with a calibrated aneroid barometer. The flow rate was also corrected to dry conditions using the moisture content as

determined by the South Coast AQMD Method 4.1 weight gain from the sampling trains as described in the following section.

Total and Hexavalent Chromium Sampling – CARB Method 425

A chromium sample was collected during each sampling run using CARB Method 425. The sample was collected from the locations within the sampling duct previously described in the velocity measurements. Each sample was collected over a period of 180 minutes using a sampling train consisting of a glass probe and nozzle connected by non-reactive tubing to the first of two Greenburg-Smith impingers each containing 100 ml of 0.1N sodium bicarbonate, an empty bubbler, a Teflon filter, and a bubbler containing tared silica gel desiccant.

The impinger assembly was connected to a vacuum pump and a calibrated dry gas meter. The sampling apparatus was checked for leaks both before and after sampling by blocking the flow at the probe tip. An observation of the resulting decrease in flow at the meter to less than 0.02 cfm or four percent of the sampling rate indicated an acceptable leak rate. The impinger train was contained within an ice bath to condense water and other condensable matter present in the sample stream.

The impinger train was returned to the SCAQMD laboratory for recovery. The pH of the recovered solution was verified of being greater than 8.0 as specified in CARB Method 425. Hexavalent chromium collected in the nozzle, probe, and impingers was determined using ion chromatography with post column reactor (IC/PCR).

DISCUSSION AND TEST CRITIQUE

Test sampling and analyses were successfully completed, and the reported results are considered accurate for the conditions tested. Following sampling, one of the probes (probe #3, Train 30), was broken. The ends of the probe were immediately sealed, and all pieces of the broken probe were extracted and analyzed. The analytical results fell within the sample standard deviation of the test set and have therefore been included in the data set.

Montrose AQS had previously conducted a single run test of the building uncontrolled emissions by EPA Method 306 in August of 2020. Results from that testing showed total Cr^{+6} emissions of 4.04 mg/hr. These results did not fulfill AB2588 requirements because only a single run was performed, and CARB approved methods were not used. The results from the previous test, however, are comparable with the results presented in this report.

APPENDICES

APPENDIX A

Calculations

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 E. Copley Dr. Diamond Bar, California 91765-4182

Test No. 21-357 Test Date: 4/27/21

SOURCE TEST CALCULATIONS

Sampling Location: East Inlet Run 1
Sample Train: 15 Input by: B. Speaks

SUMMARY

A. Average Traverse Velocity	20.81	fps
B. Gas Meter Temperature (Use 60 deg.F for Temp Comp. Meters)	90.1	deg F
C. Gas Meter Correction Factor	1.0062	
D. Average Orifice Pressure	0.43	"H_2O
E. Nozzle Diameter	0.2442	inch

F1. Stack Diameter or Dimension #1	30	inch	M. Pitot Correction Factor	0.84	
F2. Stack Dim #2 (blank if circular)		inch	N. Sampling Time	180	min
G. Stack Cross Sect. Area	4.909	ft2	O. Nozzle X-Sect. Area	0.00033	ft
H. Average Stack Temp	0.1	deg F	P. Net Hex Chrome Collection	0.00144	mg
I. Barometric Pressure	30.41	"HgA	Q. Hex Chrome Collection	0.00144	mg
J. Gas Meter Pressure (I+(D/13.6))	30.44	"HgA	R. Water Vapor Condensed	32.3	ml
K. Static Pressure	0.32	"H_2O	S. Gas Volume Metered	66.495	dcf
L. Total Stack Pressure (I+(K/13.6))	30.43	"HgA	S2. Amp-hr		amp-hr

T. Corrected Gas Volume [(S x J/29.92) x 520/(460+B) x C	64.343	dscf

PERCENT MOISTURE/GAS DENSITY

U. Percent Water Vapor in Gas Sample ((4.64 x R)/((0.0464 x R) + T))	2.28	%

V. Average Molecular Weight (Wet):

Component	Vol. Fract.		x	Moist. Fract.	x	Molecular Wt.		=	Wt./Mole
Water	0.023			1.000		18.0	,	0.41	
Carbon Dioxide	0.00050	Dry Basis		0.977		44.0	,	0.02	
Carbon Monoxide		Dry Basis		0.977		28.0	,	0.00	
Oxygen	0.20900	Dry Basis		0.977		32.0	,	6.54	
Nitrogen & Inerts	0.791	Dry Basis		0.977		28.2	,	21.78	
							,		
							Sum	28.75	

FLOW RATE

W. Gas Density Correction Factor (28.95/V)^.5	1.00	
X. Velocity Pressure Correction Factor (29.92/L)^.5	0.99	
Y. Corrected Velocity (A x M x W x X)	17.39	fps
Z. Flow Rate (Y x G x 60)	5121	cfm
AA. Flow Rate (Standard) {Z x (L/29.92) x [520/(460+H)]}	5887	scfm
BB. Dry Flow Rate (AA x (U/100))	5753	dscfm

SAMPLE CONCENTRATION/EMISSION RATE

CC. Sample Concentration [0.01543 x (P/T)]	3.453E-07	gr/dscf
DD. Sample Concentration [54,143xC 51.996 (Molecular Wt.)]	0.000	ppm
EE. Sample Concentration [P/T x 1,000,000 x 35.3145]	7.903E+02	ng/dscm
FF. Solid Emission Rate [(.0001322 x Q x BB)/T]	1.702E-05	lb/hr
GG. Isokinetic Sampling Rate [(G x T x 100)/(N x O x BB)]	93.8	%
HH. Hex Chrome Emission Rate (FF x 453.6 x 1000)	7.721206	mg/hr

Pa. Net Total Chrome Collection..... 0.00385 mg
Qa. Total Chrome Collection..... 0.00385 mg

CC. Sample Concentration [0.01543 x (Pa/T)]..... 9.233E-07 gr/dscf
DD. Sample Concentration [54,143xCC/ 0.000 ppm
EE. Sample Concentration [P/T x 1,000,000 x 35.3145]..... 2.113E+03 ng/dscm
FF. Solid Emission Rate [(.0001322 x Qa x BB)/T]..... 4.551E-05 lb/hr
GG. Isokinetic Sampling Rate [(G x T x 100)/(N x O x BB)]..... 93.8 %
HH. Total Chrome Emission Rate (FF x 454 x 1000)..... 20.66171 mg/hr

Traverse Point #	Velocity Head #1 ("H_2O)	Temp. (°F)	Calculated Velocity (fps)	Traverse Point #	Gas Meter Temp In (°F)	Gas Meter Temp Out (°F)	Average Gas Meter Temp (°F)	Traverse Point #	Orifice Pressure (" H_2O)		
1	0.10	0.1	19.67	1	82	82	82.00	1	0.366		
2	0.12	0.12	21.55	2	83	82	82.50	2	0.439		
3	0.14	0.14	23.28	3	84	83	83.50	3	0.517		
4	0.15	0.15	24.09	4	81	81	81.00	4	0.548		
5	0.15	0.15	24.09	5	84	82	83.00	5	0.546		
6	0.16	0.16	24.88	6	84	82	83.00	6	0.584		
7	0.15	0.15	24.09	7	87	83	85.00	7	0.548		
8	0.13	0.13	22.43	8	89	85	87.00	8	0.479		
9	0.12	0.12	21.55	9	88	85	86.50	9	0.444		
10	0.11	0.11	20.63	10	88	85	86.50	10	0.407		
11	0.08	0.08	17.59	11	87	86	86.50	11	0.295		
12	0.05	0.05	13.91	12	92	88	90.00	12	0.184		
13	0.09	0.09	18.66	13	94	92	93.00	13	0.338		
14	0.09	0.09	18.66	14	97	94	95.50	14	0.341		
15	0.10	0.1	19.67	15	100	97	98.50	15	0.383		
16	0.12	0.12	21.55	16	100	97	98.50	16	0.461		
17	0.15	0.15	24.09	17	97	96	96.50	17	0.576		
18	0.15	0.15	24.09	18	95	95	95.00	18	0.574		
19	0.14	0.14	23.28	19	94	94	94.00	19	0.532		
20	0.12	0.12	21.55	20	96	94	95.00	20	0.456		
21	0.10	0.1	19.67	21	95	93	94.00	21	0.378		
22	0.09	0.09	18.66	22	99	95	97.00	22	0.342		
23	0.07	0.07	16.46	23	95	94	94.50	23	0.265		
24	0.06	0.06	15.24	24	96	95	95.50	24	0.227		
Init Gas Meter Rdng:		53.755		Final Gas Meter Rdng:		120.25		Total Gas Volume		66.495	
Average Temperature (°F) -			0.11417	Average Velocity (fps) -			20.81				
Avg Gas Meter Temperature (°F)			90.1458	Average Orifice Press. ("H_2O) -			0.43				

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 E. Copley Dr. Diamond Bar, California 91765-4182

Test No. 21-357 Test Date: 4/28/21

SOURCE TEST CALCULATIONS

Sampling Location: East Inlet Run 2
Sample Train: 30 Input by: B. Speaks

SUMMARY

A. Average Traverse Velocity	23.82	fps
B. Gas Meter Temperature (Use 60 deg.F for Temp Comp. Meters)	93.5	deg F
C. Gas Meter Correction Factor	1.0041	
D. Average Orifice Pressure	0.51	"H_2O
E. Nozzle Diameter	0.2492	inch

F1. Stack Diameter or Dimension #1	30	inch	M. Pitot Correction Factor	0.84	
F2. Stack Dim #2 (blank if circular)		inch	N. Sampling Time	180	min
G. Stack Cross Sect. Area	4.909	ft2	O. Nozzle X-Sect. Area	0.00034	ft
H. Average Stack Temp	86.4	deg F	P. Net Sample Collection	0.0006	mg
I. Barometric Pressure	30.45	"HgA	Q. Net Solid Collection	0.0006	mg
J. Gas Meter Pressure (I+(D/13.6))	30.49	"HgA	R. Water Vapor Condensed	38.4	ml
K. Static Pressure	0.36	"H_2O	S. Gas Volume Metered	72.515	dcf
L. Total Stack Pressure (I+(K/13.6))	30.48	"HgA	S2. Amp-hr		amp-hr

T. Corrected Gas Volume [(S x J/29.92) x 520/(460+B) x C	69.698	dscf

PERCENT MOISTURE/GAS DENSITY

U. Percent Water Vapor in Gas Sample ((4.64 x R)/((0.0464 x R) + T))	2.49	%

V. Average Molecular Weight (Wet):

Component	Vol. Fract.		x	Moist. Fract.	x	Molecular Wt.		=	Wt./Mole
Water	0.025			1.000		18.0	,	0.45	
Carbon Dioxide	0.00050	Dry Basis		0.975		44.0	,	0.02	
Carbon Monoxide		Dry Basis		0.975		28.0	,	0.00	
Oxygen	0.20900	Dry Basis		0.975		32.0	,	6.52	
Nitrogen & Inerts	0.791	Dry Basis		0.975		28.2	,	21.74	
							,		
							Sum	28.73	

FLOW RATE

W. Gas Density Correction Factor (28.95/V)^.5	1.00	
X. Velocity Pressure Correction Factor (29.92/L)^.5	0.99	
Y. Corrected Velocity (A x M x W x X)	19.90	fps
Z. Flow Rate (Y x G x 60)	5861	cfm
AA. Flow Rate (Standard) {Z x (L/29.92) x [520/(460+H)]}	5681	scfm
BB. Dry Flow Rate (AA x (U/100))	5539	dscfm

SAMPLE CONCENTRATION/EMISSION RATE

CC. Sample Concentration [0.01543 x (P/T)]	1.328E-07	gr/dscf
DD. Sample Concentration [54,143xC(51.996 (Molecular Wt.)]	0.000	ppm
EE. Sample Concentration [P/T x 1,000,000 x 35.3145]	3.040E+02	ng/dscm
FF. Solid Emission Rate [(.0001322 x Q x BB)/T]	6.304E-06	lb/hr
GG. Isokinetic Sampling Rate [(G x T x 100)/(N x O x BB)]	101.3	%
HH. Sample Emission Rate (FF x 453.6 x 1000)	2.859571	mg/hr

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, California 91765

Test Nos. 21-357 -19- Date: 4/27/2021 and 4/28/2021

Pa. Net Total Chrome Collection..... 0.0012 mg
Qa. Total Chrome Collection..... 0.0012 mg
CC. Sample Concentration [0.01543 x (Pa/T)]..... 2.657E-07 gr/dscf
DD. Sample Concentration [54,143xCC/ 0.000 ppm
EE. Sample Concentration [P/T x 1,000,000 x 35.3145]..... 6.080E+02 ng/dscm
FF. Solid Emission Rate [(.0001322 x Qa x BB)/T]..... 1.261E-05 lb/hr
GG. Isokinetic Sampling Rate [(G x T x 100)/(N x O x BB)]..... 101.3 %
HH. Hex Chrome Emission Rate (FF x 453.6 x 1000)..... 5.719143 mg/hr

Traverse Point #	Velocity Head #1 ("H_2O)	Temp. (°F)	Calculated Velocity (fps)	Traverse Point #	Gas Meter Temp In (°F)	Gas Meter Temp Out (°F)	Average Gas Meter Temp (°F)	Traverse Point #	Orifice Pressure (" H_2O)		
1	0.11	83	22.41	1	78	80	79.00	1	0.433		
2	0.12	84	23.43	2	82	79	80.50	2	0.47		
3	0.14	83	25.28	3	82	80	81.00	3	0.551		
4	0.15	83	26.17	4	84	81	82.50	4	0.592		
5	0.16	84	27.06	5	87	83	85.00	5	0.635		
6	0.16	84	27.06	6	89	85	87.00	6	0.64		
7	0.16	85	27.08	7	91	87	89.00	7	0.644		
8	0.15	85	26.22	8	92	88	90.00	8	0.606		
9	0.14	84	25.31	9	93	89	91.00	9	0.568		
10	0.13	85	24.41	10	93	90	91.50	10	0.529		
11	0.11	86	22.47	11	94	91	92.50	11	0.448		
12	0.09	87	20.35	12	95	92	93.50	12	0.367		
13	0.10	88	21.47	13	95	93	94.00	13	0.409		
14	0.12	88	23.52	14	95	94	94.50	14	0.492		
15	0.13	87	24.45	15	97	95	96.00	15	0.536		
16	0.14	87	25.38	16	99	96	97.50	16	0.58		
17	0.14	88	25.40	17	100	97	98.50	17	0.581		
18	0.14	88	25.40	18	101	98	99.50	18	0.583		
19	0.14	88	25.40	19	103	100	101.50	19	0.587		
20	0.13	88	24.48	20	104	101	102.50	20	0.547		
21	0.11	89	22.54	21	105	102	103.50	21	0.464		
22	0.09	90	20.40	22	106	103	104.50	22	0.38		
23	0.06	89	16.64	23	106	104	105.00	23	0.255		
24	0.08	91	19.25	24	106	105	105.50	24	0.34		
Init Gas Meter Rdng:		120.525		Final Gas Meter Rdng:		193.04		Total Gas Volume		72.515	
Average Temperature (°F) -			86.4167	Average Velocity (fps) -			23.82				
Avg Gas Meter Temperature (°F)			93.5417	Average Orifice Press. ("H_2O) -			0.51				

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 E. Copley Dr. Diamond Bar, California 91765-4182

Test No. 21-357 Test Date: 4/28/21

SOURCE TEST CALCULATIONS

Sampling Location: East Inlet Run 3
Sample Train: 39 Input by: B. Speaks

SUMMARY

A. Average Traverse Velocity	18.76	fps
B. Gas Meter Temperature (Use 60 deg.F for Temp Comp. Meters)	103.6	deg F
C. Gas Meter Correction Factor	1.0062	
D. Average Orifice Pressure	0.31	"H_2O
E. Nozzle Diameter	0.2460	inch

F1. Stack Diameter or Dimension #1	30	inch	M. Pitot Correction Factor	0.84	
F2. Stack Dim #2 (blank if circular)		inch	N. Sampling Time	180	min
G. Stack Cross Sect. Area	4.909	ft2	O. Nozzle X-Sect. Area	0.00033	ft
H. Average Stack Temp	93.7	deg F	P. Net Sample Collection	0.00092	mg
I. Barometric Pressure	30.45	"HgA	Q. Net Solid Collection	0.00092	mg
J. Gas Meter Pressure (I+(D/13.6))	30.47	"HgA	R. Water Vapor Condensed	30.6	ml
K. Static Pressure	0.36	"H_2O	S. Gas Volume Metered	59.150	dcf
L. Total Stack Pressure (I+(K/13.6))	30.48	"HgA	S2. Amp-hr		amp-hr

T. Corrected Gas Volume [(S x J/29.92) x 520/(460+B) x C] 55.928 dscf

PERCENT MOISTURE/GAS DENSITY

U. Percent Water Vapor in Gas Sample ((4.64 x R)/((0.0464 x R) + T)) 2.48 %

V. Average Molecular Weight (Wet):

Component	Vol. Fract.		x	Moist. Fract.	x	Molecular Wt.		=	Wt./Mole
Water	0.025			1.000		18.0	,	0.45	
Carbon Dioxide	0.00050	Dry Basis		0.975		44.0	,	0.02	
Carbon Monoxide		Dry Basis		0.975		28.0	,	0.00	
Oxygen	0.20900	Dry Basis		0.975		32.0	,	6.52	
Nitrogen & Inerts	0.791	Dry Basis		0.975		28.2	,	21.74	
							,		
							Sum	28.73	

FLOW RATE

W. Gas Density Correction Factor (28.95/V)^.5	1.00	
X. Velocity Pressure Correction Factor (29.92/L)^.5	0.99	
Y. Corrected Velocity (A x M x W x X)	15.67	fps
Z. Flow Rate (Y x G x 60)	4616	cfm
AA. Flow Rate (Standard) {Z x (L/29.92) x [520/(460+H)]}	4416	scfm
BB. Dry Flow Rate (AA x (U/100))	4306	dscfm

SAMPLE CONCENTRATION/EMISSION RATE

CC. Sample Concentration [0.01543 x (P/T)]	2.538E-07	gr/dscf
DD. Sample Concentration [54,143xC 51.996 (Molecular Wt.)]	0.000	ppm
EE. Sample Concentration [P/T x 1,000,000 x 35.3145]	5.809E+02	ng/dscm
FF. Solid Emission Rate [(.0001322 x Q x BB)/T]	9.365E-06	lb/hr
GG. Isokinetic Sampling Rate [(G x T x 100)/(N x O x BB)]	107.3	%
HH. Sample Emission Rate (FF x 453.6 x 1000)	4.247879	mg/hr

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, California 91765

Test Nos. 21-357 -21- Date: 4/27/2021 and 4/28/2021

Pa. Net Total Chrome Collection	0.00196	mg
Qa. Total Chrome Collection	0.00196	mg
CC. Sample Concentration [0.01543 x (Pa/T)]	5.407E-07	gr/dscf
DD. Sample Concentration [54,143xCC/	0.000	ppm
EE. Sample Concentration [P/T x 1,000,000 x 35.3145]	1.238E+03	ng/dscm
FF. Solid Emission Rate [(.0001322 x Qa x BB)/T]	1.995E-05	lb/hr
GG. Isokinetic Sampling Rate [(G x T x 100)/(N x O x BB)]	107.3	%
HH. Hex Chrome Emission Rate (FF x 453.6 x 1000)	9.049829	mg/hr

Traverse Point #	Velocity Head #1 ("H_2O)	Temp. (°F)	Calculated Velocity (fps)	Traverse Point #	Gas Meter Temp In (°F)	Gas Meter Temp Out (°F)	Average Gas Meter Temp (°F)	Traverse Point #	Orifice Pressure (" H_2O)		
1	0.06	92	16.69	1	106	106	106.00	1	0.242		
2	0.07	91	18.01	2	104	104	104.00	2	0.281		
3	0.09	92	20.44	3	103	104	103.50	3	0.361		
4	0.10	92	21.55	4	104	104	104.00	4	0.401		
5	0.11	92	22.60	5	105	104	104.50	5	0.441		
6	0.12	92	23.60	6	104	104	104.00	6	0.481		
7	0.10	92	21.55	7	104	104	104.00	7	0.401		
8	0.08	93	19.29	8	104	103	103.50	8	0.319		
9	0.08	94	19.31	9	105	104	104.50	9	0.32		
10	0.07	97	18.11	10	105	104	104.50	10	0.278		
11	0.04	95	13.66	11	105	104	104.50	11	0.16		
12	0.04	98	13.70	12	105	104	104.50	12	0.159		
13	0.07	94	18.06	13	105	104	104.50	13	0.28		
14	0.06	94	16.72	14	104	104	104.00	14	0.24		
15	0.08	94	19.31	15	104	103	103.50	15	0.319		
16	0.09	95	20.50	16	104	103	103.50	16	0.358		
17	0.10	94	21.59	17	104	103	103.50	17	0.398		
18	0.09	94	20.48	18	104	103	103.50	18	0.358		
19	0.09	93	20.46	19	104	103	103.50	19	0.359		
20	0.08	93	19.29	20	103	102	102.50	20	0.318		
21	0.05	94	15.26	21	103	102	102.50	21	0.198		
22	0.07	94	18.06	22	102	101	101.50	22	0.277		
23	0.06	94	16.72	23	102	101	101.50	23	0.237		
24	0.05	96	15.29	24	101	100	100.50	24	0.196		
Init Gas Meter Rdng:		194.06		Final Gas Meter Rdng:		253.21		Total Gas Volume		59.15	
Average Temperature (°F) -			93.7083	Average Velocity (fps) -			18.76				
Avg Gas Meter Temperature (°F)			103.583	Average Orifice Press. ("H_2O) -			0.31				

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 E. Copley Dr. Diamond Bar, California 91765-4182

Test No. 21-357 Test Date: 4/27/21

SOURCE TEST CALCULATIONS

Sampling Location: West Inlet Run 1
Sample Train: 48 Input by: B. Speaks

SUMMARY

A. Average Traverse Velocity	22.58	fps
B. Gas Meter Temperature (Use 60 deg.F for Temp Comp. Meters)	83.3	deg F
C. Gas Meter Correction Factor	0.9925	
D. Average Orifice Pressure	0.47	"H_2O
E. Nozzle Diameter	0.2505	inch

F1. Stack Diameter or Dimension #1	30	inch	M. Pitot Correction Factor	0.84	
F2. Stack Dim #2 (blank if circular)		inch	N. Sampling Time	180	min
G. Stack Cross Sect. Area	4.909	ft2	O. Nozzle X-Sect. Area	0.00034	ft
H. Average Stack Temp	80.4	deg F	P. Net Hex Chrome Collection	0.00034	mg
I. Barometric Pressure	30.41	"HgA	Q. Hex Chrome Collection	0.00034	mg
J. Gas Meter Pressure (I+(D/13.6))	30.44	"HgA	R. Water Vapor Condensed	30.8	ml
K. Static Pressure	0.46	"H_2O	S. Gas Volume Metered	69.695	dcf
L. Total Stack Pressure (I+(K/13.6))	30.44	"HgA	S2. Amp-hr		amp-hr

T. Corrected Gas Volume [(S x J/29.92) x 520/(460+B) x C	67.368	dscf

PERCENT MOISTURE/GAS DENSITY

U. Percent Water Vapor in Gas Sample ((4.64 x R)/((0.0464 x R) + T))	2.08	%

V. Average Molecular Weight (Wet):

Component	Vol. Fract.		x	Moist. Fract.	x	Molecular Wt.		=	Wt./Mole
Water	0.021			1.000		18.0	,	0.37	
Carbon Dioxide	0.00050	Dry Basis		0.979		44.0	,	0.02	
Carbon Monoxide		Dry Basis		0.979		28.0	,	0.00	
Oxygen	0.20900	Dry Basis		0.979		32.0	,	6.55	
Nitrogen & Inerts	0.791	Dry Basis		0.979		28.2	,	21.83	
							,		
							Sum	28.77	

FLOW RATE

W. Gas Density Correction Factor (28.95/V)^.5	1.00	
X. Velocity Pressure Correction Factor (29.92/L)^.5	0.99	
Y. Corrected Velocity (A x M x W x X)	18.86	fps
Z. Flow Rate (Y x G x 60)	5556	cfm
AA. Flow Rate (Standard) {Z x (L/29.92) x [520/(460+H)]}	5440	scfm
BB. Dry Flow Rate (AA x (U/100))	5327	dscfm

SAMPLE CONCENTRATION/EMISSION RATE

CC. Sample Concentration [0.01543 x (P/T)]	7.787E-08	gr/dscf
DD. Sample Concentration [54,143xC 51.996 (Molecular Wt.)]	0.000	ppm
EE. Sample Concentration [P/T x 1,000,000 x 35.3145]	1.782E+02	ng/dscm
FF. Solid Emission Rate [(.0001322 x Q x BB)/T]	3.554E-06	lb/hr
GG. Isokinetic Sampling Rate [(G x T x 100)/(N x O x BB)]	100.8	%
HH. Hex Chrome Emission Rate (FF x 453.6 x 1000)	1.612079	mg/hr

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, California 91765

Test Nos. 21-357 -23- Date: 4/27/2021 and 4/28/2021

Pa. Net Total Chrome Collection	0.00057	mg
Qa. Total Chrome Collection	0.00057	mg
CC. Sample Concentration [0.01543 x (Pa/T)]	1.306E-07	gr/dscf
DD. Sample Concentration [54,143xCC/	0.000	ppm
EE. Sample Concentration [P/T x 1,000,000 x 35.3145]	2.988E+02	ng/dscm
FF. Solid Emission Rate [(.0001322 x Qa x BB)/T]	5.958E-06	lb/hr
GG. Isokinetic Sampling Rate [(G x T x 100)/(N x O x BB)]	100.8	%
HH. Hex Chrome Emission Rate (FF x 454 x 1000)	2.704986	mg/hr

Traverse Point #	Velocity Head #1 ("H_2O)	Temp. (^oF)	Calculated Velocity (fps)	Traverse Point #	Gas Meter Temp In (^oF)	Gas Meter Temp Out (^oF)	Average Gas Meter Temp (^oF)	Traverse Point #	Orifice Pressure (" H_2O)		
1	0.11	80	22.35	1	75	77	76.00	1	0.4337		
2	0.12	80	23.34	2	81	80	80.50	2	0.493		
3	0.11	77	22.29	3	81	79	80.00	3	0.454		
4	0.10	77	21.25	4	81	79	80.00	4	0.413		
5	0.10	79	21.29	5	83	80	81.50	5	0.413		
6	0.09	80	20.22	6	85	80	82.50	6	0.372		
7	0.11	79	22.33	7	85	82	83.50	7	0.458		
8	0.13	79	24.28	8	86	83	84.50	8	0.543		
9	0.15	78	26.05	9	85	83	84.00	9	0.627		
10	0.16	79	26.93	10	83	82	82.50	10	0.663		
11	0.14	80	25.21	11	84	81	82.50	11	0.579		
12	0.15	82	26.15	12	86	83	84.50	12	0.623		
13	0.04	83	13.52	13	88	86	87.00	13	0.168		
14	0.08	84	19.13	14	90	88	89.00	14	0.337		
15	0.10	81	21.33	15	92	88	90.00	15	0.425		
16	0.10	79	21.29	16	87	86	86.50	16	0.421		
17	0.10	78	21.27	17	81	82	81.50	17	0.414		
18	0.10	81	21.33	18	81	81	81.00	18	0.411		
19	0.10	81	21.33	19	82	81	81.50	19	0.411		
20	0.11	83	22.41	20	86	84	85.00	20	0.458		
21	0.12	80	23.34	21	84	83	83.50	21	0.498		
22	0.14	81	25.24	22	82	82	82.00	22	0.578		
23	0.10	84	21.39	23	87	84	85.50	23	0.415		
24	0.18	84	28.70	24	86	83	84.50	24	0.7257		
Init Gas Meter Rdng:		536.865		Final Gas Meter Rdng:		606.56		Total Gas Volume		69.695	
Average Temperature (^oF) -		80.375		Average Velocity (fps) -			22.58				
Avg Gas Meter Temperature (^oF)		83.2917		Average Orifice Press. ("H_2O) -			0.47				

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 E. Copley Dr. Diamond Bar, California 91765-4182

Test No. 21-357 Test Date: 4/28/21

SOURCE TEST CALCULATIONS

Sampling Location: West Inlet Run 2
Sample Train: 47 Input by: B. Speaks

SUMMARY

A. Average Traverse Velocity	25.54	fps
B. Gas Meter Temperature (Use 60 deg.F for Temp Comp. Meters)	88.3	deg F
C. Gas Meter Correction Factor	0.9925	
D. Average Orifice Pressure	0.61	"H_2O
E. Nozzle Diameter	0.2507	inch

F1. Stack Diameter or Dimension #1	30	inch	M. Pitot Correction Factor	0.84	
F2. Stack Dim #2 (blank if circular)		inch	N. Sampling Time	180	min
G. Stack Cross Sect. Area	4.909	ft2	O. Nozzle X-Sect. Area	0.00034	ft
H. Average Stack Temp	81.9	deg F	P. Net Sample Collection	0.00084	mg
I. Barometric Pressure	30.45	"HgA	Q. Net Solid Collection	0.00084	mg
J. Gas Meter Pressure (I+(D/13.6))	30.49	"HgA	R. Water Vapor Condensed	37.6	ml
K. Static Pressure	0.40	"H_2O	S. Gas Volume Metered	80.370	dcf
L. Total Stack Pressure (I+(K/13.6))	30.48	"HgA	S2. Amp-hr		amp-hr

T. Corrected Gas Volume [(S x J/29.92) x 520/(460+B) x C ... 77.101 dscf

PERCENT MOISTURE/GAS DENSITY

U. Percent Water Vapor in Gas Sample ((4.64 x R)/((0.0464 x R) + T)) ... 2.21 %

V. Average Molecular Weight (Wet):

Component	Vol. Fract.		x	Moist. Fract.	x	Molecular Wt.		=	Wt./Mole
Water	0.022			1.000		18.0	,	0.40	
Carbon Dioxide	0.00050	Dry Basis		0.978		44.0	,	0.02	
Carbon Monoxide		Dry Basis		0.978		28.0	,	0.00	
Oxygen	0.20900	Dry Basis		0.978		32.0	,	6.54	
Nitrogen & Inerts	0.791	Dry Basis		0.978		28.2	,	21.80	
							,		
							Sum	28.76	

FLOW RATE

W. Gas Density Correction Factor (28.95/V)^.5	1.00	
X. Velocity Pressure Correction Factor (29.92/L)^.5	0.99	
Y. Corrected Velocity (A x M x W x X)	21.32	fps
Z. Flow Rate (Y x G x 60)	6280	cfm
AA. Flow Rate (Standard) {Z x (L/29.92) x [520/(460+H)]}	6139	scfm
BB. Dry Flow Rate (AA x (U/100))	6004	dscfm

SAMPLE CONCENTRATION/EMISSION RATE

CC. Sample Concentration [0.01543 x (P/T)]	1.681E-07	gr/dscf
DD. Sample Concentration [54,143xC(51.996 (Molecular Wt.)]	0.000	ppm
EE. Sample Concentration [P/T x 1,000,000 x 35.3145]	3.847E+02	ng/dscm
FF. Solid Emission Rate [(.0001322 x Q x BB)/T]	8.647E-06	lb/hr
GG. Isokinetic Sampling Rate [(G x T x 100)/(N x O x BB)]	102.2	%
HH. Sample Emission Rate (FF x 453.6 x 1000)	3.92224	mg/hr

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, California 91765

Test Nos. 21-357 -25- Date: 4/27/2021 and 4/28/2021

Pa. Net Total Chrome Collection	0.00278	mg
Qa. Total Chrome Collection	0.00278	mg
CC. Sample Concentration [0.01543 x (Pa/T)]	5.564E-07	gr/dscf
DD. Sample Concentration [54,143xCC/	0.000	ppm
EE. Sample Concentration [P/T x 1,000,000 x 35.3145]	1.273E+03	ng/dscm
FF. Solid Emission Rate [(.0001322 x Qa x BB)/T]	2.862E-05	lb/hr
GG. Isokinetic Sampling Rate [(G x T x 100)/(N x O x BB)]	102.2	%
HH. Hex Chrome Emission Rate (FF x 453.6 x 1000)	12.98075	mg/hr

Traverse Point #	Velocity Head #1 ("H_2O)	Temp. (°F)	Calculated Velocity (fps)	Traverse Point #	Gas Meter Temp In (°F)	Gas Meter Temp Out (°F)	Average Gas Meter Temp (°F)	Traverse Point #	Orifice Pressure (" H_2O)		
1	0.16	78	26.91	1	69	71	70.00	1	0.62		
2	0.17	78	27.73	2	75	72	73.50	2	0.685		
3	0.15	79	26.08	3	77	74	75.50	3	0.61		
4	0.16	79	26.93	4	79	75	77.00	4	0.653		
5	0.15	81	26.12	5	82	77	79.50	5	0.616		
6	0.15	79	26.08	6	84	79	81.50	6	0.623		
7	0.15	80	26.10	7	87	81	84.00	7	0.628		
8	0.16	80	26.96	8	88	83	85.50	8	0.673		
9	0.16	79	26.93	9	90	85	87.50	9	0.679		
10	0.17	80	27.79	10	92	87	89.50	10	0.725		
11	0.16	80	26.96	11	93	88	90.50	11	0.685		
12	0.17	81	27.81	12	94	89	91.50	12	0.729		
13	0.13	83	24.37	13	93	91	92.00	13	0.557		
14	0.13	83	24.37	14	93	92	92.50	14	0.56		
15	0.15	82	26.15	15	93	92	92.50	15	0.644		
16	0.13	84	24.39	16	93	92	92.50	16	0.557		
17	0.13	83	24.37	17	94	93	93.50	17	0.56		
18	0.13	84	24.39	18	95	93	94.00	18	0.56		
19	0.14	84	25.31	19	97	94	95.50	19	0.603		
20	0.14	86	25.35	20	97	95	96.00	20	0.605		
21	0.12	86	23.47	21	97	95	96.00	21	0.518		
22	0.12	85	23.45	22	98	96	97.00	22	0.521		
23	0.12	86	23.47	23	97	96	96.50	23	0.519		
24	0.10	85	21.41	24	96	96	96.00	24	0.433		
Init Gas Meter Rdng:		607.61		Final Gas Meter Rdng:		687.98		Total Gas Volume		80.37	
Average Temperature (°F) -		81.875		Average Velocity (fps) -			25.54				
Avg Gas Meter Temperature (°F)		88.3125		Average Orifice Press. ("H_2O) -			0.61				

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 E. Copley Dr. Diamond Bar, California 91765-4182

Test No. 21-357 Test Date: 4/28/21

SOURCE TEST CALCULATIONS

Sampling Location: West Inlet Run 3
Sample Train: 43 Input by: B. Speaks

SUMMARY

A. Average Traverse Velocity	23.97	fps
B. Gas Meter Temperature (Use 60 deg.F for Temp Comp. Meters)	92.1	deg F
C. Gas Meter Correction Factor	0.9925	
D. Average Orifice Pressure	0.51	"$H_2$0
E. Nozzle Diameter	0.2502	inch

F1. Stack Diameter or Dimension #1	30	inch	M. Pitot Correction Factor	0.84	
F2. Stack Dim #2 (blank if circular)		inch	N. Sampling Time	180	min
G. Stack Cross Sect. Area	4.909	ft2	O. Nozzle X-Sect. Area	0.00034	ft
H. Average Stack Temp	88.6	deg F	P. Net Sample Collection	0.00046	mg
I. Barometric Pressure	30.45	"HgA	Q. Net Solid Collection	0.00046	mg
J. Gas Meter Pressure (I+(D/13.6))	30.49	"HgA	R. Water Vapor Condensed	32	ml
K. Static Pressure	0.40	"$H_2$0	S. Gas Volume Metered	73.095	dcf
L. Total Stack Pressure (I+(K/13.6))	30.48	"HgA	S2. Amp-hr		amp-hr

T. Corrected Gas Volume [(S x J/29.92) x 520/(460+B) x C] 69.629 dscf

PERCENT MOISTURE/GAS DENSITY

U. Percent Water Vapor in Gas Sample ((4.64 x R)/((0.0464 x R) + T)) 2.09 %

V. Average Molecular Weight (Wet):

Component	Vol. Fract.		x	Moist. Fract.	x	Molecular Wt.		=	Wt./Mole
Water	0.021			1.000		18.0	,	0.38	
Carbon Dioxide	0.00050	Dry Basis		0.979		44.0	,	0.02	
Carbon Monoxide		Dry Basis		0.979		28.0	,	0.00	
Oxygen	0.20900	Dry Basis		0.979		32.0	,	6.55	
Nitrogen & Inerts	0.791	Dry Basis		0.979		28.2	,	21.83	
							,		
							Sum	28.77	

FLOW RATE

W. Gas Density Correction Factor (28.95/V)^.5	1.00	
X. Velocity Pressure Correction Factor (29.92/L)^.5	0.99	
Y. Corrected Velocity (A x M x W x X)	20.01	fps
Z. Flow Rate (Y x G x 60)	5893	cfm
AA. Flow Rate (Standard) {Z x (L/29.92) x [520/(460+H)]}	5690	scfm
BB. Dry Flow Rate (AA x (U/100))	5571	dscfm

SAMPLE CONCENTRATION/EMISSION RATE

CC. Sample Concentration [0.01543 x (P/T)]	1.019E-07	gr/dscf
DD. Sample Concentration [54,143xC 51.996 (Molecular Wt.)]	0.000	ppm
EE. Sample Concentration [P/T x 1,000,000 x 35.3145]	2.333E+02	ng/dscm
FF. Solid Emission Rate [(.0001322 x Q x BB)/T]	4.866E-06	lb/hr
GG. Isokinetic Sampling Rate [(G x T x 100)/(N x O x BB)]	99.8	%
HH. Sample Emission Rate (FF x 453.6 x 1000)	2.20714	mg/hr

Pa. Net Total Chrome Collection	0.00054	mg
Qa. Total Chrome Collection	0.00054	mg
CC. Sample Concentration [0.01543 x (Pa/T)]	1.197E-07	gr/dscf
DD. Sample Concentration [54,143xCC/	0.000	ppm
EE. Sample Concentration [P/T x 1,000,000 x 35.3145]	2.739E+02	ng/dscm
FF. Solid Emission Rate [(.0001322 x Qa x BB)/T]	5.712E-06	lb/hr
GG. Isokinetic Sampling Rate [(G x T x 100)/(N x O x BB)]	99.8	%
HH. Hex Chrome Emission Rate (FF x 453.6 x 1000)	2.590991	mg/hr

Traverse Point #	Velocity Head #1 ("H_2O)	Temp. (°F)	Calculated Velocity (fps)	Traverse Point #	Gas Meter Temp In (°F)	Gas Meter Temp Out (°F)	Average Gas Meter Temp (°F)	Traverse Point #	Orifice Pressure (" H_2O)		
1	0.12	86	23.47	1	96	94	95.00	1	0.492		
2	0.12	87	23.50	2	91	92	91.50	2	0.484		
3	0.12	88	23.52	3	93	92	92.50	3	0.485		
4	0.13	88	24.48	4	93	92	92.50	4	0.525		
5	0.13	87	24.45	5	92	91	91.50	5	0.524		
6	0.13	87	24.45	6	92	91	91.50	6	0.524		
7	0.14	87	25.38	7	92	91	91.50	7	0.565		
8	0.15	87	26.27	8	93	91	92.00	8	0.6152		
9	0.14	89	25.42	9	92	91	91.50	9	0.57		
10	0.15	89	26.32	10	93	91	92.00	10	0.6129		
11	0.13	90	24.52	11	94	91	92.50	11	0.5302		
12	0.16	89	27.18	12	93	91	92.00	12	0.6538		
13	0.12	89	23.54	13	94	91	92.50	13	0.4903		
14	0.12	90	23.56	14	93	92	92.50	14	0.4894		
15	0.11	90	22.56	15	94	92	93.00	15	0.4503		
16	0.09	89	20.38	16	93	92	92.50	16	0.3678		
17	0.11	89	22.54	17	93	92	92.50	17	0.4495		
18	0.11	90	22.56	18	93	92	92.50	18	0.4487		
19	0.12	89	23.54	19	92	91	91.50	19	0.4886		
20	0.13	90	24.52	20	92	91	91.50	20	0.5283		
21	0.12	89	23.54	21	92	91	91.50	21	0.4886		
22	0.13	89	24.50	22	92	90	91.00	22	0.5293		
23	0.10	89	21.49	23	92	91	91.50	23	0.4071		
24	0.12	90	23.56	24	92	90	91.00	24	0.4877		
Init Gas Meter Rdng:		688.235		Final Gas Meter Rdng:		761.33		Total Gas Volume		73.095	
Average Temperature (°F) -			88.625	Average Velocity (fps) -			23.97				
Avg Gas Meter Temperature (°F)			92.0625	Average Orifice Press. ("H_2O) -			0.51				

APPENDIX B

Field Data – April 27 and 28, 2021

South Coast Air Quality Management District

Test No. 1 Company: Bowman Platings Date: 4/27/21
Sampling Location: West side Inlet Sample Train: 48
Traverse Source Test Data Probe No. 4

Pre-Test Leak Check:
Filter: ____ cfm @ ____ "Hg vac
Probe: 0.000 cfm @ 17 "Hg vac
Pitot Tube Leak Check: (Pass) / Fail

Post-Test Leak Check:
Filter: ____ cfm @ ____ "Hg vac
Probe: 0.005 cfm @ 4 "Hg vac
Pitot Tube Leak Check: (Pass) / Fail

Time	Sample Point #	Gas Meter Reading (dcf) Start: 536.865	Stack Velocity Head ("H_2O)	Stack Temp. °F	Calculated Velocity (fps)	Calculated Sampling Rate (cfm)	Calculated Orifice ΔP ("H_2O)	Probe Temp. °F	Filter Temp. °F	Imp. Temp. °F	Meter Temp. °F In	Meter Temp. °F Out	Vacuum "Hg
9:15 am													
+7:30	1	539.640	0.00.11	80	22.3507	0.4738	0.56	0.3645	0.4337	52	75	77	1
+15:00	2	542.600	0.12	80	23.345	0.386	0.493			50	81	80	1.5
+22:30	3	545.560	0.11	77	22.289	0.310	0.454			50	81	79	1.5
+30:00	4	548.390	0.10	77	21.251	0.353	0.413			51	81	79	1.5
+37:30	5	551.170	0.10	79	21.291	0.352	0.413			52	83	80	1
+45:00	6	553.700	0.09	80	20.217	0.334	0.372			53	85	80	1
+52:30	7	556.510	0.11	79	22.330	0.370	0.458			53	85	82	1
+60:00	8	559.590	0.13	79	24.275	0.402	0.543			53	86	83	2.5
+67:30	9	562.975	0.15	78	26.052	0.432	0.627			54	85	83	2.5
+75:00	10	566.450	0.16	79	26.931	0.446	0.663			53	83	82	2.5
+82:30	11	569.895	0.14	80	25.215	0.417	0.579			55	84	81	2.5
+90:00	12	573.195	0.15	82	26.148	0.430	0.623			55	86	83	2.5
8:40 am											8		
+7:30	13	575.010	0.04	83	13.515	0.222	0.168			59	88	86	1
+15:00	14	577.475	0.08	84	19.131	0.314	0.337			56	90	88	1
+22:30	15	580.310	0.1	81	21.330	0.352	0.425			53	92	88	1
+30:00	16	583.120	0.1	79	21.291	0.352	0.421			51	87	86	1
+37:30	17	585.985	0.1	78	21.271	0.353	0.414			50	81	82	1.5
+45:00	18	588.640	0.1	81	21.330	0.352	0.411			56	81	81	1
+52:30	19	591.320	0.1	81	21.330	0.352	0.411			55	82	81	1.5
+60:00	20	594.225	0.11	83	22.413	0.368	0.458			58	86	84	1.5
+67:30	21	597.285	0.12	80	23.345	0.386	0.498			54	84	83	1.5
+75:00	22	600.475	0.14	81	25.238	0.416	0.578			55	82	82	1.5
+82:30	23	603.425	0.1	84	21.389	0.351	0.415			56	87	84	1
+90:00	24	606.560	0.18	84	28.6965	0.4646	0.7257			54	86	83	3
(Net Vol. Uncorr.)			Avg.										

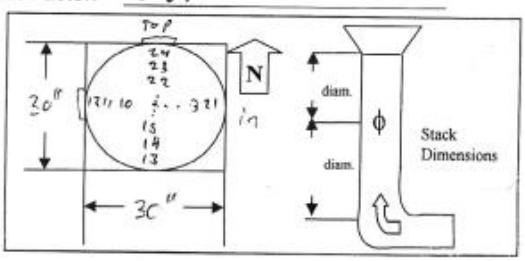
K-Factor: 0.5705 Stack Moisture: 2.5 Canister #: ____ Start: ____ "Hg vac

Nozzle Diameter: 0.250s "
Barometric Pressure: 30.41 " HgA
Static Pressure in Stack: (+) - 0.46 " H_2O

Recorded By: K. Rayos del Sol
Pitot Factor: 0.84

Calibration Data

Inclined Manometer		(Cal: N/A)
Magnehelic No.		(Cal:)
Pitot Tube No.	30403	(Cal:)
Potentiometer No.	N°315	(Cal: 4/23/21)
Thermocouple No.	10104	(Cal: 4/23/21)
Gas Meter No.	N°715	(Cal: 3/30/21)
Meter Corr. Factor:	0.9925	



Sampling Probe: Stainless Steel / Borosilicate / Quartz

Stack: (Horizontal) / Vertical Rectangular / (Circular)

Revision 01/09

South Coast Air Quality Management District

Test No. 2 Company: Bowerman Date: 4/28/2021
Sampling Location: West Duct Inlet Sample Train: 47 probe 5

Traverse Source Test Data

Pre-Test Leak Check:
Filter: ____ cfm @ ____ "Hg vac
Probe: 0.00 cfm @ 17 "Hg vac
Pitot Tube Leak Check: (Pass) / Fail

Post-Test Leak Check:
Filter: ____ cfm @ ____ "Hg vac
Probe: 0.00 cfm @ 12 "Hg vac
Pitot Tube Leak Check: (Pass) / Fail

Time	Sample Point #	Gas Meter Reading (dcf) Start: 607.61	Stack Velocity Head ("H_2O)	Stack Temp. °F	Calculated Velocity (fps)	Calculated Sampling Rate (cfm)	Calculated Orifice ΔP ("H_2O)	Probe Temp. °F	Filter Temp. °F	Imp. Temp. °F	Meter Temp. °F In	Meter Temp. °F Out	Vacuum "Hg
8:12 AM										69	69	70	11 1.0
RD 8:47 7:30	1	614.860	0.16	78	26.9060	0.4407	0.620			62	75	72	1.5
7:30	2	614.210	0.17	78	27.734	0.461	0.685						
15:00 7:30	3	617.720	0.15	79	26.076	0.432	0.610			52	77	74	1.5
22:30 7:30	4	621.360	0.16	79	26.931	0.446	0.653			56	79	75	2.0
30:00 7:30	5	624.660	0.15	81	26.124	0.431	0.616			56	82	77	1.5
37:30 7:30	6	628.020	0.15	79	26.076	0.432	0.623			56	84	79	1.0
45:00 7:30	7	631.440	0.15	80	26.100	0.432	0.628			57	87	81	1.0
52:30 7:30	8	634.910	0.16	80	26.956	0.446	0.673			59	88	83	1.5
60:00 7:30	9	638.590	0.16	79	26.931	0.446	0.679			62	90	85	2.0
67:30 7:30	10	642.120	0.17	80	27.786	0.460	0.725			60	92	87	2.0
75:00 7:30	11	645.710	0.16	80	26.956	0.446	0.685			59	93	88	2.0
82:30 7:30	12	649.390	0.17	81	27.811	0.459	0.729			57	94	89	1.5
RD 9:52 90:00 7:30	13	652.510	0.13	83	24.365	0.401	0.557			57	93	91	1.0
CHANGE 7:30	14	655.760	0.13	83	24.365	0.401	0.560			58	93	92	1.0
15:00	15	659.220	0.15	82	26.148	0.431	0.644			60	93	92	1.0
22:30	16	662.590	0.13	84	24.388	0.401	0.557			56	93	92	1.0
30:00	17	665.700	0.13	83	24.365	0.401	0.560			58	94	93	1.0
37:30	18	668.800	0.13	84	24.388	0.401	0.560			59	95	93	1.0
45:00	19	672.185	0.14	84	25308	0.416	0.603			60	97	94	1.0
52:30	20	675.680	0.14	86	25.395	0.415	0.603			61	97	93	1.5
60:00	21	678.890	0.12	86	23.474	0.384	0.518			61	97	95	1.0
67:30	22	682.070	0.12	85	23.452	0.384	0.521			57	98	96	1.0
75:00	23	685.150	0.12	86	23.474	0.384	0.519			56	97	96	1.0
82:30	24	687.980	0.1	85	21.427	0.351	0.433			58	96	96	1.0
11:22 AM 90:00					RD 21.409	RD 0.351							
(Net Vol. Uncorr.)			Avg.										

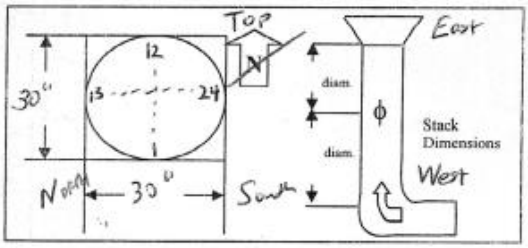
K-Factor: 0.5705 Stack Moisture: est. 0.5% Canister #: N/A Start: N/A "Hg vac

Nozzle Diameter: 0.2507 "
Barometric Pressure: 30.45 " HgA
Static Pressure in Stack: (+) - + 0.4 " H_2O

Recorded By: R. Davis
Pitot Factor: 0.84

Calibration Data

Inclined Manometer	N0715	(Cal: N/A)
Magnehelic No.		(Cal:)
Pitot Tube No.	5	(Cal:)
Potentiometer No.		(Cal:)
Thermocouple No.	10104	(Cal: 2/13/20)
Gas Meter No.	N0315	(Cal: 2/13/20)
Meter Corr. Factor:	0.9925	



Sampling Probe: Stainless Steel / Borosilicate / Quartz

Stack: Horizontal / Vertical Rectangular / Circular

Revision 01/00

South Coast Air Quality Management District

Test No. 3 Company: Borrman Plating Date: 4/28/21
Sampling Location: west side inlet Sample Train: 43
Traverse Source Test Data Probe No. 1

Pre-Test Leak Check:
Filter: ____ cfm @ ____ "Hg vac
Probe: 0.000 cfm @ 15 "Hg vac
Pitot Tube Leak Check: (Pass) / Fail

Post-Test Leak Check:
Filter: ____ cfm @ ____ "Hg vac
Probe: 0.000 cfm @ 9 "Hg vac
Pitot Tube Leak Check: (Pass) / Fail

Time	Sample Point #	Gas Meter Reading (dcf)	Stack: Velocity Head ("H2O)	Stack: Temp. °F	Calculated: Velocity (fps)	Calculated: Sampling Rate (cfm)	Calculated: Orifice ΔP ("H2O)	Probe Temp. °F	Filter Temp. °F	Imp. Temp. °F	Meter Temp. °F: In	Meter Temp. °F: Out	Vacuum "Hg
11:59 am		Start: 688.235											
+7.5	1	691.260	0.12	86	23.474	0.375	0.492			59	96	94	1
+15	2	694.270	0.12	87	23.495	0.375	0.484			55	93	92	1
+22.5	3	697.275	0.12	88	23.517	0.374	0.485			55	93	92	1
+30	4	700.280	0.13	88	24.477	0.390	0.525			55	93	92	1
+37.5	5	703.395	0.13	87	24.455	0.390	0.524			55	92	91	1
+45	6	706.510	0.13	87	24.455	0.390	0.524			54	92	91	1
+52.5	7	709.760	0.14	87	26.378	0.405	0.565			54	92	91	1
+60	8	713.130	0.15	87	26.2686	0.4215	0.6152			55	93	91	1
+67.5	9	716.420	0.14	89	25.4243	0.4065	0.570			55	92	91	1
+75	10	719.740	0.15	89	26.3166	0.4207	0.6129			56	93	91	1
+82.5	11	722.850	0.13	90	24.5217	0.3913	0.5302			56	94	91	1
+90	12	726.140	0.16	89	27.1797	0.4345	0.6338			57	93	91	1
1:42 pm				89 AR						AR			
+7.5	13	729.185	0.12	89	23.5383	0.3763	0.4903			54/56	94	91	1
+15	14	732.250	0.12	90	23.5597	0.3760	0.4894			57	93	92	1
+22.5	15	735.155	0.11	90	22.5507	0.360	0.4503			56	94	92	1
+30	16	737.690	0.09	89	20.3879	0.3259	0.3678			59	93	92	1
+37.5	17	740.550	0.11	89	22.5362	0.3603	0.4495			57	93	92	1
+45	18	743.495	0.11	90	22.5567	0.360	0.4487			56	93	92	1
+52.5	19	746.510	0.12	89	23.5383	0.3763	0.4886			57	92	91	1
+60	20	749.600	0.13	90	24.5217	0.3913	0.5243			57	92	91	1
+67.5	21	752.600	0.12	89	23.5383	0.3763	0.4886			56	92	91	1
+75	22	755.645	0.13	89	24.4994	0.3917	0.5293			54	92	90	1
+82.5	23	758.640	0.10	89	21.4874	0.3435	0.4071			54	92	91	1
+90	24	761.330	0.12	90	23.5597	0.3760	0.4877			55	92	90	1
(Net Vol. Uncorr.)			Avg.										

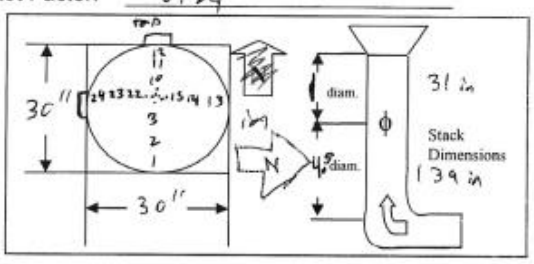
K-Factor: 0.5705 Stack Moisture: 2.5 Canister #: ____ Start: ____ "Hg vac

Nozzle Diameter: 0.2502 "
Barometric Pressure: 30.45 " HgA
Static Pressure in Stack: +/- 0.4 " H_2O

Recorded By: K. Rayos del Sol
Pitot Factor: 0.84

Calibration Data

Inclined Manometer		(Cal:	N/A)
Magnehelic No.		(Cal:	)
Pitot Tube No.	30403	(Cal:	)
Potentiometer No.	~~NO~~ 315	(Cal:	)
Thermocouple No.	10104	(Cal:	)
Gas Meter No.	NO715	(Cal:	3/30/21)
Meter Corr. Factor:	0.9925		



Sampling Probe: Stainless Steel / Borosilicate / Quartz

Stack: Horizontal / Vertical Rectangular / Circular

Revision 01/09

South Coast Air Quality Management District

Test No. 1 Company: Bowman plating Date: 4/27/21
Sampling Location: west side inlet

Data Sheet For Verification of Cyclonic Flow

Pre-Test Velocity Leak Check: ✓
Post-Test Velocity Leak Check: ✓

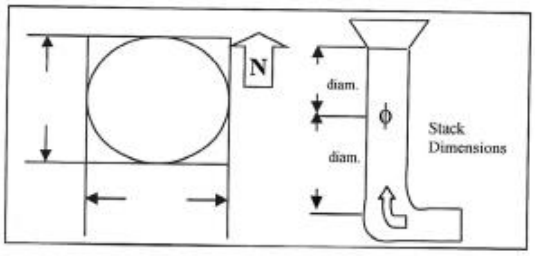
Time	Traverse Point	ΔP (in. H2O) At 0° Reference	Null Point Rotation Angle (± α)	Comments
	1	0.04	-7°	
	2	0.04	-9°	
	3	0.03	-8°	
	4	0.02	-5°	
	5	0	0°	
	6	0	0°	
	7	0	0°	
	8	0	0°	
	9	0	0°	
	10	0	0°	
	11	0	0°	
	12	0.05	+6°	

Recorded By: K. Reyes del Sol

Average (Absolute Values) of α

Calibration Data

Inclined Manometer (Cal: N/A)
Magnehelic No. (Cal:)
Pitot Tube No. (Cal:)



Revision 08/09

South Coast Air Quality Management District

Test No. Run #1 Company: Bowman Plating Date: 4/27/21
Sampling Location: Bldg PTE Inlet east Sample Train: 15 Probe #2

Traverse Source Test Data

Pre-Test Leak Check:
Filter: _____ cfm @ _____ "Hg vac
Probe: 0.0 cfm @ 15 "Hg vac
Pitot Tube Leak Check: (Pass) Fail

Post-Test Leak Check:
Filter: _____ cfm @ _____ "Hg vac
Probe: 0.0 cfm @ 5 "Hg vac
Pitot Tube Leak Check: Pass / Fail

Time	Sample Point #	Gas Meter Reading (dcf) Start: 53.455	Stack Velocity Head ("H_2O)	Stack Temp. °F	Calculated Velocity (fps)	Calculated Sampling Rate (cfm)	Calculated Orifice ΔP ("H_2O)	Probe Temp. °F	Filter Temp. °F	Imp. Temp. °F	Meter Temp. °F In	Meter Temp. °F Out	Vacuum " Hg
9:55													
+7:30	1	56.450	0.1	82	21.350	.327	.366			53	82	82	2
+15:00	2	59.190	0.12	83	23.409	.358	.439			53	83	82	2
+22:30	3	62.210	0.14	80	25.215	.388	.517			53	84	83	2
+30:00	4	65.290	0.15	81	26.124	.401	.548			53	81	81	2
+37:30	5	68.410	0.15	85	26.221	.400	.546			53	84	82	2
+45:00	6	71.630	0.16	84	27.056	.413	.584			53	84	82	2
+52:30	7	74.800	0.15	85	26.221	.400	.548			54	87	83	2
+60:00	8	77.770	0.13	85	24.410	.372	.479			55	89	85	2
+67:30	9	80.630	0.12	83	23.409	.358	.444			55	88	85	2
+75:00	10	82.290	0.11	83	22.413	.343	.407			55	88	85	2
+82:30	11	85.300	0.08	87	19.184	.291	.295			55	87	86	2
+90:00	12	87.175	0.05	91	15.222	.229	.184			63	92	88	2
11:30pm													2
+7:30	13	89.670	0.09	88	20.366	.309	.338			59	94	92	2
+15:00	14	92.275	0.09	88	20.366	.309	.341			54	97	94	2
+22:30	15	95.020	0.10	88	21.468	.325	.383			51	100	97	2
+30:00	16	97.950	0.12	86	23.470	.357	.461			50	100	97	2
+37:30	17	101.160	0.15	84	26.196	.400	.576			49	97	96	2
+45:00	18	104.420	0.15	84	26.196	.400	.574			49	95	95	2
+52:30	19	107.600	0.14	86	25.355	.386	.532			50	94	94	2
+60:00	20	110.565	0.12	86	23.474	.357	.456			51	96	94	2
+67:30	21	113.290	0.10	87	21.448	.326	.378			51	95	93	2
+75:00	22	115.880	0.09	87	20.348	.309	.342			51	94	95	2
+82:30	23	118.160	0.07	88	17.961	.272	.265			54	95	94	2
+90:00	24	120.250	0.06	89	16.644	.252	.227			53	96	95	2
(Net Vol. Uncorr.)			Avg.										

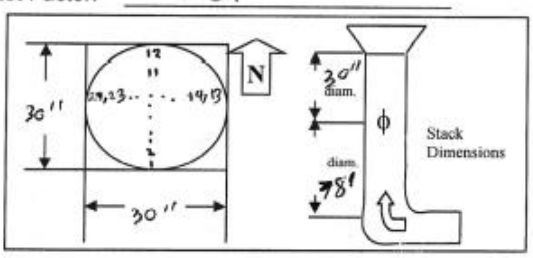
K-Factor: 0.5634 Stack Moisture: 2.5% Canister #: NA Start: NA "Hg vac

Nozzle Diameter: 0.2442 "
Barometric Pressure: 30.41 " HgA
Static Pressure in Stack: (+)/- +0.32 " H_2O

Recorded By: Michael Solis
Pitot Factor: 0.84

Calibration Data

Inclined Manometer	(Cal: N/A)	
Magnehelic No.	N/A	(Cal:)
Pitot Tube No.	40409	(Cal:)
Potentiometer No.	N0313	(Cal:)
Thermocouple No.	20202	(Cal:)
Gas Meter No.	N0713 (#3)	(Cal:)
Meter Corr. Factor:	1.0062	



Sampling Probe: Stainless Steel / Borosilicate / Quartz

Stack: Horizontal / Vertical Rectangular / Circular

Revision 01/09

South Coast Air Quality Management District

Test No. Run 2 Company: Bowman Plating Date: 4/28/21
Sampling Location: Bowman PTE East Stack Sample Train: 30
Probe # 3

Traverse Source Test Data

Pre-Test Leak Check:
Filter: NA cfm @ NA "Hg vac
Probe: 0.0 cfm @ 15 "Hg vac
Pitot Tube Leak Check: (Pass) / Fail

Post-Test Leak Check:
Filter: NA cfm @ NA "Hg vac
Probe: 0.0 cfm @ 5 "Hg vac
Pitot Tube Leak Check: Pass / Fail

	Time	Sample Point #	Gas Meter Reading (dcf)	Stack Velocity Head ("H2O)	Stack Temp. °F	Calculated Velocity (fps)	Calculated Sampling Rate (cfm)	Calculated Orifice ΔP ("H2O)	Probe Temp. °F	Filter Temp. °F	Imp. Temp. °F	Meter Temp. °F In	Meter Temp. °F Out	Vacuum " Hg
START	08:10		Start: 120.525											
	+7.5	1	123.14	.11	83	22.413	.357	.433			62	78	80	2
	+15	2	126.025	.12	84	23.431	.373	.470			55	82	79	2.5
	+22.5	3	129.145	.14	83	25.285	.403	.551			55	82	80	2.5
	+30	4	132.380	.15	83	26.172	.417	.592			55	84	81	2.5
	+37.5	5	135.748	.16	84	27.056	.430	.635			57	87	83	2.5
	+45	6	139.120	.16	84	27.056	.430	.640			55	89	85	2.5
	+52.5	7	142.520	.16	85	27.080	.430	.644			54	91	87	2.5
	+60	8	145.820	.15	85	26.221	.416	.606			53	92	88	2.5
	+67.5	9	149.030	.14	84	25.308	.402	.568			54	93	89	2.5
	+75	10	152.140	.13	85	24.410	.387	.529			53	93	90	2.5
	+82.5	11	155.020	.11	86	22.475	.356	.448			54	94	91	2.5
	+90	12	157.625	.09	87	20.348	.322	.367			56	95	92	2.5
											~~57~~	~~95~~	~~93~~	~~2~~
												GAS	#	#
START	09:50		157.625											
	+7.5	13	160.380	.10	88	21.468	.339	.409			57	95	93	2
	+15	14	163.360	.12	88	23.517	.371	.492			57	95	94	2
	+22.5	15	166.500	.13	87	24.455	.387	.536			55	97	95	2
	+30	16	169.760	.14	87	25.378	.401	.580			56	99	96	2
	+37.5	17	173.000	.14	88	25.401	.401	.581			57	100	97	2.5
	+45	18	176.290	.14	88	25.401	.401	.583			56	101	98	2.5
	+52.5	19	179.590	.14	88	25.401	.401	.587			55	103	100	2.5
	+60	20	182.775	.13	88	24.477	.386	.547			55	104	101	2.5
	+67.5	21	185.700	.11	89	22.536	.355	.464			55	105	102	2.5
	+75	22	188.395	.09	90	20.403	.321	.380			56	106	103	2
	+82.5	23	190.565	.06	89	16.699	.262	.255			58	106	104	2
	+90	24	193.040	.08	91	19.254	.302	.340			59	106	105	2
	(Net Vol. Uncorr.)			Avg.										

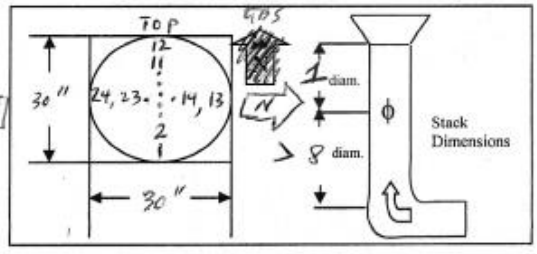
K-Factor: 0.5636 Stack Moisture: ~2.5% Canister #: NA Start: NA "Hg vac

Nozzle Diameter: 0.2492 "
Barometric Pressure: 30.45 " HgA
Static Pressure in Stack: (+)/- +0.36 " H_2O

Recorded By: B. Speaks
Pitot Factor: 0.84

Calibration Data

Inclined Manometer		(Cal: N/A)
Magnehelic No.	NA	(Cal: NA)
Pitot Tube No.	40409	(Cal: Visual PASS)
Potentiometer No.	ND 313	(Cal:)
Thermocouple No.	20202	(Cal:)
Gas Meter No.	ND 713	(Cal: 3/30/21)
Meter Corr. Factor:	1.0041	



Sampling Probe: Stainless Steel / Borosilicate / Quartz

Stack: Horizontal / Vertical Rectangular / Circular

Revision 01/09

South Coast Air Quality Management District

Test No. Run #3 Company: Bowman Plating Date: 4/28/21
Sampling Location: Bldg PTE inlet east Sample Train: 39

Traverse Source Test Data Probe #6

Pre-Test Leak Check:
Filter: _____ cfm @ _____ "Hg vac
Probe: 0 cfm @ 15 "Hg vac
Pitot Tube Leak Check: (Pass) / Fail

Post-Test Leak Check:
Filter: _____ cfm @ _____ "Hg vac
Probe: 0 cfm @ 15 "Hg vac
Pitot Tube Leak Check: (Pass) / Fail

Time	Sample Point #	Gas Meter Reading (dcf)	Stack		Calculated			Probe Temp. °F	Filter Temp. °F	Imp. Temp. °F	Meter Temp. °F		Vacuum " Hg
			Velocity Head ("H_2O)	Temp. °F	Velocity (fps)	Sampling Rate (cfm)	Orifice ΔP ("H_2O)				In	Out	
12:00		Start: 194.06											
+7:30	1	196.00	.06	92	16.659	0.255	0242			60	106	106	2
+15:00	2	198.415	.07	91	18.010	0.276	0.281			61	104	104	2
+22:30	3	201.150	.09	92	20.440	0.312	0.321			60	103	104	2
+30:00	4	204.085	.10	92	21.546	0.329	.401			58	104	104	2
+37:30	5	206.990	.11	92	22.598	.345	.441			58	105	104	2
+45:00	6	210.060	.12	92	23.603	.360	.481			54	104	104	2
+52:30	7	212.940	.10	92	21.546	.329	.401			55	104	104	2
+60:00	8	215.515	.08	93	19.289	.294	.319			53	104	103	2
+67:30	9	218.080	.08	94	19.306	.294	.320			55	105	104	2
+75:00	10	220.360	.07	97	18.108	.274	.278			55	105	104	2
+82:30	11	222.400	.04	95	13.664	.208	.160			58	105	104	2
+90:00	12	224.235	.04	95	13.701	.207	.159			63	105	104	2
+7:30	13	226.620	.07	94	18.059	.275	.280			58	105	104	2
+15:00	14	228.890	.06	94	16.720	.254	.240			55	104	104	2
+22:30	15	231.410	.08	94	19.306	.294	.319			53	104	103	2
+30:00	16	234.100	.09	95	20.495	.311	.358			53	104	103	2
+37:30	17	236.890	.10	94	21.585	.328	.398			52	104	103	2
+45:00	18	239.565	.09	94	20.477	.312	.358			53	104	103	2
+52:30	19	242.175	.09	93	20.459	.312	.359			55	104	103	2
+60:00	20	244.700	.08	93	19.280	.294	.318			54	103	102	2
+67:30	21	246.900	.05	94	15.263	.232	.199			56	103	102	2
+75:00	22	248.995	.07	94	18.059	.275	.277			59	102	101	2
+82:30	23	251.265	.06	94	16.720	.254	.237			56	102	101	2
+90:00	24	253.210	.05	96	15.290	.232	.196			56	101	100	2
(Net Vol. Uncorr.)			Avg.										

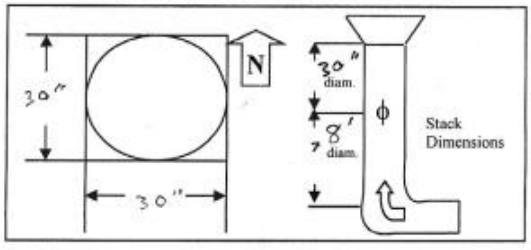
K-Factor: 0.5636 Stack Moisture: 2.5 Canister #: NA Start: NA "Hg vac

Nozzle Diameter: 0.2460 "
Barometric Pressure: 30.45 " HgA
Static Pressure in Stack: EP- +0.36 " H_2O

Recorded By: Michael Solis
Pitot Factor: 0.84

Calibration Data

Inclined Manometer	(Cal:	N/A)
Magnehelic No.	NA	(Cal:)
Pitot Tube No.	40409	(Cal:)
Potentiometer No.	N0313	(Cal:)
Thermocouple No.	20242	(Cal:)
Gas Meter No.	N0713 (#5)	(Cal:)
Meter Corr. Factor:	1.0062	



Sampling Probe: Stainless Steel / Borosilicate / Quartz

Stack: Horizontal / Vertical Rectangular / Circular

Revision 01/09

South Coast Air Quality Management District

Test No. Run #1 Company: Bowman Plating Date: 4/27/21
Sampling Location: Bldg PTE Inlet east

Data Sheet For Verification of Cyclonic Flow

Pre-Test Velocity Leak Check: _____
Post-Test Velocity Leak Check: _____

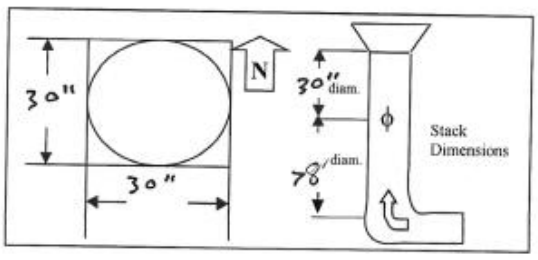
Time	Traverse Point	ΔP (in. H2O) At 0° Reference	Null Point Rotation Angle (± α)	Comments
1:20	1	↓	3°	
	2		3°	
	3		3°	
	4		4°	
	5		2°	
	6		4°	
	7		4°	
	8		5°	
	9		2°	
	10		5°	
	11		0°	
	12		0°	

Recorded By: Michael Solis

Average (Absolute Values) of α _____

Calibration Data

Inclined Manometer		(Cal: N/A)
Magnehelic No.	NA	(Cal:)
Pitot Tube No.	40409	(Cal:)



Revision 08/09

Nozzle Calibration

Date 4/23/2021 Calibrated by R. Davis/M. Solis

Nozzle identification number	D_1, mm (in.)	D_2, mm (in.)	D_3, mm (in.)	ΔD, mm (in.)	D_{avg}
Probe 1	~~0.2485~~ R0. 0.2500	~~0.2465~~ R0 0.2510	~~0.2490~~ R0 ~~0.25~~ R0 0.2495	0.0015	0.2502
Probe 2	0.2460	0.2445	0.2420	0.004	0.2442
Probe 3	0.2475	0.2495	0.2505	0.003	0.2492
Probe 4	0.2500	0.2505	0.2510	0.001	0.2505

where

$D_{1,2,3}$ = nozzle diameter measured on a different diameter, mm (in.). Tolerance = measure within 0.25 mm (0.001.)
Δ = maximum difference in any two measurements, mm (in.). Tolerance = 0.1 mm (0.004 in.).
D_{avg} = average of D_1, D_2, D_3.

probe 5	.2510	.2505	.2505	.0005	.2507
probe 6	.2460	.2460	.2460	0.0	.2460
probe 7	.2490	.2520	.2515	.003	.2508

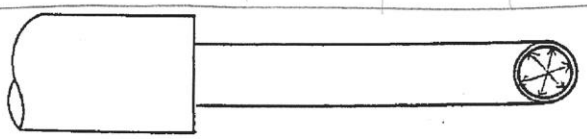


Figure 5.1-2
Nozzle Calibration Sheet

Facility: BOWMAN PLATING
Date: 4-27-21 ANODIZING ROOM

TEST #1	09:55	10:55	11:55	12:55		
TANK 301						
TOTALIZER	8434421	8435782	8435797	8436414	1993 AH	664 AH
VOLTS	19.5	19.6	22.0	22.0		
AMPS *	649	760	621	656		
TEMP. °F	95	97	99	101		INFLOW
FREEBOARD, IN.	4	4	4	4		152 FPM
TANK 314						
TEMP. °F	194	192	188	184		
FREEBOARD, IN.	4	4	4	4		INFLOW
1" POLYBALLS	✓	✓	✓	✓		320 FPM
TANK 321						
TEMP. °F	204	200	197	197		
FREEBOARD IN.	4	4	4	4		INFLOW
1" POLYBALLS	✓	✓	✓	✓		213 FPM
APC IN. H2O						
ME STAGE 1	0.18	0.18	0.18	0.18		
ME STAGE 2	0.18	0.18	0.18	0.18		
PREFILTER	0.30	0.30	0.32	0.32		
UCPA	0.85	0.85	0.85	0.85		
314/321 OPEN MIST	2	2	2	2		
PTE TELLTALE	✓ ✓	✓✓	✓✓			
TANK 312						
TEMP °F	85	85	85	84		
FREEBOARD	6	6	6	6		
VENT FANS	4/6	4/6	4/6	4/6		
SOUTH CURTAINS	-272 FPM					
EAST DOOR AJAR	-283 FPM					
* 75 PARTS HANGERS						
CONDENSER 112°F IN 65°F OUT						

Facility: BOWMAN PLATING
Date: 4-28-21 ANODIZING ROOM

TEST # 2	08:10	09:10	10:10	11:10		
TANK 301						
TOTALIZER	8438505	8439240	8440,133	8440810	2305 AH	768 AH/hr
VOLTS	18.4	26.7	26.7	21.9		
AMPS *	454	757	891	751		
TEMP, °F	96	98	102	104		
FREEBOARD, IN.	5	5	5	5		
TANK 314						
TEMP, °F	190	188	189	191		
FREEBOARD, IN.	5	5	5	5		
1" POLYBALLS	✓	✓	✓	✓		
TANK 321						
TEMP, °F	199	201	200	198		
FREEBOARD, IN.	5	5	5	5		
1" POLYBALLS	✓	✓	✓	✓		
APC, IN. H20						
ME STAGE 1	0.18	0.18	0.18	0.18		
ME STAGE 2	0.20	0.20	0.20	0.20		
PREFILTER	0.32	0.32	0.32	0.32		
ULPA	0.85	0.85	0.85	0.85		
314/321 OPEN MIN	2	2	2.22			
PTE TELLTALE	✓ ✓	✓ ✓	✓ ✓			
TANK 312						
TEMP. °F	79	79	79	79		
FREEBOARD	5	5	5	5		
		SAID 4				
VENT FANS	5/6	4/6	4/6	4/6		
SOUTH CURTAINS	-273 FPM					
EAST DOOR AJAR	-244 FPM					
* TS PARTS MANOSRS						
1" ϕ 6'L						
CONDENSER 107°F IN 97°F OUT						

Facility: BOWMAN PLATING
Date: 4-28-21 ANODIZING ROOM

TEST #3

	11:50	12:50	13:50	14:50		
TANK 301						
TOTALIZER	8441032	8441754	8442481	8443054	2022 AH	674 AH/HR
VOLTS	22.5	20.3	20.3	OFF		
AMPS *	718	715	706	OFF		
TEMP, °F	104	106	107	108		
FREEBOARD, IN.	5	5	5	5		
TANK 314						
TEMP, °F	193	200	200	201		
FREEBOARD, IN.	5	5	5	5		
1" POLYBALLS	✓	✓	✓	✓		
TANK 321						
TEMP, °F	200	198	200	200		
FREEBOARD, IN.	5	5	5	5		
1" POLYBALLS	✓	✓	✓	✓		
APE, IN. H_2O						
ME STAGE 1	0.18	0.18	0.18	0.18		
ME STAGE 2	0.20	0.20	0.20	0.20		
PREFILTER	0.32	0.32	0.32	0.32		
VLPA	0.85	0.85	0.85	0.85		
314/321 OPEN MW	2	2	2			
PTE TELLTALE	✓ ✓	✓ ✓	✓ ✓			
TANK 312						
TEMP OF	79	79	79	79		
FREEBOARD, IN.	5	5	5	5		
VENT FANS	4/6	4/6	4/6	4/6		

* 75 PARTS HANGERS 1"Ø X 6'L

CONDENSER 61°F OUT 106°F IN

APPENDIX C

Equipment Calibrations

DICK MUNNS COMPANY
LIQUID & GAS FLOW CALIBRATION

ISO 17025 IAS ACCREDITED CL-122

CERTIFICATE OF CALIBRATION

CUSTOMER:	MONTROSE AIR QUALITY SERVICES, LLC : SANTA ANA, CA	**CALIBRATION DATE:**	08/03/2020
PO NUMBER:	PO1054842	**CALIBRATION DUE:**	08/03/2021
INST. MANUFACTURER:	TSI	**PROCEDURE:**	T.O 3305-4-1769-1
INST. DESCRIPTION:	AIR VELOCITY METER	**CALIBRATION FLUID:**	AIR @ 14.7 PSIA 70°F
MODEL NUMBER:	9515	**RECEIVED CONDITION:**	WITHIN MFG. SPECS
SERIAL NUMBER:	TB5151133003	**LEFT CONDITION:**	WITHIN MFG. SPECS
RATED UNCERTAINTY:	± 5% RD OR ±5 FPM (WHICHEVER IS GREATER) ± 0.5 °F	**AMBIENT CONDITIONS:**	763 mm HGA 51% RH 72°F
UNCERTAINTY GIVEN:	± 0.20% RD ; K=2	**CERTIFICATE FILE #:**	453989 2020

NOTES: **Q.MANUAL IM 1.5 REV 2017.1 DATED 7-18-2017**

UUT INDICATED FT/MIN	DM.STD. ACTUAL FT/MIN	UUT INDICATED DEG. F	DM STD. ACTUAL DEG. F
39	38	0 TO 200°F	0 TO 200°F
126	124	43.4	43.6
250	247	72.0	72.3
518	513	99.5	99.8
1063	1052		
1587	1569		
2532	2499		
3014	2971		
3996	3933		

STANDARDS USED:

A220 12" WIND TUNNEL 0 - 8000 FPM | CMC ± 0.203% RD | TRACE# 1520423238	DUE	01/22/2021
A24 HART SCIENTIFIC TEMP. STANDARD | ± 0.024 F | TRACE# 1520423238	DUE	03/04/2021

All instruments used in the performance of the shown calibration have traceability to the National Institute of Standards and Technology (NIST). The uncertainty ratio between the calibration standards (DM.STD.) used and the unit under test (UUT) is a minimum of 4:1, unless otherwise noted. Calibration has been performed per the shown procedure number, in accordance with ISO 10012:2003, ISO 17025:2005, ANSI/NCSL-Z-540.3, and/or MIL-STD-45662A. Test methods: AP2530-92 & ASME-MFC-3M-1989.

Dick Munns Company • 11133 Winners Circle • Los Alamitos, CA 90720
Phone (714) 827-1215 • Fax (714) 827-0823

Date: 8/3/2020 Calibration Technician

Page 1 of 1

Test Nos. 21-357 -43- Date: 4/27/2021 and 4/28/2021

APEX SOURCE TESTING EQUIPMENT INSTRUMENTS

Revised: 2019/12/18

Certificate of Calibration

Method 5 Pre-Test Console Calibration - Cubic Feet (ft^3)

UUT Meter Console Information		Calibration Conditions		Factors/Conversions		Reference Equipment			
Model #:	Nutech 2010	Bar. Pressure (In Hg):	30.37	Std. Temp. (°R):	527.67	WTM Model:	W-NKoDa-5B	Serial #:	546258
Serial #:	80209	Ambient Temp. (°F):	71.2	Std. Press. (in Hg):	29.92	WTM Cal. Due Date:	May. 2021	Gamma:	0.9992
DGM Model #:	S-275	Relative Humidity (%):	55	K_1 (°R/in Hg):	17.636	WTM Thermometer:	Internal		
DGM Serial #:	6847776	Altitude (ft):	414.0						
		Bar. Pressure (Corr.) (In Hg):	29.96						

UUT Meter (DGM) | **Reference Meter (WTM)**

Run Time (minutes)	Orifice, ΔH (In. H_2O)	UUT Meter (DGM) Volume (ft^3)			UUT Meter (DGM) Outlet Temperature (°F)		Reference Meter (WTM) Meter Pressure (mm H_2O)	Reference Meter (WTM) Volume (L)			Reference Meter (WTM) Outlet Temperature (°C)	
		Initial	Final	Total	Initial	Final		Initial	Final	Total	Initial	Final
Θ	$P_{m@}$	V_{mi}	V_{mf}	V_m	t_{mi}	t_{mf}	P_w	V_{wi}	V_{wf}	V_w	t_{wi}	t_{wf}
5.0	5.0	15.438	21.397	5.959	71.0	71.0	-6.0	630.378	801.106	170.728	21.0	21.0
6.0	3.0	27.348	32.923	5.575	72.0	72.0	-4.5	970.282	1130.048	159.766	21.2	21.2
7.0	2.0	32.923	38.258	5.335	72.0	73.0	-3.0	1130.048	1281.862	151.814	21.2	21.3
10.0	1.0	38.258	43.770	5.512	73.0	73.0	-1.5	1281.862	1438.542	156.680	21.3	21.4
15.0	0.5	21.397	27.348	5.951	71.0	72.0	-0.5	801.106	970.282	169.176	21.0	21.2

Standardized Data | **Calibration Results**

Test Meter Std. Volume	Test Meter Std. Flow Rate	Reference Meter Std. Volume	Reference Meter Std. Flow Rate	Correction Factor "Gamma"	Correction Factor Variation	Flow Rate Std. & Corr.	ΔH@ (In H_2O) 0.75 SCFM	ΔH@ Variance
Vm_{std} (ft^3)	Qm_{std} (ft^3/min)	Vw_{std} (ft^3)	Qw_{std} (ft^3/min)	(Y)	(ΔY)	$Qm_{stdcorr}$	ΔH@	ΔΔH@
6.005	1.201	6.008	1.202	1.0004	-0.004	1.206	1.96	0.07
5.581	0.930	5.619	0.936	1.0069	0.003	0.934	1.92	0.04
5.322	0.760	5.339	0.763	1.0032	-0.001	0.763	1.93	0.04
5.480	0.548	5.509	0.551	1.0053	0.001	0.550	1.84	-0.04
5.926	0.395	5.954	0.397	1.0047	0.001	0.397	1.77	-0.11
				1.0041	= Y Avg.		1.88	= ΔH@ Avg.

Note: For Calibration Factor Y, the ratio of the reading of the calibration meter to the dry gas meter, acceptable tolerance of individual values from the average is ±0.02.

Note: For $\Delta H_@$, orifice pressure differential that equates to 0.75cfm (0.0212m^3/min) at standard temperature and pressure, acceptable tolerance of individual values from the average is ±0.2inches (5.1mm) H_2O.

Pass/Fail Result: Pass

Technician: Jake Bush Signature: Date: March 30, 2021

The instruments listed and described on this certificate have been calibrated against standards traceable to the National Institute of Standards and Technology (N.I.S.T.) and in reference to EPA Method 5, Section 10.3.1.

Apex Instruments - Address: 204 Technology Park Ln., Fuquay-Varina, NC 27526 USA | Tel: (919) 557-7300 Web: www.apexinst.com

APEX SOURCE TESTING EQUIPMENT INSTRUMENTS

Certificate of Calibration - Supplemental

Method 5 Pre-Test Console Calibration - Cubic Feet (ft^3)

Nomenclature

ΔH@ - Orifice press. Diff. that equates to 0.75 CFM (0.0212 CMM) at STP
DGM - Dry Gas Meter
K_1 - Constant based on standard temperature and pressure
Θ - Run time, in minutes
P_{mgd} - ΔH (Meter Pressure, gauge)
$V_{m(std)}$ - Volume collected by test meter, corrected for STP
$Q_{m(std)}$ - Calculated flow rate of test meter
K' - Critical orifice coefficient
P_w - Measured pressure of reference meter
t_w - Temperature measured in reference meter
t_m - Temperature measured in test meter
Y - Ratio of volume collected from test meter and orifice
$Vw_{(std)}$ - Volume collected by reference meter, corrected for STP
$Qw_{(std)}$ - Calculated flow rate of reference meter/standard
corr - Volume or flow rate for a meter corrected by the scaling factor

Equations

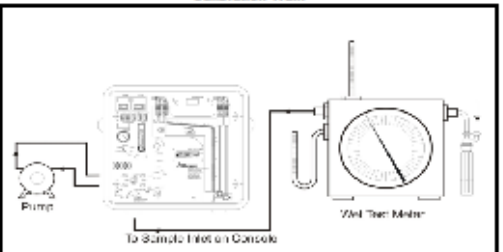
$$V_{m(std)} = K \cdot \frac{V_m \cdot (P_{bar} + \frac{\Delta H}{13.6})}{T_m} \qquad Q_{m(std)} = \frac{V_{m(std)}}{\theta}$$

$$V_{w(std)} = Y \cdot K \cdot \frac{V_w \cdot (P_{bar} - \frac{\Delta H}{13.6})}{T_w} \qquad Q_{w(std)} = \frac{V_{w(std)}}{\theta}$$

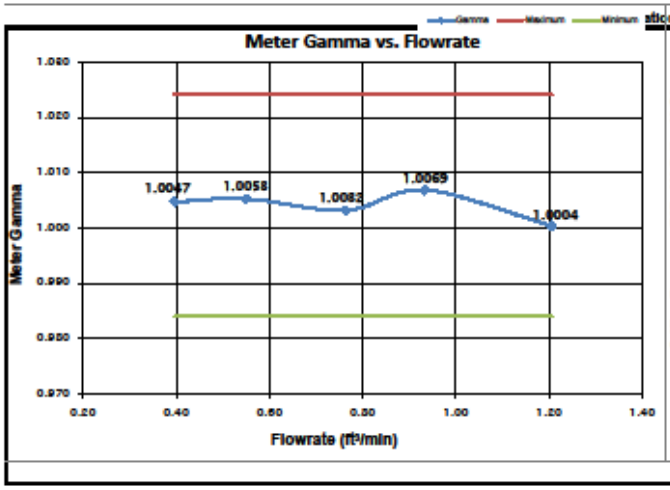
$$K_1 = \frac{T_{std}}{P_{std}} \qquad Y = \frac{V_{m(std)}}{V_{w(std)}}$$

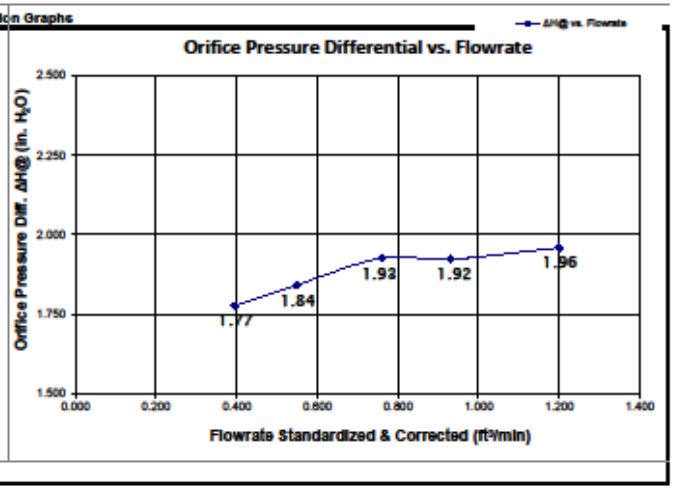
$$\text{Solving for } \Delta H@ = \frac{\Delta H \cdot 0.0319 \cdot (P_{bar} + \frac{\Delta H}{13.6})}{T_m} \cdot \left(\frac{T_m + 460}{V_m \cdot P_{bar}}\right)^2$$

Calibration Train



Calibration Graphs





Test Nos. 21-357 -45- Date: 4/27/2021 and 4/28/2021

APEX INSTRUMENTS (SOURCE TESTING EQUIPMENT)
Revised: 2018/12/18

Certificate of Calibration

Method 5 Pre-Test Console Calibration - Cubic Feet (ft^3)

UUT Meter Console Information		Calibration Conditions		Factors/Conversions		Reference Equipment			
Model #:	Nutech 2010	Bar. Pressure (In Hg):	30.38	Std. Temp. (°R):	527.67	WTM Model:	W-NKoDa-5B	Serial #:	546258
Serial #:	80305	Ambient Temp. (°F):	73.5	Std. Press. (in Hg):	29.92	WTM Cal. Due Date:	May. 2021	Gamma:	0.9992
DGM Model #:	G-275	Relative Humidity (%):	55	K_1 (°R/in Hg):	17.636	WTM Thermometer:	Internal		
DGM Serial #:	6848408	Altitude (ft):	414.0						
		Bar. Pressure (Corr.) (In Hg):	29.97						

UUT Meter (DGM) / Reference Meter (WTM)

Run Time (minutes)	Orifice, ΔH (In. H_2O)	UUT Volume (ft^3) Initial	UUT Volume (ft^3) Final	UUT Volume (ft^3) Total	UUT Outlet Temperature (°F) Initial	UUT Outlet Temperature (°F) Final	Meter Pressure (mm H_2O)	WTM Volume (L) Initial	WTM Volume (L) Final	WTM Volume (L) Total	WTM Outlet Temperature (°C) Initial	WTM Outlet Temperature (°C) Final
Θ	$P_{m@}$	V_{mi}	V_{mf}	V_m	t_{mi}	t_{mf}	P_w	V_{wi}	V_{wf}	V_w	t_{wi}	t_{wf}
5.0	5.0	493.008	498.998	5.990	73.0	73.0	-6.0	753.672	924.138	170.466	21.9	21.9
6.0	3.0	505.029	510.689	5.660	75.0	76.0	-4.5	1093.270	1252.647	159.377	22.1	22.2
7.0	2.0	510.689	516.039	5.350	76.0	77.0	-3.0	1252.647	1402.484	149.837	22.2	22.3
10.0	1.0	516.039	521.660	5.621	77.0	78.0	-1.5	1402.484	1559.124	156.640	22.3	22.4
15.0	0.5	498.998	505.029	6.031	74.0	75.0	-0.5	924.138	1093.270	169.132	21.9	22.1

Standardized Data / Calibration Results

Test Meter Std. Volume	Test Meter Std. Flow Rate	Reference Meter Std. Volume	Reference Meter Std. Flow Rate	Correction Factor "Gamma"	Correction Factor Variation	Flow Rate Std. & Corr.	ΔH@ (In H_2O) 0.75 SCFM	ΔH@ Variance
Vm_{std} (ft^3)	Qm_{std} (ft^3/min)	Vw_{std} (ft^3)	Qw_{std} (ft^3/min)	(Y)	(ΔY)	$Qm_{stdcorr}$	ΔH@	ΔΔH@
6.016	1.203	5.982	1.196	0.9944	0.002	1.194	1.97	0.07
5.630	0.938	5.589	0.932	0.9927	0.000	0.931	1.93	0.03
5.299	0.757	5.254	0.751	0.9914	-0.001	0.751	1.97	0.08
5.544	0.554	5.491	0.549	0.9905	-0.002	0.550	1.84	-0.06
5.974	0.398	5.937	0.396	0.9937	0.001	0.395	1.78	-0.12
				0.9925	= Y Avg.		1.90	= ΔH@ Avg.

Note: For Calibration Factor Y, the ratio of the reading of the calibration meter to the dry gas meter, acceptable tolerance of individual values from the average is ±0.02.

Note: For $\Delta H_@$, orifice pressure differential that equates to 0.75cfm (0.0212m^3/min) at standard temperature and pressure, acceptable tolerance of individual values from the average is ±0.2inches (5.1mm) H_2O.

Pass/Fail Result: Pass

Technician: Jake Bush Signature: Jake Bush Date: March 30, 2021

The instruments listed and described on this certificate have been calibrated against standards traceable to the National Institute of Standards and Technology (N.I.S.T.) and in reference to EPA Method 5, Section 10.3.1.

Apex Instruments - Address: 204 Technology Park Ln., Fuquay-Varina, NC 27526 USA | Tel: (919) 557-7300 Web: www.apexinst.com

APEX INSTRUMENTS

Certificate of Calibration - Supplemental

Method 5 Pre-Test Console Calibration - Cubic Feet (ft³)

Nomenclature

ΔH@ - Orifice press. Diff. that equates to 0.75 CFM (0.0212 CMM) at STP
DGM - Dry Gas Meter
K_1 - Constant based on standard temperature and pressure
Θ - Run time, in minutes
P_{mgd} - ΔH (Meter Pressure, gauge)
$V_{m(std)}$ - Volume collected by test meter, corrected for STP
$Q_{m(std)}$ - Calculated flow rate of test meter
K' - Critical orifice coefficient
P_w - Measured pressure of reference meter
t_w - Temperature measured in reference meter
t_m - Temperature measured in test meter
Y - Ratio of volume collected from test meter and orifice
$Vw_{(std)}$ - Volume collected by reference meter, corrected for STP
$Qw_{(std)}$ - Calculated flow rate of reference meter/standard
corr - Volume or flow rate for a meter corrected by the scaling factor

Equations

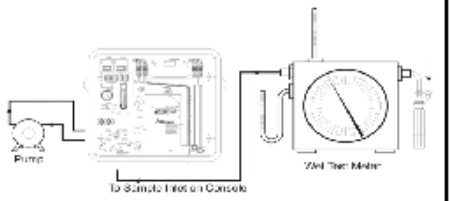
$$V_{m(std)} = K' * \frac{V_m * (P_{bar} + \frac{\Delta H}{13.6})}{T_m} \qquad Q_{m(std)} = \frac{V_{m(std)}}{\Theta}$$

$$V_{w(std)} = Y * K \frac{V_w * (P_w - \frac{P_{bar}}{13.6})}{T_w} \qquad Q_{w(std)} = \frac{V_{w(std)}}{\Theta}$$

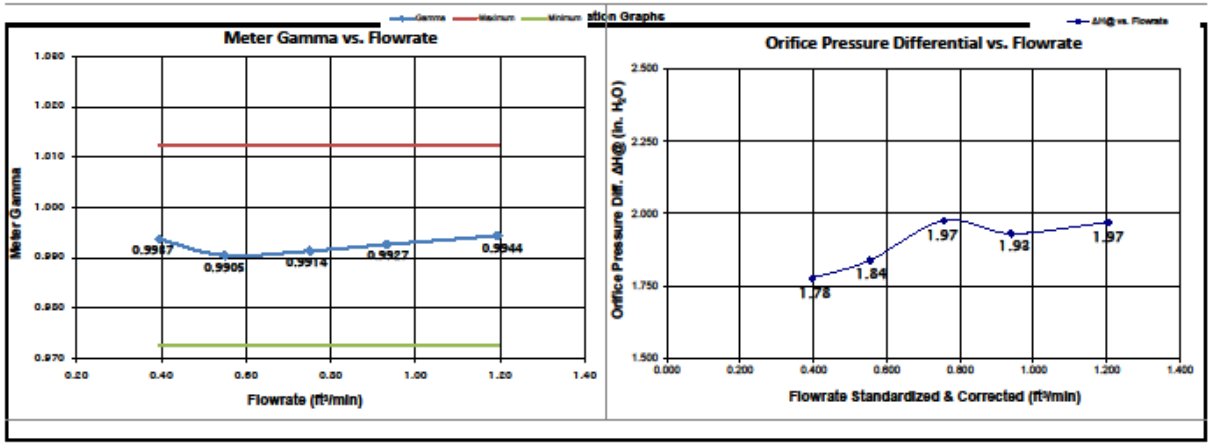
$$K_1 = \frac{T_{std}}{P_{std}} \qquad Y = \frac{V_{m(std)}}{V_{w(std)}}$$

$$\text{English } \Delta H_@ = \frac{\Delta H * 0.0319 * (P_{bar} + \frac{\Delta H}{13.6})}{T_m} * \left(\frac{T_m + 460}{T_{std} - P_{bar}}\right)^2$$

Calibration Train



ation Graphs



APPENDIX D

Laboratory Results

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Dr. Diamond Bar, CA 91765-4182

MONITORING AND ANALYSIS
REPORT OF LABORATORY ANALYSIS

(Page 1 of 6)

To: Bill Welch
Source Testing Manager
Source Test Engineering

Sampling Location
Facility ID 18989
Bowman Plating
2631 E. 126th Street
Compton, CA 90222

Laboratory No.	**2100409**
Requested By	**Brian Speaks**
Rule No.	**NA**
ST No.	**21-357**
Report Created	**08/27/2021**

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS, AND RESULTS

Hexavalent Chromium by CARB Method 425
Moisture Content by SCAQMD M4.1
pH by EPA Method 9040/9041/9045

See attached results and sample information

Comments:

Additional significant figures included for calculation purposes.

Probe for Train 30 arrived from field damaged. Broken probe recovered separately from tubing and included in final calculations for informational purposes. Hexavalent chromium determined from Train 30's broken probe is 0.26 µg, and the total chrome determined from the broken probe is 0.55 µg.

Reviewed By: John Bradley Parrack II Digitally signed by John Bradley Parrack II Date: 2021.09.01 16:47:05 -07'00' **Date Reviewed:** _____

Brad Parrack
Principal A.Q. Chemist
Laboratory Services

Approved By: Stephen Dutz Digitally signed by Stephen Dutz Date: 2021.09.03 10:28:19 -07'00' **Date Approved:** _____

Stephen Dutz
WOC Senior Manager
Laboratory Services
(909) 396-2191

Form 2.0

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Dr. Diamond Bar, CA 91765-4182

MONITORING AND ANALYSIS
REPORT OF LABORATORY ANALYSIS

(Page 2 of 6)

Laboratory No. **2100409-01 to -30**

Sample Description Sample Train 48- West

Sample Date 04/27/2021 **Received Date 04/28/2021** **Analyzed Date 7/13/2021**

Analyte, Unit	Result
Cr Total, µg	0.57
Cr+6 Total, µg	0.34
Filter Gain, g	0.0001
Impinger 1 pH, unitless	9
Impinger 2 pH, unitless	9
Moisture Gain, g	30.8
Silica Gel Expended, %	30

Sample Description Sample Train 47- West

Sample Date 04/28/2021 **Received Date 04/28/2021** **Analyzed Date 7/13/2021**

Analyte, Unit	Result
Cr Total, µg	2.78
Cr+6 Total, µg	0.84
Filter Gain, g	0.0001
Impinger 1 pH, unitless	9
Impinger 2 pH, unitless	9
Moisture Gain, g	37.6
Silica Gel Expended, %	40

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Dr. Diamond Bar, CA 91765-4182

MONITORING AND ANALYSIS
REPORT OF LABORATORY ANALYSIS

(Page 3 of 6)

Laboratory No. **2100409-01 to -35**

Sample Description Sample Train 43- West

Sample Date 04/28/2021 **Received Date 04/28/2021** **Analyzed Date 7/13/2021**

Analyte, Unit	Result
Cr Total, µg	0.54
Cr+6 Total, µg	0.46
Filter Gain, g	0.0002
Impinger 1 pH, unitless	9
Impinger 2 pH, unitless	9
Moisture Gain, g	32.0
Silica Gel Expended, %	30

Sample Description Sample Train 39- East

Sample Date 04/28/2021 **Received Date 04/28/2021** **Analyzed Date 7/13/2021**

Analyte, Unit	Result
Cr Total, µg	1.96
Cr+6 Total, µg	0.92
Filter Gain, g	0.0001
Impinger 1 pH, unitless	9
Impinger 2 pH, unitless	9
Moisture Gain, g	30.6
Silica Gel Expended, %	70

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Dr. Diamond Bar, CA 91765-4182

MONITORING AND ANALYSIS
REPORT OF LABORATORY ANALYSIS

(Page 4 of 6)

Laboratory No. **2100409-01 to -35**

Sample Description Sample Train 30- East

Sample Date 04/28/2021 **Received Date 04/28/2021** **Analyzed Date 7/13/2021**

Analyte, Unit	Result
Cr Total, µg	1.20
Cr+6 Total, µg	0.60
Filter Gain, g	-0.0001
Impinger 1 pH, unitless	9
Impinger 2 pH, unitless	9
Moisture Gain, g	38.4
Silica Gel Expended, %	30

Sample Description Sample Train 15- East

Sample Date 04/27/2021 **Received Date 04/28/2021** **Analyzed Date 7/13/2021**

Analyte, Unit	Result
Cr Total, µg	3.85
Cr+6 Total, µg	1.44
Filter Gain, g	-0.0003
Impinger 1 pH, unitless	9
Impinger 2 pH, unitless	9
Moisture Gain, g	32.3
Silica Gel Expended, %	20

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Dr. Diamond Bar, CA 91765-4182

MONITORING AND ANALYSIS
REPORT OF LABORATORY ANALYSIS

(Page 5 of 6)

Laboratory No. **2100409-01 to -35**

Sample Description Field Blank Train 8

Sample Date 04/28/2021 **Received Date 04/28/2021** **Analyzed Date 7/13/2021**

Analyte, Unit	Result
Cr Total, µg	0.00
Cr+6 Total, µg	0.00
Filter Gain, g	0.000
Impinger 1 pH, unitless	9
Impinger 2 pH, unitless	9
Moisture Gain, g	0.4
Silica Gel Expended, %	0

Sample Description Field Blank Train 42

Sample Date 04/27/2021 **Received Date 04/28/2021** **Analyzed Date 7/13/2021**

Analyte, Unit	Result
Cr Total, µg	0.00
Cr+6 Total, µg	0.00
Filter Gain, g	0.000
Impinger 1 pH, unitless	9
Impinger 2 pH, unitless	9
Moisture Gain, g	0.1
Silica Gel Expended, %	0

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Dr., Diamond Bar, CA 91765-4182

MONITORING & ANALYSIS
REPORT OF LABORATORY ANALYSIS

(Page 6 of 6)

Laboratory No. **2100409-01 to -19**

Hexavalent Chromium by CARB Method 425

QUALITY CONTROL SUMMARY

QC No	QC Type	Analyte	Result	Spike Level	Unit	Recovery %	Limits (g)
B21D087-CCV1	Balance Check	500 g	500.0	-	g	-	±0.2
B21D087-CCV2	Balance Check	100 g	100.0002	-	g	-	±0.0005

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Dr., Diamond Bar, CA 91765-4182

MONITORING AND ANALYSIS
REPORT OF LABORATORY ANALYSIS

To: Bill Welch
Source Testing Manager
Source Test Engineering

Laboratory No. **2100409-32 to -34**
Requested By **Brian Speaks**
Rule No. **NA**
ST No. **21-357**
Report Created **09/10/2021**

Sampling Location
Facility ID 18989
Bowman Plating
2631 E. 126th Street
Compton, CA 90222

ANALYTICAL WORK PERFORMED, METHOD OF ANALYSIS, AND RESULTS

Hexavalent Chromium in Bulk Samples by Ion Chromatography
Metals in Bulk Samples by Inductively Coupled Plasma - Mass Spectrometry

See attached results and sample information.

Reviewed By: Laura Saucedo Digitally signed by Laura Saucedo Date: 2021.09.10 12:27:54 -07'00' **Date Reviewed:** _____

Laura Saucedo
Principal A.Q. Chemist
Laboratory Services

Approved By: Stephen Dutz Digitally signed by Stephen Dutz Date: 2021.09.14 10:07:34 -07'00' **Date Approved:** _____

Stephen Dutz
WOC Senior Manager
Laboratory Services
(909) 396-2191

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Dr., Diamond Bar, CA 91765-4182

MONITORING AND ANALYSIS
REPORT OF LABORATORY ANALYSIS

Laboratory No. **2100409-32**
Sample Description Plastic Bottle - Chromic acid 042721-301, Tank solution

Sample Date 04/27/2021 **Received Date 04/28/2021** **Analyzed Date 05/06/2021**

Hexavalent Chromium in Bulk Samples by Ion Chromatography

Analyte, Unit	Result	Dilution Factor	MDL	MRL
Hexavalent Chromium [Cr(VI)], ppm	46,480	100,000,000	440	5,000

Laboratory No. **2100409-32**
Sample Description Plastic Bottle - Chromic acid 042721-301, Tank solution

Sample Date 04/27/2021 **Received Date 04/28/2021** **Analyzed Date 05/06/2021**

Metals in Bulk Samples by Inductively Coupled Plasma - Mass Spectrometry

Analyte, Unit	Result	Dilution Factor	MDL	MRL
Cr, ppm	42,700	1,000,000	450	1350

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Dr., Diamond Bar, CA 91765-4182

MONITORING AND ANALYSIS
REPORT OF LABORATORY ANALYSIS

Laboratory No. **2100409-33**
Sample Description Plastic Bottle - Sodium Dichromate 042721-321, Tank solution

Sample Date 04/27/2021 **Received Date 04/28/2021** **Analyzed Date 05/06/2021**

Hexavalent Chromium in Bulk Samples by Ion Chromatography

Analyte, Unit	Result	Dilution Factor	MDL	MRL
Hexavalent Chromium [Cr(VI)], ppm	13,570	100,000,000	440	5,000

Laboratory No. **2100409-33**
Sample Description Plastic Bottle - Sodium Dichromate 042721-321, Tank solution

Sample Date 04/27/2021 **Received Date 04/28/2021** **Analyzed Date 05/06/2021**

Metals in Bulk Samples by Inductively Coupled Plasma - Mass Spectrometry

Analyte, Unit	Result	Dilution Factor	MDL	MRL
Cr, ppm	12,700	1,000,000	450	1350

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Dr., Diamond Bar, CA 91765-4182

MONITORING AND ANALYSIS
REPORT OF LABORATORY ANALYSIS

Laboratory No. **2100409-34**
Sample Description Plastic Bottle - Dilute Sodium Dichromate 042721-314, Tank Solution

Sample Date 04/27/2021 **Received Date 04/28/2021** **Analyzed Date 05/06/2021**

Hexavalent Chromium in Bulk Samples by Ion Chromatography

Analyte, Unit	Result	Dilution Factor	MDL	MRL
Hexavalent Chromium [Cr(VI)], ppm	61.2	1,000,000	4.40	50.0

Laboratory No. **2100409-34**
Sample Description Plastic Bottle - Dilute Sodium Dichromate 042721-314, Tank Solution

Sample Date 04/27/2021 **Received Date 04/28/2021** **Analyzed Date 05/06/2021**

Metals in Bulk Samples by Inductively Coupled Plasma - Mass Spectrometry

Analyte, Unit	Result	Dilution Factor	MDL	MRL
Cr, ppm	66.4	1,000	0.450	1.35

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Dr., Diamond Bar, CA 91765-4182

MONITORING AND ANALYSIS
REPORT OF LABORATORY ANALYSIS

Laboratory No. 2100409-32 to -34

QUALITY CONTROL SUMMARY

QC No	QC Type	Analyzed	Result	Spike Level	Unit	Recovery %	Limits %
S21E004-CAL4	Cal Standard	05/04/2021 10:37:00	500.0	500	ng/L	100	-
S21E004-ICB1	Initial Cal Blank	05/04/2021 10:39:00	< MDL	-	ng/L	-	<MDL
S21E004-CAL5	Cal Standard	05/04/2021 10:52:00	2000.0	2000	ng/L	100	-
S21E004-CAL1	Cal Standard	05/04/2021 10:54:00	50.1	50	ng/L	100	-
S21E004-ICV1	Initial Cal Check	05/04/2021 11:06:00	250.8	250	ng/L	100	90-110
S21E004-CAL2	Cal Standard	05/04/2021 11:08:00	101.7	100	ng/L	102	-
S21E004-ICV2	Initial Cal Check	05/04/2021 11:21:00	1996.0	2000	ng/L	99.8	90-110
S21E004-CAL3	Cal Standard	05/04/2021 11:23:00	249.3	250	ng/L	99.7	-
S21E004-CCV1	Calibration Check	05/04/2021 15:23:00	97.8	100	ng/L	97.8	90-110
S21E004-CCB1	Calibration Blank	05/04/2021 15:37:00	< MDL	-	ng/L	-	<MDL
S21E011-ICV1	Initial Cal Check	05/06/2021 12:31:00	245.8	250	ng/L	98.3	90-110
S21E011-ICV2	Initial Cal Check	05/06/2021 12:46:00	1965.0	2000	ng/L	98.3	90-110
S21E011-IBL1	Instrument Blank	05/06/2021 13:00:00	< MDL	-	ng/L	-	<MDL
S21E012-ICV1	Initial Cal Check	05/06/2021 13:31:00	248.6	250	ng/L	99.4	90-110
S21E012-ICV2	Initial Cal Check	05/06/2021 13:46:00	1998.0	2000	ng/L	99.9	90-110
S21E012-IBL1	Instrument Blank	05/06/2021 14:00:00	< MDL	-	ng/L	-	<MDL
S21E011-CCV1	Calibration Check	05/06/2021 16:35:00	99.6	100	ng/L	99.6	90-110
S21E012-CCV1	Calibration Check	05/06/2021 16:37:00	94.6	100	ng/L	94.6	90-110
S21E011-CCB1	Calibration Blank	05/06/2021 16:49:00	< MDL	-	ng/L	-	<MDL
S21E012-CCB1	Calibration Blank	05/06/2021 16:52:00	< MDL	-	ng/L	-	<MDL
S21E011-CCV2	Calibration Check	05/06/2021 19:28:00	93.1	100	ng/L	93.1	90-110
S21E012-CCV2	Calibration Check	05/06/2021 19:31:00	91.8	100	ng/L	91.8	90-110
S21E011-CCB2	Calibration Blank	05/06/2021 19:42:00	< MDL	-	ng/L	-	<MDL
S21E012-CCB2	Calibration Blank	05/06/2021 19:45:00	< MDL	-	ng/L	-	<MDL
B21E023-BLK1	Blank	05/06/2021 20:00:00	< 20	-	ng/L	-	<20 ng/L
B21E023-BS1	LCS	05/06/2021 20:14:00	199.2	200	ng/L	99.6	90-110
B21E023-BS2	LCS	05/06/2021 20:29:00	200.7	200	ng/L	100	90-110
S21E011-CCV3	Calibration Check	05/06/2021 20:40:00	94.2	100	ng/L	94.2	90-110
B21E023-MS1	Soluble/Insoluble M	05/06/2021 20:43:00	66410000000.0	20000000	ng/L	99.6	90-110
S21E011-CCB3	Calibration Blank	05/06/2021 20:55:00	< MDL	-	ng/L	-	<MDL
B21E023-MSD1	Soluble MS Dup	05/06/2021 20:58:00	65870000000.0	20000000	ng/L	96.9	90-110
B21E023-DUP1	Duplicate	05/06/2021 21:26:00	45600.0	-	ppm	1.91*	15*
B21E023-DUP2	Duplicate	05/06/2021 21:55:00	13450.0	-	ppm	0.831*	15*
S21E012-CCV3	Calibration Check	05/06/2021 22:24:00	97.7	100	ng/L	97.7	90-110
S21E012-CCB3	Calibration Blank	05/06/2021 22:39:00	< MDL	-	ng/L	-	<MDL
B21E023-DUP3	Duplicate	05/06/2021 22:53:00	60.0	-	ppm	1.99*	15*

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Dr., Diamond Bar, CA 91765-4182

MONITORING AND ANALYSIS
REPORT OF LABORATORY ANALYSIS

Laboratory No. 2100409-32 to -34

QUALITY CONTROL SUMMARY

QC No	QC Type	Analyzed	Result	Spike Level	Unit	Recovery %	Limits %
B21E023-DUP4	Duplicate	05/06/2021 23:08:00	46710.0	-	ppm	0.487*	15*
S21E012-CCV4	Calibration Check	05/06/2021 23:22:00	98.6	100	ng/L	98.6	90-110
S21E012-CCB4	Calibration Blank	05/06/2021 23:36:00	< MDL	-	ng/L	-	<MDL
S21E011-CCV4	Calibration Check	05/07/2021 08:15:00	101.1	100	ng/L	101	90-110
S21E011-CCB4	Calibration Blank	05/07/2021 08:30:00	< MDL	-	ng/L	-	<MDL
S21E011-CCV5	Calibration Check	05/07/2021 10:54:00	95.2	100	ng/L	95.2	90-110
S21E011-CCB5	Calibration Blank	05/07/2021 11:08:00	< MDL	-	ng/L	-	<MDL
S21E011-CCV6	Calibration Check	05/07/2021 11:37:00	100.4	100	ng/L	100	90-110
S21E011-CCB6	Calibration Blank	05/07/2021 11:52:00	< MDL	-	ng/L	-	<MDL
S21E018-ICB1	Initial Cal Blank	05/11/2021 13:06:00	< MDL	-	ng/L	-	<MDL
S21E018-CAL2	Cal Standard	05/11/2021 13:35:00	100.9	100	ng/L	101	-
S21E018-CAL3	Cal Standard	05/11/2021 13:50:00	249.9	250	ng/L	100	-
S21E018-CAL4	Cal Standard	05/11/2021 14:04:00	499.8	500	ng/L	100	-
S21E018-CAL5	Cal Standard	05/11/2021 14:19:00	2000.0	2000	ng/L	100	-
S21E018-CAL1	Cal Standard	05/11/2021 14:33:00	50.3	50	ng/L	101	-
S21E018-ICV1	Initial Cal Check	05/11/2021 14:48:00	257.8	250	ng/L	103	90-110
S21E018-ICV2	Initial Cal Check	05/11/2021 15:02:00	1998.0	2000	ng/L	99.9	90-110
S21E018-IBL1	Instrument Blank	05/11/2021 15:16:00	< MDL	-	ng/L	-	<MDL
S21E018-CCV1	Calibration Check	05/11/2021 17:56:00	108.1	100	ng/L	108	90-110
S21E018-CCB1	Calibration Blank	05/11/2021 18:10:00	< MDL	-	ng/L	-	<MDL
S21E018-CCV2	Calibration Check	05/11/2021 20:20:00	99.6	100	ng/L	99.6	90-110
S21E018-CCB2	Calibration Blank	05/11/2021 20:34:00	< MDL	-	ng/L	-	<MDL
S21E018-CCV3	Calibration Check	05/12/2021 08:01:00	99.0	100	ng/L	99.0	90-110
S21E018-CCB3	Calibration Blank	05/12/2021 08:15:00	< MDL	-	ng/L	-	<MDL
S21E018-CCV4	Calibration Check	05/12/2021 12:16:00	101.6	100	ng/L	102	90-110
S21E018-CCB4	Calibration Blank	05/12/2021 12:30:00	< MDL	-	ng/L	-	<MDL

*Duplicates are evaluated using RPD.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Dr., Diamond Bar, CA 91765-4182

MONITORING AND ANALYSIS
REPORT OF LABORATORY ANALYSIS

(Page 7 of 8)

Laboratory No. 2100409-32 to -34

QUALITY CONTROL SUMMARY

Note: Metals QC available upon request.

SOURCE TEST REQUEST FOR EQUIPMENT/ANALYSIS

Company: Bowman Plating
Address: 2631 E 126th Street Compton, CA
Basic Equipment: Chromic Acid Anodizing Tank, and (2) Heated Seal Tanks
Analysis/Equipment Requested By: Brian Speaks
For Compliance, Rule(s) 2019 Emission Inventory
Other (specify)

Source Test No. 21-357
Request Date April 16th, 2021
Control Device Building PTE Exhaust
Date Equipment Needed April 23, 2021
Facility ID No. 18989

SAMPLE EQUIPMENT REQUEST

Dry Ice Needed ☐ Laboratory No. 2100409

SAMPLE EQUIPMENT ANALYSIS REQUEST

Equipment ID #	Analysis Requested	Set ID
(8) CARB 425 Trains	Hex Cr, Total Cr, Moisture, pH in Impinger 1 and Impinger 2	
(NaHCO3 solution and	(6 Sample Trains and 2 Field Blanks)	
filter back of train)	Train No. 8, 15, 30, 39, 42, 43, 47, 48	
	Reference STP-179 pages 47, 49-50	
(3) sample bottles for	Hex Cr, Total Cr	
tank solutions		
(7) 4' probes with ~1/4"	Acid washed and base rinsed	
nozzles, tubing (~12' min.		
ea. tube), and fittings		
Equipment Pick up:	Trains 8, 15, 30, 39 (4) probes + (4) tubing + containers & adapters	I
Equipment Pick up:	Trains 42, 43, 47, 48 (3) probes + (3) tubing	II
Equipment Pickup:	Train 8	III
Equipment Dropoff:	Train 15 with Probe 2, Train 48 with Probe 4, Train 42 (Field Blank) Dropped off & locked in ST Prep room	IV
Equipment Dropoff:	Train 47 w/Probe 5, Train 43 w/Probe 1, Train 30 w/ Probe 3-(broken), Train 39 w/ Probe 6, Train 8 (Field Blank), Probe 7 (not used), (3) Tank Solutions - Dropped off & locked in ST Prep Room	V
Equipment Dropoff:	0.1N NaHCO3 trip blank solution - dropped off by Kellen Reyes Del	(VI)
Analysis (particulates) of containers for Trains, trip blank, and (3) tank solutions.		VII 4/29/21 10:0

SAMPLE EQUIPMENT CHAIN OF CUSTODY

Sample Equipment Set ID	From	To	For (S/T, Analysis, Cleanup, Not Used)	Date Received	Time
I			S/T	4/23/21	12:19
Train 8			Not used	4/23/21	15:03
II			ST	4/23/21	15:04
III			ST	4/23/21	16:04
IV		Locked Room	Analysis	4/27/21	16:27
IV	Locked ST Prep Room		Analysis	4/28/21	6:54
V		Locked ST Prep Room	Analysis	4/28/21	19:11
V	Locked ST Room		Analysis	4/29/21	6:16
VII			Analysis	4/29/21	12:55 pm

ATTACHMENT B

List of Issues/Changes needed for the revised ATIR:

1. Include all required elements of the ATIR specified in: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-supplemental-guidelines.pdf
2. Include the 374.53 amp-hour per hour and 100,000 amp-hour per year usages for each nickel strike tank as we allowed in the January 22, 2021 letter
3. Include the 5,920 and 2,968 hours for the Anodizing and Plating Buildings based on the electricity records you submitted to us on February 5, 2021.
4. Building parameters in EIM file are in wrong units or inconsistent with ATIR report
5. Correct Anodizing Room ULPA stack parameters to match stack parameters measured in the approved source test
6. Correct modeling files to reflect the openings in the Anodizing and Plating Rooms that existed in 2019 (of special concern is the large opening on the eastern wall of the Anodizing Room that was later walled up/covered with plastic curtains)
7. Correct weight percentages for all emissions from tanks 101, 102, 105, 109, 110, 115, 140, 150, 152, 156, 161, 165, 166, 167, 168, 176, 300, 301, 303, 310, 312, 315, 601, 608, 610, 115A, 166B, 305A, 307, 314, 321, 605B, 605HSE
8. Verify that tanks 123, 132, 109B, 117, 145, 142, 149, 175, 315, 608, 319, 320, 309 did not need to be included in ATIR
9. The temperature for Tanks 300, 605A, 605B, 109B, 165, 312, 321, 314, 147, and 166B changed from what was reported in the previous iteration of the ATIR. Please provide rationale
10. The calculations for heated tanks like Tank 310 do not match the South Coast AQMD Engineering Guidance equation for heated tanks when using the provided parameters
11. The toxic weight percentages for 03GY315 do not match the MSDS
12. Propylene glycol Monomethyl ether acetate (CAS 108656) weight percentage is not consistent with SDS for Product Code 683-3-2
13. Strontium chromate weight percentage for Product Codes 44GN011, 44GN72, 823-707, 44GN054, 44GN060, 44GN049, 512X349, 44Y022, 10P30-5 do not match the SDS
14. Barium chromate weight percentage for Product Codes 823-707, 44GN007, 02Y024 do not match the SDS
15. 2-butanol (CAS 78922) is reported but this is not a toxic that needs to be reported for AB 2588
16. Xylene (CAS 1330207) weight percentage is not consistent with SDS for Product Codes 823-707, 10P20-44, 03GN209
17. Methyl Isobutyl Ketone (CAS 108101) weight percentage for Product Codes 823-707, 10P20-44, 446-22-1000, 10P30-1, 03-W-160, 10P20-26 did not match SDS
18. Methyl Ethyl Ketone (2-Butanone) (CAS 78933) weight percentage does not match SDS for Product Codes CA 8211F37038, 463-6-4, 4222T17178, 446-21-7507, 515X349, 454-4-1, Slickote P100

19. Toluene (CAS 108883) weight percentage does not match SDS for Product Code 446-22-1000, 10P20-26
20. 2-butoxyethanol (CAS 111762) weight percentage is not consistent with SDS for Product Code 44GN007, 466-21-9710
21. Hexavalent chromium (CAS 18540299) weight percentage is not consistent with SDS for Product Code 44GN049
22. Methanol (CAS 67561) weight percentage is not consistent with SDS for Product Code Slickote P100
23. Ethyl Benzene (CAS 100414) weight percentage is not consistent with SDS for Product Code 10P20-26

FORM A	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AB 2588 Program, 21865 COPLEY DR., DIAMOND BAR CA 91765-0949	INVENTORY YEAR 20_____

AB 2588 AIR TOXICS DOCUMENT CERTIFICATION & SUBMITTAL FORM

Please check the appropriate boxes for purpose of submittal:

☐ *INITIAL INFORMATION for ATIR*	☐ *EARLY ACTION REDUCTION PLAN (EARP)*	☐ *INITIAL*
☐ *AIR TOXICS INVENTORY REPORT (ATIR)*	☐ *VOLUNTARY RISK REDUCTION PLAN (VRRP)*	☐ *REVISION*
☐ *HEALTH RISK ASSESSMENT (HRA)*	☐ *IMPLEMENTATION PROGRESS REPORT for VRRP/RRP*	☐ *FINAL*
☐ *RISK REDUCTION PLAN (RRP)*	☐ *OTHER:* _____	

Does your facility participate or wish to participate in VRRP program pursuant to Rule 1402(h)? *YES* ☐ ☐

Please provide the following information:

Facility name

South Coast AQMD ID

Facility SIC/NAICS CODE

Facility Location Address

Mailing Address

Contact Person (Company Official)

Name: **Title:**

Telephone: **eMail:**

Preparer (if different from above)

Name: **Title:**

Company:

Telephone: **eMail:**

FAILURE TO SUBMIT REQUIRED INFORMATION OR KNOWINGLY SUPPLYING FALSE INFORMATION IS PUNISHABLE TO THE EXTENT DEFINED IN HEALTH AND SAFETY CODE SECTIONS 44381(a) AND 44381(b), WHICH INCLUDES MINIMUM FINES OF NOT LESS THAN FIVE HUNDRED DOLLARS.

Signature Of Responsible Company Official

Date

Name Of Responsible Company Official

Title

APPENDIX D. APPROVED 2019 ATIR

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

Via Email and CERTIFIED RETURN RECEIPT to Addressee

June 30, 2022

Dan Cunningham
Bowman Plating Co. Inc.
2631 East 126th Street
Compton, CA 90222-1599

Subject: Conditional Approval of the Modified Air Toxics Inventory Report for Bowman Plating Co. Inc. and Revised Health Risk Assessment Submittal Date (South Coast AQMD ID# **18989**)

Dear Mr. Cunningham:

The South Coast AQMD received the revised Air Toxics Inventory Report (ATIR) for the Bowman Plating Co. facility (Bowman) on April 5, 2022.[1] This letter is to notify you that the ATIR and associated Emissions Inventory Module (EIM) file have been modified by staff to address deficiencies previously identified in Attachment B of the letter dated March 3, 2022. The ATIR is now conditionally approved in accordance with Rule 1402 (d)(4)(D). As a reminder, Bowman was also informed on March 3, 2022, of the requirement to prepare and submit a Health Risk Assessment (HRA). Please note that the HRA to be submitted[2] **must be based on the modified and approved ATIR** and is due no later than August 1, 2022.

Background

In accordance with AB 2588 and South Coast AQMD Rule 1402, South Coast AQMD staff notified Bowman on April 24, 2020, that it was required to submit an updated ATIR based on its 2019 annual emissions inventory. Multiple revisions to the ATIR were required as a result of various deficiencies in the submittals identified by staff. South Coast AQMD ultimately rejected Bowman's fourth ATIR submittal (dated August 28, 2020) on September 25, 2020.

Following the rejection, South Coast AQMD and Bowman reached an agreement for our Source Test Engineering staff to perform a source test to quantify emissions from the Anodizing Room with operating conditions representative of the 2019 inventory year. Once the source test was completed, it was understood that Bowman would use the results of the source test for their 2019 ATIR. The source test results were approved and provided to you on March 3, 2022, along with instructions to use 5,920 and 2,968 hours of operation for the Anodizing and Plating Buildings, respectively. These hours of operation were provided by Bowman and first reported on October 27, 2020, in an ATIR submittal. South Coast AQMD staff requested substantiating documentation

[1] The most recent Emission Inventory Module file that accompanied the ATIR was received on May 24, 2022.
[2] An extension to the original HRA submittal date was granted on May 25, 2022, in an email from Eugene Kang to Steve Walters of Trinity Consultants.

on these hours and received electrical usage records on February 5, 2021. Following review of the documentation, staff accepted the reduced hours of operation.

The hourly emission rate from the approved source test was used in calculating emissions for the April 5, 2022, ATIR; however, Bowman revised the hours of operation for Tanks 314 and 321 without explanation from the previously approved 5,920 hours of operation to 3,000 hours. In a letter dated May 13, 2022, staff requested supporting documentation for this reduction in operating hours. In response, Bowman provided sample production records for one month, February 2019, while stating "the tank operators do not keep records of these batch groups, but rather rely on their experience and judgment to make these determinations based on specific customer orders received each day." This statement combined with partial records is insufficient documentation to substantiate the reduced hours of operation. Furthermore, it fails to account for emissions that occur from Tanks 314 and 321 as they are heated. Given the size of the tanks, the tanks will retain heat even during periods of non-operation, with emissions occurring even during idle periods. As such, the modified and approved ATIR used the previously approved operation hours of 5,920 hours.

South Coast AQMD had previously required Bowman to prepare and submit an HRA based on the approved modified ATIR by June 1, 2022. The submittal date was extended via an email sent to Bowman on May 25, 2022. Please be advised that the HRA must be based on the approved modified ATIR, which is provided to you as an attachment. Please also include a signed copy of the AB 2588 Air Toxics Document Certification & Submittal Form (Attachment D) along with your HRA submittal. The HRA must be submitted within **30 days** from the date of this letter, no later than **August 1, 2022.**

If you have questions regarding this letter, please contact Matthew Lee, Air Quality Engineer at (909) 396-2053, or Victoria Moaveni, Program Supervisor at (909) 396-2455.

Sincerely,

Eugene Kang
Planning & Rules Manager
Planning, Rule Development & Implementation

Attachment(s):
Attachment A – List of Modifications to ATIR and Accompanying EIM File
Attachment B – Modified .tra file
Attachment C – Modified ATIR
Attachment D – AB2588 Air Toxics Document Certification & Submittal Form

EK:VM:FC:ML

cc: Kimberly Pham, Bowman Plating Co. Inc.
Barry Groveman, Groveman Hiete LLP
Ryan Hiete, Groveman Hiete LLP
Shailesh Patel, Trinity Consultants
Steven Walters, Trinity Consultants

Attachment A – List of Modifications to ATIR and Accompanying EIM File

1. Building coordinate points for buildings were provided in the EIM file but were missing the number of coordinates (total per building). Corrected to include the number of points per building.
2. Correction to the annual emissions of hexavalent chromium for EIM Device 18, Process 1 ('ANODIZING ROOM') from 0.05099741432 lb/yr which was based on 0.0498 lb/yr (0.0000166 lb/hr * 3000 hr/yr) to 0.0995 lb/yr which is based on 0.098272 lb/yr (0.0000166 lb/hr * 5920 hr/yr)
3. Correction to the annual emissions of hydrochloric acid emissions for EIM Device 17, Process 1 ('PLATING ROOM') from 3.19399103684383 lb/yr to 3.80 lb/yr. The correct calculation for annual evaporative emissions for Tank 175 is 0.00068 lb/hr * 2968 hr/yr = 2.01824 lb/yr, thereby leading to a revised annual emission of hydrochloric acid for the plating room.
4. Corrections to spray booth emission calculations based on information presented in ATIR and SDS sheets previously submitted to staff. These corrections include:
    a. weight % of 2-butanol from a coating product (44GN098) emissions to 10% instead of 5% (The calculations were correct in the EIM but the report had the wrong weight %)
    b. Removal of barium chromate and ethylbenzene emissions from a primer coating (10P20-13) emissions
    c. Changed weight % of xylene from the epoxy primer (10P4-2NF/EC117S) emissions to 10% instead of 12.5%
    d. Included the chromium, ion (Cr6+) weight % from the epoxy primer (44GN049) emissions to total hexavalent chromium emissions from this coating
    e. Addition of methyl isobutyl ketone emissions with 0.5% weight from coating (02GN084)

Trinity Consultants
20 Corporate Park, Ste 285, Irvine, CA 92606 / P 949.567.9880 / F 949.812.6650 / **trinityconsultants.com**

DELIVERED VIA EMAIL: EKang@aqmd.gov

April 5, 2022

Mr. Eugene Kang
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765

Subject: **Updated 2019 Air Toxics Inventory Report**

Facility: Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222
Facility ID No. 18989

Dear Mr. Kang:

Per your letter dated March 3, 2022, please find attached the updated 2019 Air Toxics Inventory Report (ATIR) for Bowman Plating Company. Note that the items identified in Attachment B of your letter have also been addressed, and any corrections are reflected in the updated ATIR, as applicable. In addition, we have included the EIM files associated with this updated ATIR, which are attached to this email.

As you may be aware, Bowman has been proactive in reducing health risk impacts from its facility and made considerable capital investments in emission controls over the past several years. These risk reduction measures have included the construction of Permanent Total Enclosures (PTEs), mist eliminators and Ultra Low Particulate Air (ULPA) filtration devices for its operations. As a consequence, these emission controls have significantly reduced health risk impacts, which are not reflected in the enclosed 2019 ATIR.

Due to these circumstances and extent of emission reductions already achieved, Bowman requests to participate in the Voluntary Risk Reduction Program (VRRP) as provided by SCAQMD Rule 1402, which was previously discussed with the agency. If there are any questions, please contact our office to discuss the matter further.

Sincerely,

TRINITY CONSULTANTS

Steven R. Walters, P.E.
Principal Consultant

Encl.

cc: Dan Cunningham, Bowman Plating

Trinity Consultants
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AB 2588 AIR TOXICS DOCUMENT CERTIFICATION & SUBMITTAL FORM

ATTACHMENT C

FORM A	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AB 2588 Program, 21865 COPLEY DR., DIAMOND BAR CA 91765-0949	INVENTORY YEAR 2019

AB 2588 AIR TOXICS DOCUMENT CERTIFICATION & SUBMITTAL FORM

Please check the appropriate boxes for purpose of submittal:

- ☐ *INITIAL INFORMATION for ATIR*
- ☑ *AIR TOXICS INVENTORY REPORT (ATIR)*
- ☐ *HEALTH RISK ASSESSMENT (HRA)*
- ☐ *RISK REDUCTION PLAN (RRP)*
- ☐ *EARLY ACTION REDUCTION PLAN (EARP)*
- ☐ *VOLUNTARY RISK REDUCTION PLAN (VRRP)*
- ☐ *IMPLEMENTATION PROGRESS REPORT for VRRP/RRP*
- ☐ *OTHER:* _____
- ☐ *INITIAL*
- ☐ *REVISION*
- ☑ *FINAL*

Does your facility participate or wish to participate in VRRP program pursuant to Rule 1402(h)? *YES* ☐ ☐

Please provide the following information:

Facility name	South Coast AQMD ID	Facility SIC/NAICS CODE
Bowman Plating	18989	

Facility Location Address	Mailing Address
2631 E. 126th Street	2631 E. 126th Street
Compton, CA 90222	Compton, CA 90222

Contact Person (Company Official)

Name: Dan Cunningham	Title: Vice President
Telephone: 310-639-4343	eMail: dan@bowmanplating.com

Preparer (if different from above)

Name: Steve Walters	Title: Consultant
Company: Trinity Consultants	
Telephone: 949-567-9880 Ext. 5510	eMail: srwalters@trinityconsultants.com

FAILURE TO SUBMIT REQUIRED INFORMATION OR KNOWINGLY SUPPLYING FALSE INFORMATION IS PUNISHABLE TO THE EXTENT DEFINED IN HEALTH AND SAFETY CODE SECTIONS 44381(a) AND 44381(b), WHICH INCLUDES MINIMUM FINES OF NOT LESS THAN FIVE HUNDRED DOLLARS.

Signature Of Responsible Company Official	Date
[signature]	3-30-2022
Name Of Responsible Company Official	**Title**
Dan Cunningham	Executive Vice President

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RESPONSES TO SCAQMD QUESTIONS AND COMMENTS (ATTACHMENT B)

BOWMAN PLATING

RESPONSE TO SCAQMD COMMENTS/ISSUES
ATTACHMENT B

1. Include all required elements of the ATIR specified in: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-supplemental-guidelines.pdf

Response: Completed.

2. Include the 374.53 amp-hour per hour and 100,000 amp-hour per year usages for each nickel strike tank as we allowed in the January 22, 2021 letter

Response: The stated amp-hour usages were applied to electrolytic tanks, as applicable.

3. Include the 5,920 and 2,968 hours for the Anodizing and Plating Buildings based on the electricity records you submitted to us on February 5, 2021.

Response: Representative hours of operation were applied to all process tanks, as applicable.

4. Building parameters in EIM file are in wrong units or inconsistent with ATIR report

Response: Building parameters were reviewed, and corrections made to ATIR, as applicable.

5. Correct Anodizing Room ULPA stack parameters to match stack parameters measured in the approved source test

Response: Stack parameters were revised to reflect the SCAQMD source test report dated October 19, 2021.

6. Correct modeling files to reflect the openings in the Anodizing and Plating Rooms that existed in 2019 (of special concern is the large opening on the eastern wall of the Anodizing Room that was later walled up/covered with plastic curtains)

Response: No modeling files were previously submitted for the 2019 ATIR. Irrespective, the Anodizing and Plating Buildings will be considered area sources for purposes of this 2019 ATIR, and subsequent modeling for HRA.

7. Correct weight percentages for all emissions from tanks 101, 102, 105, 109, 110, 115, 140, 150, 152, 156, 161, 165, 166, 167, 168, 176, 300, 301, 303, 310, 312, 315, 601, 608, 610, 115A, 166B, 305A, 307, 314, 321, 605B, 605HSE

Response: The above referenced tank data were confirmed based on 2019 operations, and any corrections are reflected in the updated ATIR.

8. Verify that tanks 123, 132, 109B, 117, 145, 142, 149, 175, 315, 608, 319, 320, 309 did not need to be included in ATIR

Response: Note that Tanks 109B, 132, 117 and 175 were previously identified in the ATIR. Other tanks referenced above do not need to be included.

9. The temperature for Tanks 300, 605A, 605B, 109B, 165, 312, 321, 314, 147, and 166B changed from what was reported in the previous iteration of the ATIR. Please provide rationale

Response: Tank operating temperatures reflect 2019 operations based on best available information.

10. The calculations for heated tanks like Tank 310 do not match the South Coast AQMD Engineering Guidance equation for heated tanks when using the provided parameters

Response: The heated tanks were confirmed to match the SCAQMD engineering guidance, and any corrections are reflected in the updated ATIR.

11. The toxic weight percentages for 03GY315 do not match the MSDS.

Response: SDS were reviewed, and any corrections are reflected in the ATIR.

12. Propylene glycol Monomethyl ether acetate (CAS 108656) weight percentage is not consistent with SDS for Product Code 683-3-2

Response: SDS were reviewed, and any corrections are reflected in the ATIR.

13. Strontium chromate weight percentage for Product Codes 44GN011, 44GN72, 823-707, 44GN054, 44GN060, 44GN049, 512X349, 44Y022, 10P30-5 do not match the SDS

Response: SDS were reviewed, and any corrections are reflected in the ATIR. Note that toxic weight percentages factor in coating mix ratios, as applied.

14. Barium chromate weight percentage for Product Codes 823-707, 44GN007, 02Y024 do not match the SDS

Response: SDS were reviewed, and any corrections are reflected in the ATIR. Note that toxic weight percentages factor in the applicable coating mix ratios.

15. 2-butanol (CAS 78922) is reported but this is not a toxic that needs to be reported for AB 2588

Response: 2-Butanol (sec-butyl alcohol) (CAS 78922) was identified in AB 2588, Appendix A-I list of reportable chemicals.

16. Xylene (CAS 1330207) weight percentage is not consistent with SDS for Product Codes 823-707, 10P20-44, 03GN209

Response: SDS were reviewed, and any corrections are reflected in the ATIR.

17. Methyl Isobutyl Ketone (CAS 108101) weight percentage for Product Codes 823-707, 10P20-44, 446-22-1000, 10P30-1, 03-W-160, 10P20-26 did not match SDS

Response: SDS were reviewed, and any corrections are reflected in the ATIR.

18. Methyl Ethyl Ketone (2-Butanone) (CAS 78933) weight percentage does not match SDS for Product Codes CA 8211F37038, 463-6-4, 4222T17178, 446-21-7507, 515X349, 454-4-1, Slickote P100

Response: SDS were reviewed, and any corrections are reflected in the ATIR.

19. Toluene (CAS 108883) weight percentage does not match SDS for Product Code 446-22-1000, 10P20-26

Response: SDS were reviewed, and any corrections are reflected in the ATIR.

20. 2-butoxyethanol (CAS 111762) weight percentage is not consistent with SDS for Product Code 44GN007, 466-21-9710

Response: SDS were reviewed, and any corrections are reflected in the ATIR.

21. Hexavalent chromium (CAS 18540299) weight percentage is not consistent with SDS for Product Code 44GN049

Response: SDS were reviewed, and any corrections are reflected in the ATIR.

22. Methanol (CAS 67561) weight percentage is not consistent with SDS for Product Code Slickote P100

Response: SDS were reviewed, and any corrections are reflected in the ATIR.

23. Ethyl Benzene (CAS 100414) weight percentage is not consistent with SDS for Product Code 10P20-26

Response: SDS were reviewed, and any corrections are reflected in the ATIR. However, note there were no material usages of this product in 2019.

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FIGURES

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BOWMAN

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description: Location Map

Scale	Date	Figure
N/A	July 2020	1

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BOWMAN

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description: Vicinity Map

Scale	Date	Figure
N/A	July 2020	2

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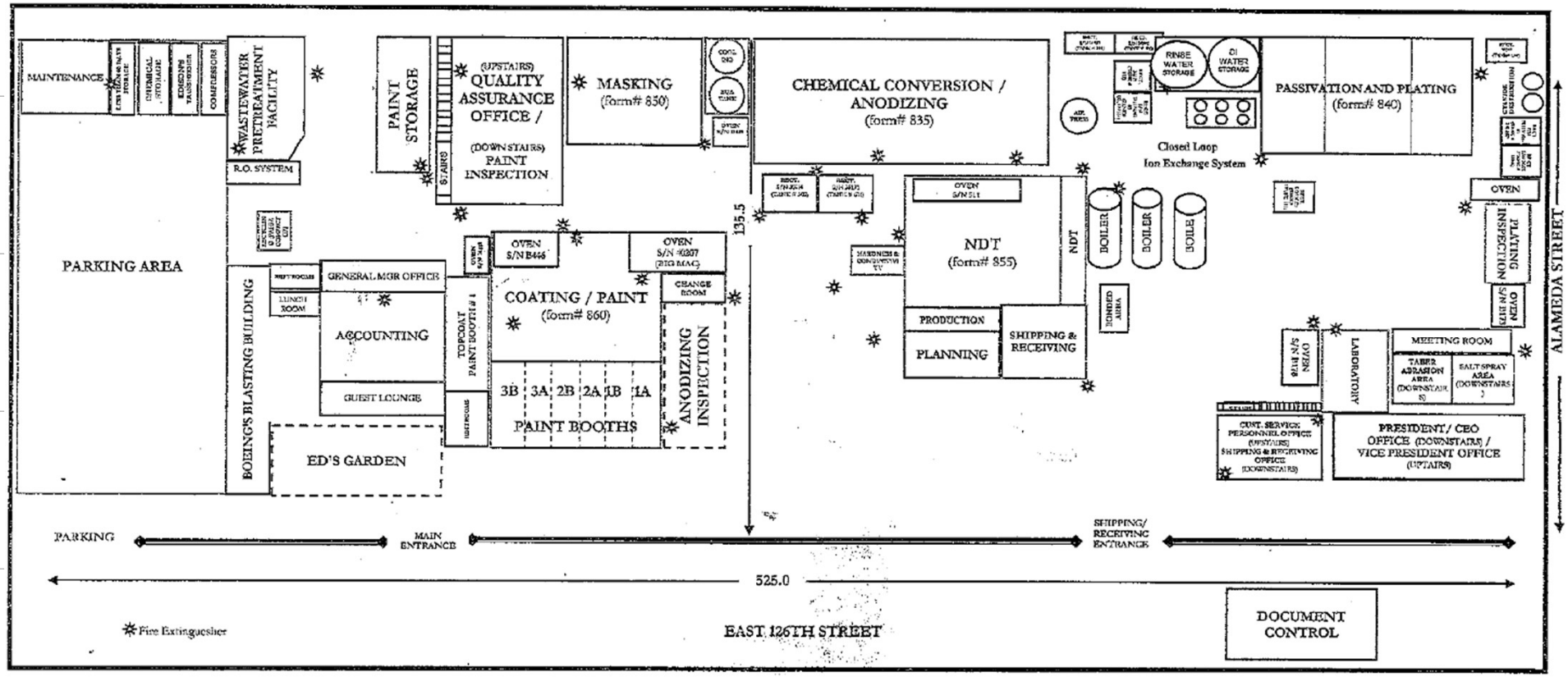
BOWMAN

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description			
Site Plot Plan			
Scale	Date	Figure	
N/A	July 2020	3a	



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BOWMAN

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description: General Facility Layout

Scale	Date	Figure
N/A	July 2020	3b

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BOWMAN

Bowman Plating Company
2631 E. 126th Street
Compton, CA 90222

Description: Emission Sources/Stack Locations

Scale	Date	Figure
N/A	July 2020	4

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SUMMARY OF AIR TOXIC EMISSION CALCULATIONS

HEATED TANK EMISSIONS
EVAPORATIVE EMISSIONS
ELECTROLYTIC EMISSIONS

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2019 AIR TOXICS INVENTORY REPORT - TANK EMISSIONS (ANNUAL EMISSIONS)

Bowman Plating
2631 E. 126th Street
Compton, CA
SCAQMD ID No 18989

Summary by Bldg/Room - Anodizing Room

Bldg/Room	Source Type	Stack ID	Substance	CAS No	Annual Emissions			Total (lb/yr)
					Heated Tank	Evaporative	Electrolytic	
Anodizing	Area	18	Hexavalent Chromium	18540299	5.10E-02	0.00E+00	0.00E+00	5.10E-02
Anodizing	Area	18	Nickel	7440020	7.40E-01	0.00E+00	0.00E+00	7.40E-01
Anodizing	Area	18	Cadmium	7440439	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Anodizing	Area	18	Nitric acid	7697372	0.00E+00	3.34E+00	0.00E+00	3.34E+00
Anodizing	Area	18	Hydrofluoric Acid	7664393	0.00E+00	6.77E+01	0.00E+00	6.77E+01
Anodizing	Area	18	Sodium Hydroxide	1310732	0.00E+00	7.40E-02	0.00E+00	7.40E-02
Anodizing	Area	18	Sulfuric Acid	7664939	0.00E+00	2.11E-13	1.07E+01	1.07E+01
Anodizing	Area	18	Hydrochloric Acid	7647010	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Anodizing	Area	18	DGMBE	112345	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Anodizing	Stack	16	Hexavalent Chromium	18540299	4.80E-05	0.00E+00	1.09E-05	5.89E-05

Summary by Bldg/Room - Plating Room

Bldg/Room	Source Type	Stack ID	Substance	CAS No	Annual Emissions			Total (lb/yr)
					Heated Tank	Evaporative	Electrolytic	
Plating	Area	17	Hexavalent Chromium	18540299	2.37E-02	0.00E+00	0.00E+00	2.37E-02
Plating	Area	17	Nickel	7440020	0.00E+00	0.00E+00	1.26E-01	1.26E-01
Plating	Area	17	Cadmium	7440439	0.00E+00	0.00E+00	9.62E-02	9.62E-02
Plating	Area	17	Nitric acid	7697372	0.00E+00	8.38E-01	0.00E+00	8.38E-01
Plating	Area	17	Hydrofluoric Acid	7664393	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Plating	Area	17	Sodium Hydroxide	1310732	0.00E+00	1.31E-01	0.00E+00	1.31E-01
Plating	Area	17	Sulfuric Acid	7664939	0.00E+00	2.41E-15	0.00E+00	2.41E-15
Plating	Area	17	Hydrochloric Acid	7647010	0.00E+00	3.19E+00	0.00E+00	3.19E+00
Plating	Area	17	DGMBE	112345	0.00E+00	7.39E-03	0.00E+00	7.39E-03
Plating	Stack	15	Cadmium	7440439	0.00E+00	0.00E+00	2.36E-03	2.36E-03

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2019 AIR TOXICS INVENTORY REPORT - TANK EMISSIONS (1-HOUR)

Bowman Plating
2631 E. 126th Street
Compton, CA
SCAQMD ID No 18989

Summary by Bldg/Room - Anodizing Room

Bldg/Room	Source Type	Stack ID	Substance	CAS No	1-Hour Emissions (lb/hr)			Total (lb/hr)
					Heated Tank	Evaporative	Electrolytic	
Anodizing	Area	18	Hexavalent Chromium	18540299	1.68E-05	0.00E+00	0.00E+00	1.68E-05
Anodizing	Area	18	Nickel	7440020	1.25E-04	0.00E+00	0.00E+00	1.25E-04
Anodizing	Area	18	Cadmium	7440439	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Anodizing	Area	18	Nitric acid	7697372	0.00E+00	4.06E-04	0.00E+00	4.06E-04
Anodizing	Area	18	Hydrofluoric Acid	7664393	0.00E+00	7.73E-03	0.00E+00	7.73E-03
Anodizing	Area	18	Sodium Hydroxide	1310732	0.00E+00	8.45E-06	0.00E+00	8.45E-06
Anodizing	Area	18	Sulfuric Acid	7664939	0.00E+00	2.40E-17	2.54E-01	2.54E-01
Anodizing	Area	18	Hydrochloric Acid	7647010	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Anodizing	Area	18	DGMBE	112345	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Anodizing	Stack	16	Hexavalent Chromium	18540299	8.11E-09	0.00E+00	1.57E-07	1.65E-07

Summary by Bldg/Room - Plating Room

Bldg/Room	Source Type	Stack ID	Substance	CAS No	1-Hour Emissions (lb/hr)			Total (lb/hr)
					Heated Tank	Evaporative	Electrolytic	
Plating	Area	17	Hexavalent Chromium	18540299	8.00E-06	0.00E+00	0.00E+00	8.00E-06
Plating	Area	17	Nickel	7440020	0.00E+00	0.00E+00	4.74E-04	4.74E-04
Plating	Area	17	Cadmium	7440439	0.00E+00	0.00E+00	1.44E-03	1.44E-03
Plating	Area	17	Nitric acid	7697372	0.00E+00	1.29E-04	0.00E+00	1.29E-04
Plating	Area	17	Hydrofluoric Acid	7664393	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Plating	Area	17	Sodium Hydroxide	1310732	0.00E+00	1.50E-05	0.00E+00	1.50E-05
Plating	Area	17	Sulfuric Acid	7664939	0.00E+00	2.75E-19	0.00E+00	2.75E-19
Plating	Area	17	Hydrochloric Acid	7647010	0.00E+00	8.83E-04	0.00E+00	8.83E-04
Plating	Area	17	DGMBE	112345	0.00E+00	8.43E-07	0.00E+00	8.43E-07
Plating	Stack	15	Cadmium	7440439	0.00E+00	0.00E+00	2.86E-05	2.86E-05

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2019 AIR TOXIC INVENTORY REPORT - HEATED TANK EMISSIONS

Bowman Plating
2631 E. 126th Street
Compton, CA
SCAQMD ID No 18989

Summary by Substance - Heated Emissions

Bldg/Room	Source Type	Substance	1-Hour	Annual
Anodizing	Area	Hexavalent Chromium	1.68E-05	5.10E-02
Anodizing	Area	Nickel	1.25E-04	7.40E-01
Anodizing	Area	Cadmium	0.00E+00	0.00E+00
Anodizing	Stack	Hexavalent Chromium	8.11E-09	4.80E-05
Plating	Area	Hexavalent Chromium	8.00E-06	2.37E-02
Plating	Area	Nickel	0.00E+00	0.00E+00
Plating	Area	Cadmium	0.00E+00	0.00E+00

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2019 AIR TOXIC INVENTORY REPORT - HEATED TANK EMISSIONS

Bowman Plating
2631 E. 126th Street
Compton, CA
SCAQMD ID No 18989

Anodizing Room - Heated Tanks

						Tank/ Chemical Parameters				Emissions [3]	
AER ID	**Tank ID**	**Tank Name**	**Temp (F)**	**Controls**	**Substance Name**	**A**	**W**	**EF**	**CE**	**lb/hr**	**lb/yr**
-	999-A7**	Chemfilm	Ambient	-	Hexavalent chromium	49.00	0.58	0.000	0.00%	0.00E+00	0.00E+00
-	312	Chemfilm	85	-	Hexavalent chromium	49.00	0.45	0.000	0.00%	0.00E+00	0.00E+00
ES59	610	Chemfilm	130 - 160	Tank Lid	Hexavalent chromium	28.75	0.11	0.298	90.00%	2.07E-07	1.23E-03
-	310	Nickel Acetate	190 - 210	-	Nickel	49.00	0.46	2.230	0.00%	1.25E-04	7.40E-01
ES55	301	Chromic Acid Anodizing	90 - 99	- Tank Lid - Polyballs - ULPA Filter System (99.999%) (Permit #G46953 A/N 6008293)	Hexavalent chromium	49.00	3.53	0.000	99.999%	0.00E+00	0.00E+00
ES55	314*	Dilute Chromic Seal	195 - 210		Hexavalent chromium	49.00	0.003	2.230	99.999%	7.45E-12	4.41E-08
ES55	321*	Sodium Dichromate Seal	190 - 210		Hexavalent chromium	49.00	3.37	2.230	99.999%	8.10E-09	4.80E-05

Anodizing Room - Fugitives (from SCAQMD test report dated October 19, 2021)

						Tank/ Chemical Parameters				Emissions	
AER ID	**Tank ID**	**Tank Name**	**Temp (F)**	**Controls**	**Substance Name**	**A**	**W**	**EF**	**CE**	**lb/hr**	**lb/yr**
ES32	314*	Dilute Chromic Seal	195 - 210	- Tank Lid - Polyballs - ULPA Filter System (99.999%) (Permit #G46953 A/N 6008293)	Hexavalent chromium	-	-	-	99.999%	1.66E-05	0.098272
ES18	321*	Sodium Dichromate Seal	190 - 210		Hexavalent chromium	-	-	-	99.999%		

Note: SCAQMD test report (Oct 2021), Table 3 indicated Building PTE Uncontrolled hex chrome emissions = 1.66 x 10^{-5} lbs/hr (East and West exhausts).

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2019 AIR TOXIC INVENTORY REPORT - HEATED TANK EMISSIONS

Bowman Plating
2631 E. 126th Street
Compton, CA
SCAQMD ID No 18989

Plating Room - Heated Tanks

						Tank/ Chemical Parameters				Emissions [4]	
AER ID	Tank ID	Tank Name	Temp (F)	Controls	Substance Name	A	W	EF	CE	lb/hr	lb/yr
-	166	Passivation Type II	90 - 130	Tank Lid Polyballs	Hexavalent chromium	20.00	1.04	0.000	90.00%	0.00E+00	0.00E+00
-	166A**	Sodium dichromate seal	140 - 180	Tank Lid	Hexavalent chromium	16.00	3.37	0.650	90.00%	7.71E-06	2.29E-02
ES58	166B	Hot Chromic Acid Rinse	200	Tank Lid	Hexavalent chromium	16.00	0.02	2.230	90.00%	1.18E-07	3.49E-04
ES57	147	Hot Chromic Dip	200	Tank Lid	Hexavalent chromium	22.50	0.02	2.230	90.00%	1.71E-07	5.08E-04
ES53	115	Nickel Strike (Still)	Ambient	-	Nickel	20.00	11.38	0.000	0.00%	0.00E+00	0.00E+00
ES53	102	Cadmium Plating (Still)	Ambient	-	Cadmium	36.00	4.33	0.000	0.00%	0.00E+00	0.00E+00
-	109*	Cad Post Treatment (Color)	60 - 110	-	Hexavalent chromium	5.83	0.42	0.000	0.00%	0.00E+00	0.00E+00
-	108	Cad Post Treatment (Clear)	Ambient	-	Hexavalent chromium	5.83	3.43	0.000	0.00%	0.00E+00	0.00E+00
-	132	Cad Post Treatment (Color)	60 - 110	-	Hexavalent chromium	5.83	0.48	0.000	0.00%	0.00E+00	0.00E+00
-	105	Bright Dip	Ambient	-	Hexavalent chromium	2.17	3.71	0.000	0.00%	0.00E+00	0.00E+00

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2019 AIR TOXIC INVENTORY REPORT - HEATED TANK EMISSIONS

Bowman Plating
2631 E. 126th Street
Compton, CA
SCAQMD ID No 18989

Plating Room - Heated Tanks (Cont'd)

						Tank/ Chemical Parameters				Emissions	
AER ID	**Tank ID**	**Tank Name**	**Temp (F)**	**Controls**	**Substance Name**	**A**	**W**	**EF**	**CE**	**lb/hr**	**lb/yr**
ES2	150	Cadmium Plating (Barrel)	Ambient	Tank Lid Mesh Pads	Cadmium	48.49	4.29	0.000	98.00%	0.00E+00	0.00E+00
ES54	115A	Nickel Strike (Barrel)	Ambient	-	Nickel	12.40	11.38	0.000	0.00%	0.00E+00	0.00E+00
-	109B	Cad Post Treatment (Barrel)	Ambient	-	Hexavalent chromium	4.00	0.48	0.000	0.00%	0.00E+00	0.00E+00

Reference: SCAQMD Engineering Guidance

E = A x W x EF x (1 - CE) x 2.2E-06, where

E = Air toxic emissions (lbs/hr)

A = Tank surface area (ft^2)

W = Weight fraction of chemical

EF = Emission factor based on tank temperature (mg/hr-ft2-W%)

CE = Overall control efficiency (%)

2.2E-06 = milligrams to pounds conversion

Heated Tank Emission Factors

Temp Range (F)	Emission Factor mg/(hr - ft^2 - W)	Emission Factor lb/(hr - ft^2 - W)
140 to 150	0.113	2.49E-07
> 150 to 160	0.298	6.57E-07
> 160 to 169	0.475	1.05E-06
> 169 to 188	0.65	1.43E-06
> 188	2.23	4.92E-06

Pollution Control Efficiencies

Mist Eliminators = 50%
Packed Bed Scrubber = 70%
Tank Lids = 90%
Polyballs = 90%
Mesh Pads = 95%
Chemical Fume Suppressants = 95% to 99%
HEPA Filters = 99.97%
ULPA Filters = 99.999%

Notes:

1. Tank #166A shut down as of 3/29/2019 (36 weeks out of service in 2019).
2. Tank #999-A7 shut down as of 3/29/2019 (36 weeks out of service in 2019).
3. Operating hours (uncovered/covered tanks): Anodizing Bldg = 5,920 hours (with exception of Tank 314/321 which is based on tank operating hours = 3,000 hrs)
4. Operating hours (uncovered/covered tanks): Plating Bldg = 2,968 hours
5. Nickel emissions adjusted for molecular weight: Ni (58.693) / Cr+6 (51.996) = 1.13
6. Cadmium emissions adjusted for molecular weight: Cd (112.411) / Cr+6 (51.996) = 2.16

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2019 AIR TOXICS INVENTORY REPORT - EVAPORATIVE TANK EMISSIONS

Bowman Plating
2631 E. 126th Street
Compton, CA
SCAQMD ID No 18989

Summary by Substance - Evaporative Emissions

Bldg/Room	Source Type	Substance	1-Hour	Annual
Anodizing	Area	Nitric acid	4.06E-04	3.34E+00
Anodizing	Area	Hydrofluoric Acid	7.73E-03	6.77E+01
Anodizing	Area	Sodium Hydroxide	8.45E-06	7.40E-02
Anodizing	Area	Sulfuric Acid	2.40E-17	2.11E-13
Anodizing	Area	Hydrochloric Acid	0.00E+00	0.00E+00
Anodizing	Area	DGMBE	0.00E+00	0.00E+00
Plating	Area	Nitric acid	1.29E-04	8.38E-01
Plating	Area	Hydrofluoric Acid	0.00E+00	0.00E+00
Plating	Area	Sodium Hydroxide	1.50E-05	1.31E-01
Plating	Area	Sulfuric Acid	2.75E-19	2.41E-15
Plating	Area	Hydrochloric Acid	8.83E-04	3.19E+00
Plating	Area	DGMBE	8.43E-07	7.39E-03

Anodizing Room - Evaporative Emissions

						Tank/Chemical Parameters								Emissions	
AER ID	Tank ID	Tank Name	Substance Name	CAS No	Substance Wt%	U	MW	K	A	VP	R	T	CE	lb/hr	lb/yr
-	605A**	Titanium Etch	Nitric acid	7697372	18.52%	0.0623	63.01	3.31E-04	7.8	8.79E-05	10.73	550	0%	8.77E-06	7.68E-02
-	605B	Titanium Etch	Nitric acid	7697372	31.75%	0.0623	63.01	3.31E-04	49.0	4.44E-04	10.73	555	0%	2.75E-04	2.40E+00
-	605HSE	Titanium Etch High Speed	Nitric acid	7697372	29.81%	0.0623	63.01	3.31E-04	16.7	3.69E-03	10.73	580	90%	7.43E-05	4.40E-01
-	319A	Conversion Coating Titanium	Hydrofluoric acid	7664393	1.62%	0.0623	20.01	4.85E-04	3.1	1.10E-02	10.73	528	90%	2.12E-05	1.26E-01
-	307*	Aluminum Etch	Sodium Hydroxide	1310732	2.93%	0.0623	40.00	3.85E-04	49.0	1.90E-05	10.73	570	0%	8.45E-06	7.40E-02
-	305*	Deoxidizer	Nitric acid	7697372	9.13%	0.0623	63.01	3.31E-04	49.0	4.00E-05	10.73	528	0%	2.60E-05	2.28E-01
-	305A*	Deoxidizer LNC	Hydrofluoric acid	7664393	0.20%	0.0623	20.01	4.85E-04	49.0	2.55E-02	10.73	528	0%	7.71E-03	6.75E+01
	305A*	Deoxidizer LNC	Nitric acid	7697372	6.26%	0.0623	63.01	3.31E-04	49.0	3.42E-05	10.73	528	0%	2.22E-05	1.95E-01
ES56	601	Hard Anodize	Sulfuric acid	7664939	27.66%	0.0623	98.08	2.86E-04	63.0	2.09E-18	10.73	495	0%	2.50E-18	2.19E-14
ES56	303	Sulfuric Anodize	Sulfuric acid	7664939	18.52%	0.0623	98.08	2.86E-04	69.0	1.66E-17	10.73	532	0%	2.03E-17	1.77E-13
ES55	300	Boric-Sulfuric Anodize	Sulfuric acid	7664939	4.03%	0.0623	98.08	2.86E-04	62.1	1.19E-18	10.73	544	0%	1.28E-18	1.12E-14

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2019 AIR TOXICS INVENTORY REPORT - EVAPORATIVE TANK EMISSIONS

Bowman Plating
2631 E. 126th Street
Compton, CA
SCAQMD ID No 18989

Plating Room - Evaporative Emissions

						Tank/Chemical Parameters								Emissions	
AER ID	Tank ID	Tank Name	Substance Name	CAS No	Substance Wt%	U	MW	K	A	VP	R	T	CE	lb/hr	lb/yr
-	161	Alkaline Cleaning	Sodium Hydroxide	1310732	2.55%	0.0175	40.00	1.43E-04	20.0	1.90E-05	10.73	640	0%	1.14E-06	9.99E-03
-	166	Passivation Type II	Nitric acid	7697372	18.73%	0.0175	63.01	1.23E-04	20.0	1.74E-03	10.73	590	90%	1.53E-05	4.55E-02
-	165	Passivation Type VI	Nitric acid	7697372	33.95%	0.0175	63.01	1.23E-04	16.0	6.07E-04	10.73	550	90%	4.59E-06	1.36E-02
-	167	Passivation Type VII	Nitric acid	7697372	17.51%	0.0175	63.01	1.23E-04	16.0	2.93E-03	10.73	605	90%	2.01E-05	5.98E-02
ES58	168	Passivation Type VIII	Nitric acid	7697372	41.63%	0.0175	63.01	1.23E-04	16.0	1.56E-03	10.73	590	90%	1.10E-05	3.26E-02
-	161BM	Alkaline Cleaning	DGMBE	112345	0.26%	0.0175	162.20	8.98E-05	20.0	2.50E-06	10.73	590	0%	4.14E-07	3.63E-03
-	140	Alkaline Cleaning	Sodium Hydroxide	1310732	2.81%	0.0175	40.00	1.43E-04	22.5	1.90E-05	10.73	640	0%	1.28E-06	1.12E-02
-	140	Alkaline Cleaning	DGMBE	112345	0.005%	0.0175	162.20	8.98E-05	22.5	2.50E-06	10.73	640	0%	4.29E-07	3.76E-03
-	142**	Hydrochloric Acid	Hydrochloric acid	7647010	23.00%	0.0175	36.46	1.48E-04	27.0	1.43E-02	10.73	528	0%	0.00E+00	0.00E+00
-	117**	Zinc Plating	Sodium Hydroxide	1310732	15.00%	0.0175	40.00	1.43E-04	27.0	8.74E-05	10.73	528	0%	8.58E-06	7.52E-02
-	101	Alkaline Cleaning	Sodium Hydroxide	1310732	2.64%	0.0175	40.00	1.43E-04	20.0	1.90E-05	10.73	640	0%	1.14E-06	9.99E-03
ES57	110	HCl Acid Bath	Hydrochloric acid	7647010	10.10%	0.0175	36.46	1.48E-04	16.0	6.58E-05	10.73	528	0%	3.60E-06	3.15E-02
ES53	115	Nickel Strike (Still)	Hydrochloric acid	7647010	3.52%	0.0175	36.46	1.48E-04	20.0	2.94E-06	10.73	528	0%	2.01E-07	1.76E-03
ES53	102	Cadmium Plating (Still)	Sodium Hydroxide	1310732	1.50%	0.0175	40.00	1.43E-04	36.0	7.60E-06	10.73	528	0%	9.95E-07	8.72E-03
ES53	105	Bright Dip	Sulfuric acid	7664939	0.16%	0.0175	98.08	1.06E-04	2.2	1.92E-17	10.73	528	0%	2.75E-19	2.41E-15

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2019 AIR TOXICS INVENTORY REPORT - EVAPORATIVE TANK EMISSIONS

Bowman Plating
2631 E. 126th Street
Compton, CA
SCAQMD ID No 18989

Plating Room - Evaporative Emissions (Cont'd)

						Tank/Chemical Parameters								Emissions	
AER ID	Tank ID	Tank Name	Substance Name	CAS No	Substance Wt%	U	MW	K	A	VP	R	T	CE	lb/hr	lb/yr
ES2	150	Cadmium Plating (Barrel)	Sodium Hydroxide	1310732	1.49%	0.0175	40.00	1.43E-04	48.5	7.60E-06	10.73	528	98%	2.68E-08	7.95E-05
ES54	152	Alkaline Cleaning	Sodium Hydroxide	1310732	2.17%	0.0175	40.00	1.43E-04	17.0	1.42E-05	10.73	640	0%	7.24E-07	6.34E-03
-	156	Hydrochloric Acid	Hydrochloric acid	7647010	20.20%	0.0175	36.46	1.48E-04	12.4	4.70E-03	10.73	528	0%	1.99E-04	1.74E+00
-	115A	Nickel Strike (Barrel)	Hydrochloric Acid	7647010	3.52%	0.0175	36.46	1.48E-04	12.4	2.96E-06	10.73	528	0%	1.25E-07	1.10E-03
ES54	161	Alkaline Cleaning	Sodium hydroxide	1310732	2.55%	0.0175	40.00	1.43E-04	20.0	1.92E-05	10.73	660	0%	1.12E-06	9.79E-03
ES54	175**	Activation	Hydrochloric acid	7647010	26.41%	0.0175	36.46	1.48E-04	3.1	7.40E-01	10.73	600	90%	6.80E-04	2.01824
ES2	176	Stainless Steel Pickel	Nitric acid	7697372	17.65%	0.0175	63.01	1.23E-04	7.5	2.41E-03	10.73	600	0%	7.83E-05	6.86E-01

Reference: AP-42 / EIIP, Vol. 2, Chapter 8, Section 4.1.4 - Emission Model for Surface Evaporation

$E = ((MW \times K \times A \times VP \times 3600) / R \times T) \times (1-CE)$, where

E = Air toxic emissions (lbs/hr)

MW = Molecular weight of substance (lb/lbmole)

K = Gas phase transfer coefficient (ft/sec)

A = Tank surface area (ft^2)

VP = Vapor pressure of substance (psia) (mmHg x 0.0193368)

(estimated from Perry's Handbook, Antoine coefficients, Raolts Law)

R = Universal gas constant @ 1 atm (10.73 psia-ft^3/R-lbmole)

T = Temperature (°R) (°F + 460)

CE = Control efficiency (%)

3,600 = seconds to hour conversion

$K = 0.00438 \times U^{0.78} \times (18/MW)^{0.333}$, where

K = Gas phase transfer coefficient (ft/sec)

MW = Molecular weight of substance (lb/lb-mole)

U = Average air speed (miles/hr)

For inside of building, U calculated as ventilation exhaust rate divided by floor area:

Anodizing Room: U = (6 forced air fans x 3,000 cfm / 3,281 sq. ft) (1 mile/5280 ft) (60 min/hr) = 0.06234 miles/hr

Plating Room: U = (4 natural draft fans x 1,000 cfm) / 2,604 sq. ft) (1 mile/5280 ft) (60 min/hr) = 0.0175 miles/hr

Pollution Control Efficiencies

Mist Eliminators = 50%
Packed Bed Scrubber = 70%
Tank Lids = 90%
Polyballs = 90%
Mesh Pads = 95%
Chemical Fume Suppressants = 95% to 99%
HEPA Filters = 99.97%
ULPA Filters = 99.999%

Notes:

1. Tank #142 shut down in 2018 (out of service in 2019).
2. Tanks #117 and #175 shut down as of 1/31/2020.
3. Tank 605A shut down as of 10/24/2019 (9 weeks out of service in 2019).
4. Operating hours (uncovered tanks): 24 hrs x 7 days x 52 weeks = 8760 hours
5. Operating hours (covered tanks): Anodizing Bldg = 5,920 hours and Plating Bldg = 2,968 hours

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2019 AIR TOXIC INVENTORY REPORT - ELECTROLYTIC TANK EMISSIONS

Bowman Plating
2631 E. 126th Street
Compton, CA
SCAQMD ID No. 18989

Summary by Substance - Electrolytic Emissions

Bldg/Room	Source Type	Substance	1-Hour	Annual
Anodizing	Stack	Hexavalent chromium	1.57E-07	1.09E-05
Anodizing	Area	Sulfuric acid	2.54E-01	1.07E+01
Plating	Area	Nickel	4.74E-04	1.26E-01
Plating	Area	Cadmium	1.44E-03	9.62E-02
Plating	Stack	Cadmium	2.86E-05	2.36E-03

Note: For modeling purposes, sources are categorized as emitting < 12 hrs/day or > 12 hrs/day based on operations.

Anodizing Room - Electrolytic Tanks

						Tank Parameters				1-Hour Emissions [1]		Annual Emissions [2]	
AER ID	Tank ID	Tank Name	Temp. (F)	Controls	Substance	W%	N	R	CE	lb/hr	g/s	Amp-hrs	lbs/yr
ES56	601	Hard Anodize	35 (Chilled)	-	Sulfuric acid	27.66%	0	5000	0.000%	1.54E-01	1.93E-02	210,540	6.47E+00
ES56	303	Sulfuric Anodize	68 - 72 (Chilled)	-	Sulfuric acid	18.52%	0	4000	0.000%	8.23E-02	1.04E-02	172,870	3.56E+00
ES55	301	Chromic Acid Anodizing	90 - 99	- Tank Lid - Polyballs - ULPA Filter	Hexavalent chromium	3.53%	0	4000	99.999%	1.57E-07	1.97E-08	276,907	1.09E-05
ES55	300	Boric-Sulfuric Anodize	84	-	Sulfuric acid	4.03%	0	4000	0.000%	1.79E-02	2.25E-03	158,453	7.09E-01

Reference: SCAQMD Engineering Guidance

E = 0.505 x W% x (100 - N) x R x (1 - CE) x 2.2E-06, where

E = Air toxic emissions (lbs/hr)

W% = Weight fraction of metal (%)

N = Plating efficiency

R = Rectifier size (amps)

CE = Control efficiency (%)

2.2E-06 = milligrams to pounds conversion

2019 Amp-Hour Usage:	Daily	Annual
Tank 601 - Hard Anodizing:	788.54	210,540
Tank 303 - Sulfuric Anodizing:	647.45	172,870
Tank 301 - Chromic Acid Anodizing:	1037.10	276,907
Tank 300 - Boric Sulfuric Anodizing:	593.46	158,453

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2019 AIR TOXIC INVENTORY REPORT - ELECTROLYTIC TANK EMISSIONS

Bowman Plating
2631 E. 126th Street
Compton, CA
SCAQMD ID No. 18989

Plating Room - Electrolytic Tanks

						Tank Parameters				1-Hour Emissions [1]		Annual Emissions [2]	
AER ID	Tank ID	Tank Name	Temp. (F)	Controls	Substance	W%	N	R	CE	lb/hr	g/s	Amp-hrs	lbs/yr
ES53	115	Nickel Strike (Still)	Ambient	-	Nickel	11.38%	95	3000	0.000%	2.37E-04	2.98E-05	100,000	6.32E-02
ES53	102	Cadmium Plating (Still)	Ambient	-	Cadmium	4.33%	90	3000	0.000%	1.44E-03	1.82E-04	200,000	9.62E-02
ES2	150	Cadmium Plating (Barrel)	Ambient	Tank Lid Mesh Pads	Cadmium	4.29%	90	3000	98.000%	2.86E-05	3.60E-06	247,287	2.36E-03
ES54	115A	Nickel Strike (Barrel)	Ambient	-	Nickel	11.38%	95	3000	0.000%	2.37E-04	2.98E-05	100,000	6.32E-02

Reference: SCAQMD Engineering Guidance

E = 0.505 x W% x (100 - N) x R x (1 - CE) x 2.2E-06, where

E = Air toxic emissions (lbs/hr)

W% = Weight fraction of metal (%)

N = Plating efficiency

R = Rectifier size (amps)

CE = Control efficiency (%)

2.2E-06 = milligrams to pounds conversion

Notes:

1. Since nickel strike tanks do not operate continuously for any hour, max hourly emissions are based on daily amp-hours instead of maximum rectifier capacity.
2. Annual emissions based on annual amp-hours for all electrolytic tanks.

2019 Amp-Hour Usage:	Daily	Annual
Tank 115 - Nickel Strike (Still) =	374.53	100,000
Tank 102 - Cadmium Plating (Still) =	749.06	200,000
Tank 150 - Cadmium Plating (Barrel) =	926.17	247,287
Tank 115A - Nickel Strike (Barrel) =	374.53	100,000

Pollution Control Efficiencies

Mist Eliminators = 50%
Packed Bed Scrubber = 70%
Tank Lids = 90%
Polyballs = 90%
Mesh Pads = 95%
Chemical Fume Suppressants = 95% to 99%
HEPA Filters = 99.97%
ULPA Filters = 99.999%

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SUMMARY OF AIR TOXIC EMISSION CALCULATIONS

SPRAY COATING EMISSIONS
COMBUSTION EMISSIONS
ABRASIVE BLASTING EMISSIONS

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2019 AIR TOXIC INVENTORY REPORT - SPRAY COATING, COMBUSTION AND ABRASIVE BLASTING

Bowman Plating
2631 E. 126th Street
Compton, CA
SCAQMD ID No. 18989

Summary of Substances - By Equipment/Device

Stack ID	Permit ID	AER ID	Equipment Name	Substance Name	CAS No.	Annual (lb/year)	Hourly (lb/hr)	Hourly (g/s)
1	G54929	ES49	Spray Booth 1	Hexavalent Chromium	18540-29-9	9.00E-04	2.16E-07	2.72E-08
				Toluene	108-88-3	112.94	2.71E-02	3.42E-03
				Xylene	1330-20-7	85.45	2.05E-02	2.58E-03
				Ethyl Benzene	100-41-4	24.76	5.95E-03	7.49E-04
				Methyl Ethyl Ketone	78-93-3	225.53	5.42E-02	6.82E-03
				Formaldehyde	50000	0.00	0.00E+00	0.00E+00
				Methyl Isobutyl Ketone	108101	188.99	4.54E-02	5.72E-03
				Propylene glycol monomethyl et	107-98-2	38.32	9.21E-03	1.16E-03
				Ethylene glycol monopropyl ethe	2807-30-9	2.51	6.02E-04	7.58E-05
				Methanol	67561	0.31	7.54E-05	9.49E-06
				Hexane	110-54-3	14.75	3.55E-03	4.46E-04
				Silicon Dioxide	7631-86-9	15.47	3.72E-03	4.68E-04
				Propylene glycol monomethyl et	108-65-6	3.83	9.21E-04	1.16E-04
				2-butoxyethanol	111-76-2	1.13	2.71E-04	3.41E-05
				1,2,4-Trimethyl Benzene	95-63-6	1.29	3.10E-04	3.89E-05
				2-Butanol	78-92-2	541.22	1.30E-01	1.64E-02
				Diethylene glycol monobutyl eth	112-34-5	0.37	8.79E-05	1.11E-05
				n-Butyl alcohol	71363	16.91	4.06E-03	5.12E-04
				Isopropyl alcohol	67630	29.65	7.13E-03	8.97E-04
2	G45909	ES50	Spray Booth 2	Hexavalent Chromium	18540-29-9	1.20E-03	2.87E-07	3.62E-08
				Toluene	108-88-3	121.70	2.93E-02	3.68E-03
				Xylene	1330-20-7	124.36	2.99E-02	3.76E-03
				Ethyl Benzene	100-41-4	33.06	7.95E-03	1.00E-03
				Methyl Ethyl Ketone	78-93-3	245.05	5.89E-02	7.41E-03
				Formaldehyde	50000	0.00	9.98E-07	1.26E-07
				Methyl Isobutyl Ketone	108101	261.83	6.29E-02	7.92E-03
				Propylene glycol monomethyl et	107-98-2	39.05	9.39E-03	1.18E-03
				Ethylene glycol monopropyl ethe	2807-30-9	6.47	1.56E-03	1.96E-04
				Methanol	67561	0.83	2.01E-04	2.53E-05
				Hexane	110-54-3	10.99	2.64E-03	3.32E-04
				Silicon Dioxide	7631-86-9	22.28	5.36E-03	6.74E-04
				Propylene glycol monomethyl et	108-65-6	4.06	9.77E-04	1.23E-04
				2-butoxyethanol	111-76-2	1.22	2.94E-04	3.69E-05
				1,2,4-Trimethyl Benzene	95-63-6	1.62	3.89E-04	4.89E-05
				2-Butanol	78-92-2	700.30	1.68E-01	2.12E-02
				Diethylene glycol monobutyl eth	112-34-5	0.03	7.63E-06	9.60E-07
				n-Butyl alcohol	71363	14.96	3.60E-03	4.52E-04
				Isopropyl alcohol	67630	30.54	7.34E-03	9.24E-04

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2019 AIR TOXIC INVENTORY REPORT - SPRAY COATING, COMBUSTION AND ABRASIVE BLASTING

Bowman Plating
2631 E. 126th Street
Compton, CA
SCAQMD ID No. 18989

Summary of Substances - By Equipment/Device

Stack ID	Permit ID	AER ID	Equipment Name	Substance Name	CAS No.	Annual (lb/year)	Hourly (lb/hr)	Hourly (g/s)
3	G45910	ES51	Spray Booth 3	Hexavalent Chromium	18540-29-9	1.17E-03	2.82E-07	3.55E-08
				Toluene	108-88-3	207.23	4.98E-02	6.27E-03
				Xylene	1330-20-7	165.43	3.98E-02	5.00E-03
				Ethyl Benzene	100-41-4	63.88	1.54E-02	1.93E-03
				Methyl Ethyl Ketone	78-93-3	370.31	8.90E-02	1.12E-02
				Formaldehyde	50000	0.00	9.98E-07	1.26E-07
				Methyl Isobutyl Ketone	108101	305.43	7.34E-02	9.24E-03
				Propylene glycol monomethyl et	107-98-2	101.40	2.44E-02	3.07E-03
				Ethylene glycol monopropyl ethe	2807-30-9	6.30	1.52E-03	1.91E-04
				Methanol	67561	0.99	2.38E-04	3.00E-05
				Hexane	110-54-3	11.69	2.81E-03	3.54E-04
				Silicon Dioxide	7631-86-9	100.61	2.42E-02	3.04E-03
				Propylene glycol monomethyl et	108-65-6	18.30	4.40E-03	5.54E-04
				2-butoxyethanol	111-76-2	33.61	8.08E-03	1.02E-03
				1,2,4-Trimethyl Benzene	95-63-6	38.99	9.37E-03	1.18E-03
				2-Butanol	78-92-2	707.94	1.70E-01	2.14E-02
				Diethylene glycol monobutyl eth	112-34-5	0.02	3.81E-06	4.80E-07
				n-Butyl alcohol	71363	14.96	3.60E-03	4.52E-04
				Isopropyl alcohol	67630	33.67	8.09E-03	1.02E-03
4	G19828	ES19	Spray Booth 4 (Stack 1)	Hexavalent Chromium	18540-29-9	0.00E+00	0.00E+00	0.00E+00
				Toluene	108-88-3	0.00	0.00E+00	0.00E+00
				Xylene	1330-20-7	0.00	0.00E+00	0.00E+00
				Ethyl Benzene	100-41-4	0.00	0.00E+00	0.00E+00
				Methyl Ethyl Ketone	78-93-3	0.00	0.00E+00	0.00E+00
				Formaldehyde	50000	0.00	0.00E+00	0.00E+00
				Methyl Isobutyl Ketone	108101	0.00	0.00E+00	0.00E+00
				Propylene glycol monomethyl et	107-98-2	0.00	0.00E+00	0.00E+00
				Ethylene glycol monopropyl ethe	2807-30-9	0.00	0.00E+00	0.00E+00
				Methanol	67561	1.54	3.71E-04	4.67E-05
				Hexane	110-54-3	0.00	0.00E+00	0.00E+00
				Silicon Dioxide	7631-86-9	0.00	0.00E+00	0.00E+00
				Propylene glycol monomethyl et	108-65-6	0.00	0.00E+00	0.00E+00
				2-butoxyethanol	111-76-2	0.00	0.00E+00	0.00E+00
				1,2,4-Trimethyl Benzene	95-63-6	0.00	0.00E+00	0.00E+00
				2-Butanol	78-92-2	0.00	0.00E+00	0.00E+00
				Diethylene glycol monobutyl eth	112-34-5	0.00	0.00E+00	0.00E+00
				n-Butyl alcohol	71363	0.00	0.00E+00	0.00E+00
				Isopropyl alcohol	67630	0.00	0.00E+00	0.00E+00

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Bowman Plating
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Summary of Substances - By Equipment/Device

Stack ID	Permit ID	AER ID	Equipment Name	Substance Name	CAS No.	Annual (lb/year)	Hourly (lb/hr)	Hourly (g/s)
5	G19828	ES19	Spray Booth 4 (Stack 2)	Hexavalent Chromium	18540-29-9	0.00E+00	0.00E+00	0.00E+00
				Toluene	108-88-3	0.00	0.00E+00	0.00E+00
				Xylene	1330-20-7	0.00	0.00E+00	0.00E+00
				Ethyl Benzene	100-41-4	0.00	0.00E+00	0.00E+00
				Methyl Ethyl Ketone	78-93-3	0.00	0.00E+00	0.00E+00
				Formaldehyde	50000	0.00	0.00E+00	0.00E+00
				Methyl Isobutyl Ketone	108101	0.00	0.00E+00	0.00E+00
				Propylene glycol monomethyl et	107-98-2	0.00	0.00E+00	0.00E+00
				Ethylene glycol monopropyl ethe	2807-30-9	0.00	0.00E+00	0.00E+00
				Methanol	67561	1.54	3.71E-04	4.67E-05
				Hexane	110-54-3	0.00	0.00E+00	0.00E+00
				Silicon Dioxide	7631-86-9	0.00	0.00E+00	0.00E+00
				Propylene glycol monomethyl et	108-65-6	0.00	0.00E+00	0.00E+00
				2-butoxyethanol	111-76-2	0.00	0.00E+00	0.00E+00
				1,2,4-Trimethyl Benzene	95-63-6	0.00	0.00E+00	0.00E+00
				2-Butanol	78-92-2	0.00	0.00E+00	0.00E+00
				Diethylene glycol monobutyl eth	112-34-5	0.00	0.00E+00	0.00E+00
				n-Butyl alcohol	71363	0.00	0.00E+00	0.00E+00
				Isopropyl alcohol	67630	0.00	0.00E+00	0.00E+00
6	G19828	ES19	Spray Booth 4 (Stack 3)	Hexavalent Chromium	18540-29-9	0.00E+00	0.00E+00	0.00E+00
				Toluene	108-88-3	0.00	0.00E+00	0.00E+00
				Xylene	1330-20-7	0.00	0.00E+00	0.00E+00
				Ethyl Benzene	100-41-4	0.00	0.00E+00	0.00E+00
				Methyl Ethyl Ketone	78-93-3	0.00	0.00E+00	0.00E+00
				Formaldehyde	50000	0.00	0.00E+00	0.00E+00
				Methyl Isobutyl Ketone	108101	0.00	0.00E+00	0.00E+00
				Propylene glycol monomethyl et	107-98-2	0.00	0.00E+00	0.00E+00
				Ethylene glycol monopropyl ethe	2807-30-9	0.00	0.00E+00	0.00E+00
				Methanol	67561	1.54	3.71E-04	4.67E-05
				Hexane	110-54-3	0.00	0.00E+00	0.00E+00
				Silicon Dioxide	7631-86-9	0.00	0.00E+00	0.00E+00
				Propylene glycol monomethyl et	108-65-6	0.00	0.00E+00	0.00E+00
				2-butoxyethanol	111-76-2	0.00	0.00E+00	0.00E+00
				1,2,4-Trimethyl Benzene	95-63-6	0.00	0.00E+00	0.00E+00
				2-Butanol	78-92-2	0.00	0.00E+00	0.00E+00
				Diethylene glycol monobutyl eth	112-34-5	0.00	0.00E+00	0.00E+00
				n-Butyl alcohol	71363	0.00	0.00E+00	0.00E+00
				Isopropyl alcohol	67630	0.00	0.00E+00	0.00E+00

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Summary of Substances - By Equipment/Device

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7	G19828	ES19	Spray Booth 4 (Stack 4)	Hexavalent Chromium	18540-29-9	0.00E+00	0.00E+00	0.00E+00
				Toluene	108-88-3	0.00	0.00E+00	0.00E+00
				Xylene	1330-20-7	0.00	0.00E+00	0.00E+00
				Ethyl Benzene	100-41-4	0.00	0.00E+00	0.00E+00
				Methyl Ethyl Ketone	78-93-3	0.00	0.00E+00	0.00E+00
				Formaldehyde	50000	0.00	0.00E+00	0.00E+00
				Methyl Isobutyl Ketone	108101	0.00	0.00E+00	0.00E+00
				Propylene glycol monomethyl et	107-98-2	0.00	0.00E+00	0.00E+00
				Ethylene glycol monopropyl ethe	2807-30-9	0.00	0.00E+00	0.00E+00
				Methanol	67561	1.54	3.71E-04	4.67E-05
				Hexane	110-54-3	0.00	0.00E+00	0.00E+00
				Silicon Dioxide	7631-86-9	0.00	0.00E+00	0.00E+00
				Propylene glycol monomethyl et	108-65-6	0.00	0.00E+00	0.00E+00
				2-butoxyethanol	111-76-2	0.00	0.00E+00	0.00E+00
				1,2,4-Trimethyl Benzene	95-63-6	0.00	0.00E+00	0.00E+00
				2-Butanol	78-92-2	0.00	0.00E+00	0.00E+00
				Diethylene glycol monobutyl eth	112-34-5	0.00	0.00E+00	0.00E+00
				n-Butyl alcohol	71363	0.00	0.00E+00	0.00E+00
				Isopropyl alcohol	67630	0.00	0.00E+00	0.00E+00
8	G19828	ES48	Spray Booth 4 (Heater)	Benzene	71432	0.01	3.29E-06	4.14E-07
				Formaldehyde	50000	0.03	6.98E-06	8.79E-07
				PAHs (excl. Napthalene)	1151	0.00	5.68E-08	7.14E-09
				Napthalene	91203	0.00	1.70E-07	2.14E-08
				Acetaldehyde	75070	0.01	1.76E-06	2.21E-07
				Acrolein	107028	0.01	1.53E-06	1.93E-07
				Ammonia	7664417	42.51	1.02E-02	1.29E-03
				Ethyl Benzene	100414	0.02	3.92E-06	4.93E-07
				Hexane	110543	0.01	2.61E-06	3.29E-07
				Toluene	108883	0.06	1.50E-05	1.89E-06
				Xylene	1330207	0.05	1.12E-05	1.41E-06
9	Permit Exempt	ES45	Boiler 1	Benzene	71432	0.03	6.26E-06	7.87E-07
				Formaldehyde	50000	0.06	1.33E-05	1.67E-06
				PAHs (excl. Napthalene)	1151	0.00	1.08E-07	1.36E-08
				Napthalene	91203	0.00	3.24E-07	4.07E-08
				Acetaldehyde	75070	0.01	3.34E-06	4.21E-07
				Acrolein	107028	0.01	2.91E-06	3.66E-07
				Ammonia	7664417	80.77	1.94E-02	2.44E-03
				Ethyl Benzene	100414	0.03	7.44E-06	9.37E-07
				Hexane	110543	0.02	4.96E-06	6.24E-07
				Toluene	108883	0.12	2.86E-05	3.60E-06
				Xylene	1330207	0.09	2.13E-05	2.67E-06

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Stack ID	Permit ID	AER ID	Equipment Name	Substance Name	CAS No.	Annual (lb/year)	Hourly (lb/hr)	Hourly (g/s)
9	Permit Exempt	ES46	Boiler 2	Benzene	71432	0.03	6.26E-06	7.87E-07
				Formaldehyde	50000	0.06	1.33E-05	1.67E-06
				PAHs (excl. Napthalene)	1151	0.00	1.08E-07	1.36E-08
				Napthalene	91203	0.00	3.24E-07	4.07E-08
				Acetaldehyde	75070	0.01	3.34E-06	4.21E-07
				Acrolein	107028	0.01	2.91E-06	3.66E-07
				Ammonia	7664417	80.77	1.94E-02	2.44E-03
				Ethyl Benzene	100414	0.03	7.44E-06	9.37E-07
				Hexane	110543	0.02	4.96E-06	6.24E-07
				Toluene	108883	0.12	2.86E-05	3.60E-06
				Xylene	1330207	0.09	2.13E-05	2.67E-06
9	Permit Exempt	ES47	Boiler 3	Benzene	71432	0.03	6.26E-06	7.87E-07
				Formaldehyde	50000	0.06	1.33E-05	1.67E-06
				PAHs (excl. Napthalene)	1151	0.00	1.08E-07	1.36E-08
				Napthalene	91203	0.00	3.24E-07	4.07E-08
				Acetaldehyde	75070	0.01	3.34E-06	4.21E-07
				Acrolein	107028	0.01	2.91E-06	3.66E-07
				Ammonia	7664417	80.77	1.94E-02	2.44E-03
				Ethyl Benzene	100414	0.03	7.44E-06	9.37E-07
				Hexane	110543	0.02	4.96E-06	6.24E-07
				Toluene	108883	0.12	2.86E-05	3.60E-06
				Xylene	1330207	0.09	2.13E-05	2.67E-06
10	G55996	ES52	Abrasive Blasting Cabinet (Boeing Mesa)	Nickel	7440-02-0	0.02	1.14E-04	1.43E-05
				Lead	7439-92-1	0.00	1.00E-07	1.26E-08
				Copper	7440-50-8	0.00	1.90E-06	2.39E-07
11	F83389	ES11	Abrasive Blasting Room	-	-	-		
12	F98450	ES15	Oven 1 (#B446 - Paint Booth)	Benzene	71432	0.00	9.88E-07	1.24E-07
				Formaldehyde	50000	0.01	2.09E-06	2.64E-07
				PAHs (excl. Napthalene)	1151	0.00	1.70E-08	2.14E-09
				Napthalene	91203	0.00	5.11E-08	6.43E-09
				Acetaldehyde	75070	0.00	5.28E-07	6.64E-08
				Acrolein	107028	0.00	4.60E-07	5.79E-08
				Ammonia	7664417	12.75	3.07E-03	3.86E-04
				Ethyl Benzene	100414	0.00	1.18E-06	1.48E-07
				Hexane	110543	0.00	7.83E-07	9.86E-08
				Toluene	108883	0.02	4.51E-06	5.68E-07
				Xylene	1330207	0.01	3.36E-06	4.22E-07
13	F98451	ES16	Oven 2 (#40207)	Benzene	71432	0.01	3.29E-06	4.14E-07
				Formaldehyde	50000	0.03	6.98E-06	8.79E-07
				PAHs (excl. Napthalene)	1151	0.00	5.68E-08	7.14E-09
				Napthalene	91203	0.00	1.70E-07	2.14E-08
				Acetaldehyde	75070	0.01	1.76E-06	2.21E-07
				Acrolein	107028	0.01	1.53E-06	1.93E-07
				Ammonia	7664417	42.51	1.02E-02	1.29E-03
				Ethyl Benzene	100414	0.02	3.92E-06	4.93E-07
				Hexane	110543	0.01	2.61E-06	3.29E-07
				Toluene	108883	0.06	1.50E-05	1.89E-06
				Xylene	1330207	0.05	1.12E-05	1.41E-06

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Stack ID	Permit ID	AER ID	Equipment Name	Substance Name	CAS No.	Annual (lb/year)	Hourly (lb/hr)	Hourly (g/s)
14	G46866	ES24	Oven 3 (#B449)	Benzene	71432	0.01	3.29E-06	4.14E-07
				Formaldehyde	50000	0.03	6.98E-06	8.79E-07
				PAHs (excl. Napthalene)	1151	0.00	5.68E-08	7.14E-09
				Napthalene	91203	0.00	1.70E-07	2.14E-08
				Acetaldehyde	75070	0.01	1.76E-06	2.21E-07
				Acrolein	107028	0.01	1.53E-06	1.93E-07
				Ammonia	7664417	42.51	1.02E-02	1.29E-03
				Ethyl Benzene	100414	0.02	3.92E-06	4.93E-07
				Hexane	110543	0.01	2.61E-06	3.29E-07
				Toluene	108883	0.06	1.50E-05	1.89E-06
				Xylene	1330207	0.05	1.12E-05	1.41E-06
-	G19829	-	Oven 4 (#B448) (Boeing Mesa)	No emissions. Electric oven.	-	-		
-	P02988	ES23	Oven 5 (#B176)	No emissions. Electric oven.	-	-		
-	P32054	ES22	Oven 6 (#B173)	No emissions. Electric oven.	-	-		
-	F42817	ES5	Oven	Equipment no longer exists.	-	-		
-	F42818	ES6	Oven	Equipment no longer exists.	-	-		
-	F43414	ES39	Sludge Dryer	Equipment no longer exists.	-	-		

Notes:

1. For abrasive blasting cabinet, hourly emission rates taken from SCAQMD permit engineering files.
2. Estimated 170 hours of operation in CY 2019 for abrasive blasting cabinet.

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2019 AIR TOXICS INVENTORY REPORT - SPRAY COATING EMISSIONS

Bowman Plating
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Summary - Hex Chrome Emissions

Chromate Type	Hex Chrome Wt% (Cr6)	Transfer Efficiency (%)	Hex Chrome Applied (lbs/yr) SB 1	SB 2	SB 3	SB 4
Barium Chromate	20.53%	65%	2.19	2.91	2.84	0.00
Calcium Chromate	33.22%	65%	5.31	7.67	7.08	0.00
Lead Chromate	16.09%	65%	0.00	0.00	0.00	0.00
Sodium Dichromate	39.70%	65%	0.00	0.00	0.00	0.00
Strontium Chromate	25.54%	65%	82.47	109.02	107.35	0.00
Zinc Chromate	28.67%	65%	0.00	0.00	0.00	0.00
Calcium Dichromate	33.32%	65%	0.00	0.00	0.00	0.00
Magnesium Chromate	18.53%	65%	0.00	0.00	0.00	0.00
		Pre-Control (lb/yr)	89.97	119.60	117.27	0.00
		Filter Control Efficiency	99.999%	99.999%	99.999%	99.97%
		Emissions (lb/yr)	**0.00090**	**0.00120**	**0.00117**	**0.00000**

Summary - Volatile Emissions

Substance	CAS No.	Transfer Efficiency (%)	Volatile Emissions (lbs/yr) SB 1	SB 2	SB 3	SB 4
Toluene	108-88-3	0%	112.94	121.70	207.23	0.00
Xylene	1330-20-7	0%	85.45	124.36	165.43	0.00
Ethyl Benzene	100-41-4	0%	24.76	33.06	63.88	0.00
Methyl Ethyl Ketone	78-93-3	0%	225.53	245.05	370.31	0.00
Formaldehyde	50000	0%	0.00	0.00	0.00	0.00
Methyl Isobutyl Ketone	108101	0%	188.99	261.83	305.43	0.00
Propylene glycol monomethyl ether	107-98-2	0%	38.32	39.05	101.40	0.00
Ethylene glycol monopropyl ether	2807-30-9	0%	2.51	6.47	6.30	0.00
Methanol	67561	0%	0.31	0.83	0.99	6.18
Hexane	110-54-3	0%	14.75	10.99	11.69	0.00
Silicon Dioxide	7631-86-9	0%	15.47	22.28	100.61	0.00
Propylene glycol monomethyl ether acetate	108-65-6	0%	3.83	4.06	18.30	0.00
2-butoxyethanol	111-76-2	0%	1.13	1.22	33.61	0.00
1,2,4-Trimethyl Benzene	95-63-6	0%	1.29	1.62	38.99	0.00
2-Butanol	78-92-2	0%	541.22	700.30	707.94	0.00
Diethylene glycol monobutyl ether	112-34-5	0%	0.37	0.03	0.02	0.00
n-Butyl alcohol	71363	0%	16.91	14.96	14.96	0.00
Isopropyl alcohol	67630	0%	29.65	30.54	33.67	0.00

Spray Coating Data - Reporting Year 2019

Base Material	Product Code	Substance	Coating Usage (gal/yr)				Density (lb/gal)	Coating Mixture - Substance %						Substance (W%)	Emissions (lbs/yr)			
			SB 1	SB 2	SB 3	SB 4		Part 1 - Base		Part 2 - Catalyst		Part 3 - Water			SB 1	SB 2	SB 3	SB 4
Epoxy Primer-3 Part Coating	44GN11	Strontium chromate	615.0	780.0	805.0		9.57	31.0	2	0	1	0	4.5	8.27%	486.45	616.97	636.74	0.00
Epoxy Primer-3 Part Coating	44GN11	Barium chromate	615.0	780.0	805.0		9.57	1.0	2	0	1	0	4.5	0.27%	15.69	19.90	20.54	0.00
Epoxy Primer-3 Part Coating	44GN11	2-Butanol	615.0	780.0	805.0		9.57	20.0	2	0	1	0	4.5	5.33%	313.84	398.04	410.80	0.00
Epoxy Primer-3 Part Coating	44GN72	Strontium chromate	260.0	340.0	330.0		9.13	30.0	2	0	1	0	4.5	8.00%	189.90	248.33	241.02	0.00
Epoxy Primer-3 Part Coating	44GN72	Barium chromate	260.0	340.0	330.0		9.13	1.0	2	0	1	0	4.5	0.27%	6.33	8.28	8.03	0.00
Epoxy Primer-3 Part Coating	44GN72	2-Butanol	260.0	340.0	330.0		9.57	30.0	2	0	1	0	4.5	8.00%	199.02	260.26	252.60	0.00
WATER REDUCIBLE HIGH PERFORMANCE EPOXY	44GN098	2-Butanol	95.0	115.0	110.0		11.82	10.0	2	0	1	0	4	1.43%	16.04	19.41	18.57	0.00
FS#17925 GLOSS WHITE 800001	03W127A	Methyl Isobutyl Ketone	80.0	95.0	101.0		10.44	1.0	1	0	1	0	0	0.50%	4.17	4.96	5.27	0.00
Hi Solid Epoxy Primer	10P20-26	Strontium chromate	0.0	0.0	0.0		11.24	30.0	3	0	1	0	0	22.50%	0.00	0.00	0.00	0.00
Hi Solid Epoxy Primer	10P20-26	Methyl Isobutyl Ketone	0.0	0.0	0.0		11.24	13.0							0.00	0.00	0.00	0.00
Hi Solid Epoxy Primer	10P20-26	Toluene	0.0	0.0	0.0		11.24	5.0							0.00	0.00	0.00	0.00
Hi Solid Epoxy Primer	10P20-26	Ethyl Benzene	0.0	0.0	0.0		11.24	1.0							0.00	0.00	0.00	0.00
823-707 FUEL TANK COATING	823-707	Strontium chromate	50.0	65.0	65.0		9.59	10.0	4	0	1	0	4	4.44%	21.31	27.70	27.70	0.00
823-707 FUEL TANK COATING	823-707	Barium chromate	50.0	65.0	65.0		9.59	0.3	4	0	1	0	4	0.13%	0.64	0.83	0.83	0.00
823-707 FUEL TANK COATING	823-707	Methyl Isobutyl Ketone	50.0	65.0	65.0		9.59	20.0	4	0	1	0	4	8.89%	42.62	55.41	55.41	0.00
823-707 FUEL TANK COATING	823-707	Xylene	50.0	65.0	65.0		9.59	10.0	4	0	1	0	4	4.44%	21.31	27.70	27.70	0.00
823-707 FUEL TANK COATING	823-707	Ethyl Benzene	50.0	65.0	65.0		9.59	3.0	4	0	1	0	4	1.33%	6.39	8.31	8.31	0.00
desoto High Temp. Coating	825-009	Calcium Chromate	36.0	52.0	48.0		9.51	30.0	4	0	1	0	4	13.33%	45.67	65.97	60.89	0.00
desoto High Temp. Coating	825-009	Methyl Isobutyl Ketone	36.0	52.0	48.0		9.51	30.0	4	0	1	0	4	13.33%	45.67	65.97	60.89	0.00
desoto High Temp. Coating	825-009	Toluene	36.0	52.0	48.0		9.51	10.0	4	0	1	0	4	4.44%	15.22	21.99	20.30	0.00
desoto High Temp. Coating	825-009	Xylene	36.0	52.0	48.0		9.51	10.0	4	0	1	0	4	4.44%	15.22	21.99	20.30	0.00
desoto High Temp. Coating	825-009	Ethyl Benzene	36.0	52.0	48.0		9.51	1.0	4	0	1	0	4	0.44%	1.52	2.20	2.03	0.00
desoto High Temp. Coating	825-009	Methyl Ethyl Ketone	36.0	52.0	48.0		9.51	10.0	4	0	1	0	4	4.44%	15.22	21.99	20.30	0.00
Hi Solid Epoxy Primer	10P20-44	Strontium chromate	35.0	52.0	48.0		10.49	25.0	3	0	1	0	1	15.00%	55.09	81.85	75.55	0.00
Hi Solid Epoxy Primer	10P20-44	Methyl Isobutyl Ketone	35.0	52.0	48.0		10.49	10.0	3	0	1	0	1	6.00%	22.04	32.74	30.22	0.00
Hi Solid Epoxy Primer	10P20-44	Silicon Dioxide	35.0	52.0	48.0		10.49	5.0	3	0	1	0	1	3.00%	11.02	16.37	15.11	0.00
Hi Solid Epoxy Primer	10P20-44	Xylene	35.0	52.0	48.0		10.49	5.0	3	0	1	0	1	3.00%	11.02	16.37	15.11	0.00
Hi Solid Epoxy Primer	10P20-44	Ethyl Benzene	35.0	52.0	48.0		10.49	1.0	3	0	1	0	1	0.60%	2.20	3.27	3.02	0.00
Mil-PRF-23377K TY I CL C2	02Y40A	Strontium chromate	58.0	85.0	67.0		11.75	19.0	3	0	1	0	0	14.25%	97.13	142.35	112.21	0.00
Mil-PRF-23377K TY I CL C2	02Y40A	Barium chromate	58.0	85.0	67.0		11.75	1.0	3	0	1	0	0	0.75%	5.11	7.49	5.91	0.00
Mil-PRF-23377K TY I CL C2	02Y40A	Methyl Isobutyl Ketone	58.0	85.0	67.0		11.75	1.3	3	0	1	0	0	0.98%	6.65	9.74	7.68	0.00
DESTHANE HS CA8200 POLYURETHANE	CA8211/F37038	Toluene	28.0	33.0	35.0		9.72	1.0	3	0	1	0	0	0.75%	2.04	2.41	2.55	0.00
DESTHANE HS CA8200 POLYURETHANE	CA8211/F37038	Methyl Ethyl Ketone	28.0	33.0	35.0		9.72	20.0	3	0	1	0	0	15.00%	40.83	48.13	51.04	0.00
22/23 SERIES HS EPOXY TOP COAT	446-22-2000	Xylene	0.0	0.0	72.0		11.00	5.0	3	0	1	0	0	3.75%	0.00	0.00	29.71	0.00
22/23 SERIES HS EPOXY TOP COAT	446-22-2000	Propylene glycol monome	0.0	0.0	72.0		11.00	5.0	3	0	1	0	0	3.75%	0.00	0.00	29.71	0.00
22/23 SERIES HS EPOXY TOP COAT	446-22-2000	Silicon Dioxide	0.0	0.0	72.0		11.00	5.0	3	0	1	0	0	3.75%	0.00	0.00	29.71	0.00
Corrosion Resitant Epoxy Primer	10P30-5	Strontium chromate			0.0		10.37	10.0	3	0	1	0	2	5.00%	0.00	0.00	0.00	0.00
22/23 SERIES HS EPOXY TOP COAT	446-22-2000	1,2,4-Trimethyl Benzene	0.0	0.0	72.0		11.00	5.0	3	0	1	0	0	3.75%	0.00	0.00	29.71	0.00
22/23 SERIES HS EPOXY TOP COAT	446-22-2000	Ethyl Benzene	0.0	0.0	72.0		11.00	5.0	3	0	1	0	0	3.75%	0.00	0.00	29.71	0.00
22/23 SERIES HS EPOXY TOP COAT	446-22-2000	Methyl Ethyl Ketone	0.0	0.0	72.0		11.00	10.0	3	0	1	0	0	7.50%	0.00	0.00	59.41	0.00
TL-52 EPOXY PRIMER THINNER	TL-52	Toluene	24.0	30.0	30.0		7.03	30.0	1	0	0	0	0	30.00%	50.62	63.27	63.27	0.00
TL-52 EPOXY PRIMER THINNER	TL-52	Methyl Ethyl Ketone	24.0	30.0	30.0		7.03	30.0	1	0	0	0	0	30.00%	50.62	63.27	63.27	0.00
TL-52 EPOXY PRIMER THINNER	TL-52	Methyl Isobutyl Ketone	24.0	30.0	30.0		7.03	13.0	1	0	0	0	0	13.00%	21.93	27.42	27.42	0.00
TL-52 EPOXY PRIMER THINNER	TL-52	Xylene	24.0	30.0	30.0		7.03	10.0	1	0	0	0	0	10.00%	16.87	21.09	21.09	0.00
TL-52 EPOXY PRIMER THINNER	TL-52	Ethyl Benzene	24.0	30.0	30.0		7.03	5.0	1	0	0	0	0	5.00%	8.44	10.55	10.55	0.00
22/23 SERIES HS EPOXY TOP COAT	446-22-1000	Toluene	0.0	0.0	75.0		10.73	10.0	3	0	1	0	0	7.50%	0.00	0.00	60.33	0.00
22/23 SERIES HS EPOXY TOP COAT	446-22-1000	Methyl Isobutyl Ketone	0.0	0.0	75.0		10.73	5.0	3	0	1	0	0	3.75%	0.00	0.00	30.16	0.00
22/23 SERIES HS EPOXY TOP COAT	446-22-1000	Methyl Ethyl Ketone	0.0	0.0	75.0		10.73	5.0	3	0	1	0	0	3.75%	0.00	0.00	30.16	0.00

Spray Coating Data - Reporting Year 2019

Base Material	Product Code	Substance	Coating Usage (gal/yr)				Density (lb/gal)	Coating Mixture - Substance %						Substance (W%)	Emissions (lbs/yr)			
			SB 1	SB 2	SB 3	SB 4		Part 1 - Base		Part 2 - Catalyst		Part 3 - Water			SB 1	SB 2	SB 3	SB 4
22/23 SERIES HS EPOXY TOP COAT	446-22-1000	2-butoxyethanol	0.0	0.0	75.0		10.73	5.0	3	0	1	0	0	3.75%	0.00	0.00	30.16	0.00
22/23 SERIES HS EPOXY TOP COAT	446-22-1000	Silicon Dioxide	0.0	0.0	75.0		10.73	5.0	3	0	1	0	0	3.75%	0.00	0.00	30.16	0.00
IS-237 EPOXY REDUCER	IS-237	Methyl Ethyl Ketone	10.0	10.0	14.0		7.10	50.0	1	0	0	0	0	50.00%	35.50	35.50	49.70	0.00
IS-237 EPOXY REDUCER	IS-237	Propylene glycol monome	10.0	10.0	14.0		7.10	50.0	1	0	0	0	0	50.00%	35.50	35.50	49.70	0.00
IS-237 EPOXY REDUCER	IS-237	Methyl Isobutyl Ketone	10.0	10.0	14.0		7.10	20.0	1	0	0	0	0	20.00%	14.20	14.20	19.88	0.00
Defthane M85285E-I-H-36320	03GY287	Ethyl Benzene	2.0	2.0	0.0		10.43	1.0	1	0	1	0	0	0.50%	0.10	0.10	0.00	0.00
Hi Solid Epoxy Primer	10P20-13	Strontium chromate	15.0	22.0	23.0		12.58	30.0	3	0	1	0	1	18.00%	33.97	49.82	52.09	0.00
Hi Solid Epoxy Primer	10P20-13	Methyl Isobutyl Ketone	15.0	22.0	23.0		12.58	9.0	3	0	1	0	1	5.40%	10.19	14.95	15.63	0.00
Hi Solid Epoxy Primer	10P20-13	Xylene	15.0	23.0	22.0		12.58	2.4	3	0	1	0	1	1.43%	2.71	4.15	3.97	0.00
Integral Fuel Tank Primer	10P30-1	Strontium chromate	17.0	22.0	21.0		9.58	5.0	2	0	1	0	4.5	1.33%	2.17	2.81	2.68	0.00
Integral Fuel Tank Primer	10P30-1	Ethyl Benzene	17.0	22.0	21.0		9.58	1.0	2	0	1	0	4.5	0.27%	0.43	0.56	0.54	0.00
Integral Fuel Tank Primer	10P30-1	Methyl Isobutyl Ketone	17.0	22.0	21.0		9.58	15.0	2	0	1	0	4.5	4.00%	6.51	8.43	8.05	0.00
Solid Film Lubricant	099 LUBRICANT	No listed toxics	2.0	2.0	2.0		11.47	0.0	1	0	0	0	0	0.00%	0.00	0.00	0.00	0.00
WATERBORNE EPOXY PRIMER	03GY315	Methyl Isobutyl Ketone	15.0	18.0	19.0		8.22	1.0	1	0	1	0	0	0.50%	0.62	0.74	0.78	0.00
WATERBORNE EPOXY PRIMER	03GY315	1,2,4-Trimethyl Benzene	15.0	18.0	19.0		8.22	1.7	1	0	1	0	0	0.85%	1.05	1.26	1.33	0.00
34424 GREEN LACQUER	20A-34424	Isopropyl Alcohol	8.0	8.0	10.0		9.23	10.0	1	0	0	0	0	10.00%	7.38	7.38	9.23	0.00
WATERBORNE EPOXY PRIMER	TT-L-20A-36118	Isopropyl Alcohol	2.0	2.0	4.0		7.10	9.0	1	0	0	0	0	9.00%	1.28	1.28	2.56	0.00
36118GRAY FLAT LACQUER	TT-L-20A-36118	Toluene	2.0	2.0	4.0		8.75	12.0	1	0	0	0	0	12.00%	2.10	2.10	4.20	0.00
36118GRAY FLAT LACQUER	TT-L-20A-36118	Methyl Ethyl Ketone	2.0	2.0	4.0		8.75	8.0	1	0	0	0	0	8.00%	1.40	1.40	2.80	0.00
36118GRAY FLAT LACQUER	TT-L-20A-36118	Xylene	2.0	2.0	4.0		8.75	7.0	1	0	0	0	0	7.00%	1.23	1.23	2.45	0.00
36118GRAY FLAT LACQUER	TT-L-20A-36118	Hexane	2.0	2.0	4.0		8.75	4.0	1	0	0	0	0	4.00%	0.70	0.70	1.40	0.00
36118GRAY FLAT LACQUER	TT-L-20A-36118	Ethylbenzene	2.0	2.0	4.0		8.75	1.0	1	0	0	0	0	1.00%	0.18	0.18	0.35	0.00
36118GRAY FLAT LACQUER	TT-L-20A-36118	Methyl Isobutyl Ketone	2.0	2.0	4.0		8.75	2.0	1	0	0	0	0	2.00%	0.35	0.35	0.70	0.00
Epoxy Primer-3 Part Coating	44GN054	Strontium chromate	13.0	15.0	18.0		9.58	30.0	2	0	1	0	4.5	8.00%	9.96	11.50	13.80	0.00
Epoxy Primer-3 Part Coating	44GN054	2-butanol	13.0	15.0	18.0		9.58	30.0	2	0	1	0	4.5	8.00%	9.96	11.50	13.80	0.00
Epoxy Primer-3 Part Coating	44GN054	Barium chromate	13.0	15.0	18.0		9.58	1.0	2	0	1	0	4.5	0.27%	0.33	0.38	0.46	0.00
DOPE & LACQUER	266D-GL	Toluene	20.0	15.0	15.0		6.86	21.0	1	0	0	0	0	21.00%	28.81	21.61	21.61	0.00
DOPE & LACQUER	266D-GL	Methyl Ethyl Ketone	20.0	15.0	15.0		6.86	16.0	1	0	0	0	0	16.00%	21.95	16.46	16.46	0.00
DOPE & LACQUER	266D-GL	n-Butyl alcohol	20.0	15.0	15.0		6.86	11.0	1	0	0	0	0	11.00%	15.09	11.32	11.32	0.00
DOPE & LACQUER	266D-GL	Isopropyl alcohol	20.0	15.0	15.0		6.86	11.0	1	0	0	0	0	11.00%	15.09	11.32	11.32	0.00
DOPE & LACQUER	266D-GL	Hexane	20.0	15.0	15.0		6.86	10.0	1	0	0	0	0	10.00%	13.72	10.29	10.29	0.00
58 SERIES POLYURETHANE TOP COAT	646-58-7925	Silicon Dioxide	11.0	14.0	15.0		9.78	5.0	1	0	1	0	0	2.50%	2.69	3.42	3.67	0.00
BMS 100-11Y Type I Class A Grade E	44GN060	2-butanol	5.0	15.0	18.0		9.88	20.0	1	0	5	0	0	3.64%	1.80	5.39	6.47	0.00
BMS 100-11Y Type I Class A Grade E	44GN060	Barium chromate	5.0	15.0	18.0		9.88	1.0	1	0	5	0	0	0.18%	0.09	0.27	0.32	0.00
BMS 100-11Y Type I Class A Grade E	44GN060	Strontium chromate	5.0	15.0	18.0		9.88	31.0	1	0	5	0	0	5.64%	2.79	8.36	10.03	0.00
23T3 SERIES POLYURETHANE TOP COAT	23T3-10/PC-216	Titanium Dioxide	0.0	0.0	36.0		11.01	20.0	3	0	1	0	0	15.00%	0.00	0.00	59.47	0.00
23T3 SERIES POLYURETHANE TOP COAT	23T3-10/PC-216	Propylene glycol monomet	0.0	0.0	36.0		11.01	5.0	3	0	1	0	0	3.75%	0.00	0.00	14.87	0.00
23T3 SERIES POLYURETHANE TOP COAT	23T3-10/PC-216	Silicon Dioxide	0.0	0.0	36.0		11.01	5.0	3	0	1	0	0	3.75%	0.00	0.00	14.87	0.00
3M SURFACE PRE-TREATMENT AC-130-2	AC-130-2 1GAL	Methanol	0.0	0.0	0.0	29.0	7.10	3.0	1	0	0	0	0	3.00%	0.00	0.00	0.00	6.18
WATERBORNE EPOXY PRIMER	AD9320/AD2304	Strontium chromate	7.5	10.0	9.5		8.35	20.0	4	0	1	0	0	16.00%	10.02	13.36	12.69	0.00
WATERBORNE EPOXY PRIMER	AD9320/AD2304	Propylene glycol monomet	7.5	10.0	9.5		8.35	5.0	4	0	1	0	0	4.00%	2.51	3.34	3.17	0.00
WATERBORNE EPOXY PRIMER	AD9320/AD2304	Ethylene glycol monopropy	7.5	10.0	9.5		8.35	5.0	4	0	1	0	0	4.00%	2.51	3.34	3.17	0.00
BR 6747-1 WATER BASED PRIMER 20-40% SOLIDS	32336	Strontium chromate	2.0	2.0	2.0		8.35	5.0	1	0	0	0	0	5.00%	0.84	0.84	0.84	0.00
POLYURETHANE TOPCOAT	03W160	Methyl Isobutyl Ketone	0.0	0.0	24.0		10.99	1.0	4	0	1	0	0	0.80%	0.00	0.00	2.11	0.00
10P8-10NF	10P-8-1010-P8-1	Strontium chromate	6.5	9.0	8.5		8.35	6.3	1	0	1	0	0	3.13%	1.70	2.35	2.22	0.00
463-6-4 HI TEMP EPOXY COATING	463-6-4	Xylene	6.0	9.0	9.0		8.64	25.0	3	0	1	0	0.5	16.67%	8.64	12.96	12.96	0.00
463-6-4 HI TEMP EPOXY COATING	463-6-4	Methyl Isobutyl Ketone	6.0	9.0	9.0		8.64	10.0	3	0	1	0	0.5	6.67%	3.46	5.18	5.18	0.00

Spray Coating Data - Reporting Year 2019

Base Material	Product Code	Substance	Coating Usage (gal/yr)				Density (lb/gal)	Coating Mixture - Substance %						Substance (W%)	Emissions (lbs/yr)			
			SB 1	SB 2	SB 3	SB 4		Part 1 - Base		Part 2 - Catalyst		Part 3 - Water			SB 1	SB 2	SB 3	SB 4
463-6-4 HI TEMP EPOXY COATING	463-6-4	Toluene	6.0	9.0	9.0		8.64	10.0	3	0	1	0	0.5	6.67%	3.46	5.18	5.18	0.00
463-6-4 HI TEMP EPOXY COATING	463-6-4	Methyl Ethyl Ketone	6.0	9.0	9.0		8.64	25.0	3	0	1	0	0.5	16.67%	8.64	12.96	12.96	0.00
463-6-4 HI TEMP EPOXY COATING	463-6-4	Ethyl Benzene	6.0	9.0	9.0		8.64	10.0	3	0	1	0	0.5	6.67%	3.46	5.18	5.18	0.00
DESOTHANE HS CA8000 POLYURETHANE TOPCOA	8000F17925RPG	Xylene	7.0	8.0	9.0		7.52	3.9	2	0	1	0	0	2.60%	1.37	1.56	1.76	0.00
DESOTHANE HS CA8000 POLYURETHANE TOPCOA	8000F17925RPG	Toluene	7.0	8.0	9.0		7.52	1.0	2	0	1	0	0	0.67%	0.35	0.40	0.45	0.00
DESOTHANE HS CA8000 POLYURETHANE TOPCOA	8000F17925RPG	Ethyl Benzene	7.0	8.0	9.0		7.52	1.0	2	0	1	0	0	0.67%	0.35	0.40	0.45	0.00
DESOTHANE HS CA8000 POLYURETHANE TOPCOA	8000F17925RPG	Methyl Isobutyl Ketone	7.0	8.0	9.0		7.52	1.0	2	0	1	0	0	0.67%	0.35	0.40	0.45	0.00
Integral Fuel Tank Coating 20P1-21	20P1-21	Strontium chromate	4.0	6.0	6.0		10.38	9.3	3	0	1	0	0.5	6.21%	2.58	3.87	3.87	0.00
Integral Fuel Tank Coating 20P1-21	20P1-21	Barium chromate	4.0	6.0	6.0		10.38	0.1	3	0	1	0	0.5	0.09%	0.04	0.06	0.06	0.00
Integral Fuel Tank Coating 20P1-21	20P1-21	Methyl Isobutyl Ketone	4.0	6.0	6.0		10.38	1.8	3	0	1	0	0.5	1.21%	0.50	0.76	0.76	0.00
Integral Fuel Tank Coating 20P1-21	20P1-21	Silicon Dioxide	4.0	6.0	6.0		10.38	1.1	3	0	1	0	0.5	0.70%	0.29	0.44	0.44	0.00
Integral Fuel Tank Coating 20P1-21	20P1-21	Ethyl Benzene	4.0	6.0	6.0		10.38	0.1	3	0	1	0	0.5	0.07%	0.03	0.04	0.04	0.00
High Solid Epoxy Topcoat	4222-T17178C	Toluene	0.0	0.0	24.0		10.34	10.0	3	0	1	0	0	7.50%	0.00	0.00	18.61	0.00
High Solid Epoxy Topcoat	4222-T17178C	Methyl Ethyl Ketone	0.0	0.0	24.0		10.34	10.0	3	0	1	0	0	7.50%	0.00	0.00	18.61	0.00
High Solid Epoxy Topcoat	4222-T17178C	Propylene glycol monome	0.0	0.0	24.0		10.34	10.0	3	0	1	0	0	7.50%	0.00	0.00	18.61	0.00
High Solid Epoxy Topcoat	4222-T17178C	1,2,4-Trimethyl Benzene	0.0	0.0	24.0		10.34	2.5	3	0	1	0	0	1.88%	0.00	0.00	4.65	0.00
PRF-85285 TYPE I CLASS H	03GY292	Toluene	2.0	4.0	6.0		9.75	1.0	1	0	1	0	0	0.50%	0.10	0.19	0.29	0.00
PRF-85285 TYPE I CLASS H	03GY292	Xylene	2.0	4.0	6.0		9.75	1.0	1	0	1	0	0	0.50%	0.10	0.19	0.29	0.00
PRF-85285 TYPE I CLASS H	03GY292	Ethyl Benzene	2.0	4.0	6.0		9.75	1.0	1	0	1	0	0	0.50%	0.10	0.19	0.29	0.00
PRF-85285 TYPE I CLASS H	03GY292	Methyl Ethyl Ketone	2.0	4.0	6.0		9.75	5.0	1	0	1	0	0	2.50%	0.49	0.97	1.46	0.00
PRF-85285 TYPE I CLASS H	03GY292	Methyl Isobutyl Ketone	2.0	4.0	6.0		9.75	20.0	1	0	1	0	0	10.00%	1.95	3.90	5.85	0.00
23T3 ABRASION RESISTANT POLYURETHANE TOP	23T3-105	Silicon Dioxide	3.0	5.0	4.0		11.01	2.5	3	0	1	0	0	1.88%	0.62	1.03	0.83	0.00
Wash Primer Yellow	PT-402 Yellow	Methanol	2.0	4.0	5.0		7.54	2.6	4	0	1	0	0	2.08%	0.31	0.63	0.78	0.00
Wash Primer Yellow	PT-402 Yellow	Xylene	2.0	4.0	5.0		7.54	0.0	4	0	1	0	0	0.03%	0.00	0.01	0.01	0.00
Wash Primer Yellow	PT-402 Yellow	Propylene glycol monome	2.0	4.0	5.0		7.54	0.0	4	0	1	0	0	0.03%	0.00	0.01	0.01	0.00
Wash Primer Yellow	PT-402 Yellow	Ethyl Benzene	2.0	4.0	5.0		7.54	0.0	4	0	1	0	0	0.01%	0.00	0.00	0.00	0.00
HI SOLID EPOXY TOPCOAT	01-W-074	Toluene	0.0	0.0	8.0		10.89	4.1	3	0	1	0	0	3.08%	0.00	0.00	2.68	0.00
HI SOLID EPOXY TOPCOAT	01-W-074	1,2,4-Trimethyl Benzene	0.0	0.0	8.0		10.89	4.5	3	0	1	0	0	3.38%	0.00	0.00	2.94	0.00
Epoxy Primer-3 Part Coating	44GN007	Barium chromate	2.0	3.0	3.0		9.58	29.0	3	0	1	0	8	7.25%	1.39	2.08	2.08	0.00
Epoxy Primer-3 Part Coating	44GN007	1,2,4-Trimethyl Benzene	2.0	3.0	3.0		9.58	5.0	3	0	1	0	8	1.25%	0.24	0.36	0.36	0.00
Epoxy Primer-3 Part Coating	44GN007	Strontium chromate	2.0	3.0	3.0		9.58	1.0	3	0	1	0	8	0.25%	0.05	0.07	0.07	0.00
Epoxy Primer-3 Part Coating	44GN007	2-butoxyethanol	2.0	3.0	3.0		9.58	17.0	3	0	1	0	8	4.25%	0.81	1.22	1.22	0.00
Mil-PRF-85582 Type II Class C2	44GN049	Strontium chromate	0.0	4.0	4.0		9.16	20.0	2	0	1	0	4.5	5.33%	0.00	1.95	1.95	0.00
Mil-PRF-85582 Type II Class C2	44GN049	Barium chromate	0.0	4.0	4.0		9.16	1.0	2	0	1	0	4.5	0.27%	0.00	0.10	0.10	0.00
Mil-PRF-85582 Type II Class C2	44GN049	Chromium, Hexavalent	0.0	4.0	4.0		9.16	10.0	2	0	1	0	4.5	2.67%	0.00	0.98	0.98	0.00
Mil-PRF-85582 Type II Class C2	44GN049	2-butanol	0.0	4.0	4.0		9.16	50.0	2	0	1	0	4.5	13.33%	0.00	4.88	4.88	0.00
ECLIPSE HS POLYURETHANE TOPCOAT	ECL-G-101/PC-23	Silicon Dioxide	0.0	0.0	8.0		9.96	5.0	2	0	1	0	1	2.50%	0.00	0.00	1.99	0.00
Hi Solides Coating	833K086	Strontium chromate	3.5	0.0	0.0		9.47	10.0	2	0	1	0	1	5.00%	1.66	0.00	0.00	0.00
Hi Solides Coating	833K086	Methyl Isobutyl Ketone	3.5	0.0	0.0		9.47	3.0	2	0	1	0	1	1.50%	0.50	0.00	0.00	0.00
Hi Solides Coating	833K086	Toluene	0.0	2.0	0.0		9.47	3.0	2	0	1	0	1	1.50%	0.00	0.28	0.00	0.00
Hi Solides Coating	833K086	Barium chromate	0.0	0.0	2.0		9.47	0.3	2	0	1	0	1	0.15%	0.00	0.00	0.03	0.00
POLYURETHANE TOPCOAT	03GN209	Ethyl Benzene	0.0	0.0	6.0		9.90	1.0	3	0	1	0	0	0.75%	0.00	0.00	0.45	0.00
POLYURETHANE TOPCOAT	03GN209	Toluene	0.0	0.0	6.0		9.90	1.0	3	0	1	0	0	0.75%	0.00	0.00	0.45	0.00
POLYURETHANE TOPCOAT	03GN209	Xylene	0.0	0.0	6.0		9.90	1.0	3	0	1	0	0	0.75%	0.00	0.00	0.45	0.00
POLYURETHANE TOPCOAT	03GN209	2-butoxyethanol	0.0	0.0	6.0		9.90	5.0	3	0	1	0	0	3.75%	0.00	0.00	2.23	0.00
POLYURETHANE TOPCOAT	03-R-064	No listed toxics	1.0	1.0	0.0		8.78	0.0	1	0	1	0	0	0.00%	0.00	0.00	0.00	0.00
ECLIPSE HS POLYURETHANE TOPCOAT	ECL-G-46	Silicon Dioxide	0.0	0.0	7.0		10.39	5.0	2	0	1	0	1	2.50%	0.00	0.00	1.82	0.00
ECLIPSE HS POLYURETHANE TOPCOAT	ECL-G-46	Ethyl Benzene	0.0	0.0	7.0		10.39	1.0	2	0	1	0	1	0.50%	0.00	0.00	0.36	0.00
HI SOLID EPOXY TOPCOAT	01GY082	Toluene	0.0	0.0	4.0		10.73	5.0	3	0	1	0	0	3.75%	0.00	0.00	1.61	0.00

Spray Coating Data - Reporting Year 2019

Base Material	Product Code	Substance	Coating Usage (gal/yr)				Density (lb/gal)	Coating Mixture - Substance %						Substance (W%)	Emissions (lbs/yr)			
			SB 1	SB 2	SB 3	SB 4		Part 1 - Base		Part 2 - Catalyst		Part 3 - Water			SB 1	SB 2	SB 3	SB 4
EPOXY POLYAMIDE PRIMER	02Y024	Strontium chromate	1.0	1.5	1.5		8.65	20.0	1	0	1	0	0	10.00%	0.87	1.30	1.30	0.00
EPOXY POLYAMIDE PRIMER	02Y024	Barium chromate	1.0	1.5	1.5		8.65	1.0	1	0	1	0	0	0.50%	0.04	0.06	0.06	0.00
EPOXY POLYAMIDE PRIMER	02Y024	Methyl Ethyl Ketone	1.0	1.5	1.5		8.65	20.0	1	0	1	0	0	10.00%	0.87	1.30	1.30	0.00
EPOXY POLYAMIDE PRIMER	02Y024	Toluene	1.0	1.5	1.5		8.65	10.0	1	0	1	0	0	5.00%	0.43	0.65	0.65	0.00
POLYURETHANE TOPCOAT	03-W-160	Methyl Isobutyl Ketone	8.0	8.0	8.0		10.20	1.0	1	0	0	0	0	1.00%	0.82	0.82	0.82	0.00
03848WEP - HFX/03849CEH-HFX	K3848WEP-HFX	No listed toxics	1.0	0.0	0.0		12.50	0.0	4	0	1	0	0	0.00%	0.00	0.00	0.00	0.00
10P4-2NF EPOXY PRIMER	10P4-2NF/EC1175	Strontium chromate	1.0	1.5	1.5		8.35	10.0	1	0	1	0	0	5.00%	0.42	0.63	0.63	0.00
10P4-2NF EPOXY PRIMER	10P4-2NF/EC1175	Methyl Ethyl Ketone	1.0	1.5	1.5		8.35	25.0	1	0	1	0	0	12.50%	1.04	1.57	1.57	0.00
10P4-2NF EPOXY PRIMER	10P4-2NF/EC1175	Methyl Isobutyl Ketone	1.0	1.5	1.5		8.35	10.0	1	0	1	0	0	5.00%	0.42	0.63	0.63	0.00
10P4-2NF EPOXY PRIMER	10P4-2NF/EC1175	Xylene	1.0	1.5	1.5		8.35	10.0	1	0	1	0	0	6.25%	0.52	0.78	0.78	0.00
10P4-2NF EPOXY PRIMER	10P4-2NF/EC1175	Silicon Dioxide	1.0	1.5	1.5		8.35	2.5	1	0	1	0	0	1.25%	0.10	0.16	0.16	0.00
10P4-2NF EPOXY PRIMER	10P4-2NF/EC1175	Ethyl Benzene	1.0	1.5	1.5		8.35	2.5	1	0	1	0	0	1.25%	0.10	0.16	0.16	0.00
21 SERIES HS EPOXY TOP COAT	446-21-7507	Toluene	4.0	2.0	2.0		10.74	10.0	3	0	1	0	0	7.50%	3.22	1.61	1.61	0.00
21 SERIES HS EPOXY TOP COAT	446-21-7507	Methyl Isobutyl Ketone	4.0	2.0	2.0		10.74	5.0	3	0	1	0	0	3.75%	1.61	0.81	0.81	0.00
21 SERIES HS EPOXY TOP COAT	446-21-7507	Methyl Ethyl Ketone	4.0	2.0	2.0		10.74	10.0	3	0	1	0	0	7.50%	3.22	1.61	1.61	0.00
21 SERIES HS EPOXY TOP COAT	446-21-7507	Xylene	4.0	2.0	2.0		10.74	5.0	3	0	1	0	0	3.75%	1.61	0.81	0.81	0.00
21 SERIES HS EPOXY TOP COAT	446-21-7507	Ethyl Benzene	4.0	2.0	2.0		10.74	1.0	3	0	1	0	0	0.75%	0.32	0.16	0.16	0.00
DESTHANE HS CA8201 GLOSS TOP COAT POLYURI	CA8201/F17925						9.85	0.0	2	0	1	0	0	0.00%	0.00	0.00	0.00	0.00
SEMI GLOSS LACQUER	TT-L-20(23531)						10.84	0.0	1	0	0	0	0	0.00%	0.00	0.00	0.00	0.00
Reducer- 69 530-2138	R7K69						7.04	0.0	1	0	0	0	0	0.00%	0.00	0.00	0.00	0.00
Reducer- 99KY29	R99KY29						6.93	0.0	1	0	0	0	0	0.00%	0.00	0.00	0.00	0.00
Polyurethane Enamel F63HY8	F63HY8						10.53	0.0	7	0	1	0	0	0.00%	0.00	0.00	0.00	0.00
Lead & Chromate Free Epoxy Primer E90W201	E90W201						8.78	0.0	2	0	0	0	0	0.00%	0.00	0.00	0.00	0.00
HAPS Free Epoxy Primer E90W501	E90W501						10.99	0.0	4	0	1	0	0	0.00%	0.00	0.00	0.00	0.00
Polane T Polyurethane Enamel	F63/B12	Methyl Ethyl Ketone					8.31	10.0	6	0	1	0	0	8.57%	0.00	0.00	0.00	0.00
Polane T Polyurethane Enamel	F63/B12	Toluene					8.31	10.0	6	0	1	0	0	8.57%	0.00	0.00	0.00	0.00
Polane T Polyurethane Enamel	F63/B12	Xylene					8.31	3.7	6	0	1	0	0	3.17%	0.00	0.00	0.00	0.00
Polane T Polyurethane Enamel	F63/B12	Ethyl Benzene					8.31	1.0	6	0	1	0	0	0.86%	0.00	0.00	0.00	0.00
TR-114HS Epoxy Primer Thinner Reducer	TR - 114	No listed toxics	1.0	1.0	0.0		9.53	0.0	1	0	0	0	0	0.00%	0.00	0.00	0.00	0.00
21 SERIES HS EPOXY TOP COAT	446-21-7507	Ethyl Benzene	1.0	1.5	1.5		10.74	1.0	3	0	1	0	0	0.75%	0.08	0.12	0.12	0.00
DESOTO 513X408B MILITARY WATER-BORNE PRI	513X408B/910X3	Strontium chromate	0.0	2.0	2.0		8.35	25.0	3	0	1	0	0	18.75%	0.00	3.13	3.13	0.00
DESOTO 513X408B MILITARY WATER-BORNE PRI	513X408B/910X3	Barium chromate	0.0	2.0	2.0		8.35	1.0	3	0	1	0	0	0.75%	0.00	0.13	0.13	0.00
DESOTO 513X408B MILITARY WATER-BORNE PRI	513X408B/910X3	Ethylene glycol monoprop	0.0	2.0	2.0		8.35	25.0	3	0	1	0	0	18.75%	0.00	3.13	3.13	0.00
512X310 POLYURETHANE Compatible Epoxy Prim	512 X 310	Methyl Ethyl Ketone	64.0	64.0	64.0		9.05	12.5	1	0	1	0	0	6.25%	36.20	36.20	36.20	0.00
515X349 BASE	515X349	Strontium chromate	4.0	0.0	0.0		8.93	16.0	1	0	1	0	0	8.00%	2.86	0.00	0.00	0.00
515X349 BASE	515X349	Barium chromate	4.0	0.0	0.0		8.93	0.7	1	0	1	0	0	0.37%	0.13	0.00	0.00	0.00
515X349 BASE	515X349	Methyl Ethyl Ketone	4.0	0.0	0.0		8.93	25.0	1	0	1	0	0	12.50%	4.47	0.00	0.00	0.00
Desoto 825X309 Integral Fuel Tank Coating	825-X309	Methyl Isobutyl Ketone	1.0	1.5	1.5		8.35	17.0	4	0	1	0	0	13.60%	1.14	1.70	1.70	0.00
Desoto 825X309 Integral Fuel Tank Coating	825-X309	Methyl Ethyl Ketone	1.0	1.5	1.5		8.35	13.0	4	0	1	0	0	10.40%	0.87	1.30	1.30	0.00
Desoto 825X309 Integral Fuel Tank Coating	825-X309	Strontium chromate	1.0	1.5	1.5		8.35	9.7	4	0	1	0	0	7.76%	0.65	0.97	0.97	0.00
Desoto 825X309 Integral Fuel Tank Coating	825-X309	Xylene	1.0	1.5	1.5		8.35	4.3	4	0	1	0	0	3.44%	0.29	0.43	0.43	0.00
Desoto 825X309 Integral Fuel Tank Coating	825-X309	Ethyl Benzene	1.0	1.5	1.5		8.35	1.0	4	0	1	0	0	0.80%	0.07	0.10	0.10	0.00
Desoto 825X309 Integral Fuel Tank Coating	825-X309	Barium chromate	1.0	1.5	1.5		8.35	1.0	4	0	1	0	0	0.80%	0.07	0.10	0.10	0.00
PT-1045 SOLVENT BLEND	PT-1045	Isopropyl alcohol	1.0	2.0	2.0		7.10	74.4	1	0	0	0	0	74.39%	5.28	10.56	10.56	0.00
PT-1045 SOLVENT BLEND	PT-1045	n-Butyl alcohol	1.0	2.0	2.0		7.10	25.6	1	0	0	0	0	25.61%	1.82	3.64	3.64	0.00
ECLIPSE HS POLYURETHANE ENAMEL	ECL-G-1129	Silicon Dioxide	0.5	1.8	1.7		7.52	5.0	2	0	1	0	0	3.33%	0.13	0.45	0.43	0.00
POLY URETHANE ECL-G- 1622 WHITE BAC	ECL-G-1622	Silicon Dioxide	0.0	0.0	3.0		10.16	5.0	2	0	1	0	1	2.50%	0.00	0.00	0.76	0.00
POLY URETHANE ECL-G- 1622 WHITE BAC	ECL-G-1622	Ethyl Benzene	0.0	0.0	3.0		10.16	1.0	2	0	1	0	1	0.50%	0.00	0.00	0.15	0.00
PT-522 GREEN PRIMER	PT-522	1-Methoxy-2-Propanol Ac	0.0	1.5	1.5		10.89	4.0	1	0	0	0	0	4.02%	0.00	0.66	0.66	0.00

Spray Coating Data - Reporting Year 2019

Base Material	Product Code	Substance	Coating Usage (gal/yr)				Density (lb/gal)	Coating Mixture - Substance %						Substance (W%)	Emissions (lbs/yr)			
			SB 1	SB 2	SB 3	SB 4		Part 1 - Base		Part 2 - Catalyst		Part 3 - Water			SB 1	SB 2	SB 3	SB 4
PT-522 GREEN PRIMER	PT-522	Methyl Ethyl Ketone	0.0	1.5	1.5		10.89	3.8	1	0	0	0	0	3.75%	0.00	0.61	0.61	0.00
PT-522 GREEN PRIMER	PT-522	Xylene	0.0	1.5	1.5		10.89	3.4	1	0	0	0	0	3.41%	0.00	0.56	0.56	0.00
PT-522 GREEN PRIMER	PT-522	Ethyl Benzene	0.0	1.5	1.5		10.89	0.2	1	0	0	0	0	0.24%	0.00	0.04	0.04	0.00
High Solid Epoxy Topcoat	01BK042	Toluene	0.0	0.0	2.0		10.28	5.0	3	0	1	0	0	3.75%	0.00	0.00	0.77	0.00
Alumigrip 10P8-11 Epoxy Primer	10P8-11	Strontium chromate	0.0	1.0	1.0		8.35	25.0	1	0	1	0	0	12.50%	0.00	1.04	1.04	0.00
Alumigrip 10P8-11 Epoxy Primer	10P8-11	2-(propyloxy)ethanol	0.0	1.0	1.0		8.35	10.0	1	0	1	0	0	5.00%	0.00	0.42	0.42	0.00
Alumigrip 10P8-11 Epoxy Primer	10P8-11	Silicon Dioxide	0.0	1.0	1.0		8.35	10.0	1	0	1	0	0	5.00%	0.00	0.42	0.42	0.00
Epoxy Green - 2 Part Coating	02GN070	Strontium chromate	1.0	0.0	0.0		11.64	25.0	3	0	1	0	0	18.75%	2.18	0.00	0.00	0.00
Epoxy Green - 2 Part Coating	02GN070	Methyl Isobutyl Ketone	1.0	0.0	0.0		11.64	2.0	3	0	1	0	0	1.50%	0.17	0.00	0.00	0.00
Epoxy Green - 2 Part Coating	02GN070	Barium chromate	1.0	0.0	0.0		11.64	1.0	3	0	1	0	0	0.75%	0.09	0.00	0.00	0.00
BMS 100-11AA Type I Class A Grade E	44Y022	Strontium chromate	0.0	0.5	0.5		9.66	32.0	2	0	1	0	4.5	8.53%	0.00	0.41	0.41	0.00
BMS 100-11AA Type I Class A Grade E	44Y022	Barium chromate	0.0	0.5	0.5		9.66	1.0	2	0	1	0	4.5	0.27%	0.00	0.01	0.01	0.00
BMS 100-11AA Type I Class A Grade E	44Y022	2-Butanol	0.0	0.5	0.5		9.66	20.0	2	0	1	0	4.5	5.33%	0.00	0.26	0.26	0.00
LOW FRICTION COATING	EV642		0.0	0.0	0.0		7.10	0.0	1	0	0	0	0	0.00%	0.00	0.00	0.00	0.00
DESOTHANE HS CA8000 POLYURETHANE TOPCOA	CA8000/D3635		0.0	0.0	0.0		7.52	3.9	2	0	1	0	0	2.60%	0.00	0.00	0.00	0.00
DESTHANE HS CA8100 POLYURETHANE TOPCOAT	101F17925CAG22						7.72	0.0	2	0	1	0	1	0.00%	0.00	0.00	0.00	0.00
POLYURETHANE ENAMEL	V66V27						7.10	0.0	1	0	0	0	0	0.00%	0.00	0.00	0.00	0.00
POLYURETHANE TOPCOAT	03BK074	No listed toxics	3.0	3.0	2.0		7.41	0.0	3	0	1	0	0	0.00%	0.00	0.00	0.00	0.00
Integral Fuel tank coating	454-4-1	Toluene	1.0	0.0	0.0		8.66	25.0	12	0	4	0	1	17.65%	1.53	0.00	0.00	0.00
Integral Fuel tank coating	454-4-1	Methyl Isobutyl Ketone	1.0	0.0	0.0		8.66	10.0	12	0	4	0	1	7.06%	0.61	0.00	0.00	0.00
Integral Fuel tank coating	454-4-1	Methyl Ethyl Ketone	1.0	0.0	0.0		8.66	25.0	12	0	4	0	1	17.65%	1.53	0.00	0.00	0.00
Integral Fuel tank coating	454-4-1	Isopropyl alcohol	1.0	0.0	0.0		8.66	10.0	12	0	4	0	1	7.06%	0.61	0.00	0.00	0.00
Integral Fuel tank coating	454-4-1	Ethyl Benzene	1.0	0.0	0.0		8.66	2.5	12	0	4	0	1	1.76%	0.15	0.00	0.00	0.00
Integral Fuel tank coating	454-4-1	Xylene	1.0	0.0	0.0		8.66	10.0	12	0	4	0	1	7.06%	0.61	0.00	0.00	0.00
POLYURETHANE TOPCOAT	12APX-T1/064800	No listed toxics	6.0	6.0	6.0		8.35	0.0	1	0	0	0	0	0.00%	0.00	0.00	0.00	0.00
URETHANE REDUCER	SB61	Toluene	3.0	3.0	4.0		8.35	8.0	1	0	0	0	0	8.00%	2.00	2.00	2.67	0.00
FLEXIBLE HIGH GLOSS FILM	26293 COLOR	No listed toxics	6.0	6.0	8.0		8.35	0.0	1	0	0	0	0	0.00%	0.00	0.00	0.00	0.00
DESOTHANE HS CA8110 FLAT ANTI-CHAFE TOPCC	110F36375PSG32	Xylene	1.0	0.0	0.0		7.52	2.8	2	0	1	0	0	1.87%	0.14	0.00	0.00	0.00
DESOTHANE HS CA8110 FLAT ANTI-CHAFE TOPCC	110F36375PSG32	Methyl Isobutyl Ketone	1.0	0.0	0.0		7.52	1.6	2	0	1	0	0	1.07%	0.08	0.00	0.00	0.00
DESOTHANE HS CA8110 FLAT ANTI-CHAFE TOPCC	110F36375PSG32	Ethyl Benzene	1.0	0.0	0.0		7.52	1.0	2	0	1	0	0	0.67%	0.05	0.00	0.00	0.00
02GN084 CHROME FREE EPOXY PRIMER	02GN084	2-Butanol	1.0	1.0	1.0		7.41	10.0	3	0	1	0	0	7.50%	0.56	0.56	0.56	0.00
02GN084 CHROME FREE EPOXY PRIMER	02GN084	Methyl Isobutyl Ketone	1.0	1.0	1.0		7.41	0.5	3	0	1	0	0	0.38%	0.027788	0.027788	0.027788	0.00
JETFLEX WR AIRCRAFT INTERIOR FINISH WATER	FB-GL	Diethylene glycol monobu	1.0	0.0	0.0		8.35	4.0	1	0	0	0	0	4.00%	0.33	0.00	0.00	0.00
PT-799 POLYURETHANE TOPCOAT	PT-799 #34424	Propylene glycol monomet	2.0	2.0	1.0		8.35	7.1	1	0	1	0	0	3.53%	0.59	0.59	0.29	0.00
PT-799 POLYURETHANE TOPCOAT	PT-799 #34424	Methyl Ethyl Ketone	2.0	2.0	1.0		8.35	1.9	1	0	1	0	0	0.97%	0.16	0.16	0.08	0.00
PT-799 POLYURETHANE TOPCOAT	PT-799 #34424	Diethylene glycol monobut	2.0	2.0	1.0		8.35	0.4	1	0	1	0	0	0.19%	0.03	0.03	0.02	0.00
DESOTHANE HS CA8110 FLAT ANTI-CHAFE TOPCC	110F36375PSG32	Toluene	1.0	0.0	0.0		7.52	1.0	2	0	1	0	0	0.67%	0.05	0.00	0.00	0.00
DEFTHANE APC/ELT	99-GY-001	Dipropylene Glycol	1.0	0.0	0.0		9.26	1.0	3	0	1	0	0	0.75%	0.07	0.00	0.00	0.00
DEFTHANE APC/ELT	99-GY-001	Xylene	1.0	0.0	0.0		9.26	5.9	3	0	1	0	0	4.39%	0.41	0.00	0.00	0.00
DEFTHANE APC/ELT	99-GY-001	Ethyl Benzene	1.0	0.0	0.0		9.26	1.2	3	0	1	0	0	0.92%	0.08	0.00	0.00	0.00
ECLIPSE HS POLYURETHANE TOPCOAT	ECL-G-16	Silicon Dioxide	0.0	0.0	1.0		10.40	5.0	2	0	1	0	1	2.50%	0.00	0.00	0.26	0.00
ECLIPSE HS POLYURETHANE TOPCOAT	ECL-G-16	Ethyl Benzene	0.0	0.0	1.0		10.40	1.0	2	0	1	0	1	0.50%	0.00	0.00	0.05	0.00
Solid Film Lubricant	Slickote P100	Propylene Glycol Monome	0.0	0.5	0.5		8.30	5.0	1	0	0	0	0	5.00%	0.00	0.21	0.21	0.00
Solid Film Lubricant	Slickote P100	Formaldehyde	0.0	0.5	0.5		8.30	0.1	1	0	0	0	0	0.10%	0.00	0.00	0.00	0.00
Solid Film Lubricant	Slickote P100	Methanol	0.0	0.5	0.5		8.30	5.0	1	0	0	0	0	5.00%	0.00	0.21	0.21	0.00
Solid Film Lubricant	Slickote P100	Methyl Ethyl Ketone	0.0	0.5	0.5		8.30	35.0	1	0	0	0	0	35.00%	0.00	1.45	1.45	0.00
Corrosion Resistant Epoxy Primer	10P30-5	Methyl Isobutyl Ketone	0.0	0.0	0.0		10.37	10.0	3	0	1	0	2	5.00%	0.00	0.00	0.00	0.00
Corrosion Resistant Epoxy Primer	10P30-5	Strontium chromate	0.0	0.0	0.0		10.37	10.0	3	0	1	0	2	5.00%	0.00	0.00	0.00	0.00
Corrosion Resistant Epoxy Primer	10P30-5	Silicon Dioxide	0.0	0.0	0.0		10.37	10.0	3	0	1	0	2	5.00%	0.00	0.00	0.00	0.00
Corrosion Resistant Epoxy Primer	10P30-5	Xylene	0.0	0.0	0.0		10.37	2.5	3	0	1	0	2	1.25%	0.00	0.00	0.00	0.00

Spray Coating Data - Reporting Year 2019

Base Material	Product Code	Substance	Coating Usage (gal/yr)				Density (lb/gal)	Coating Mixture - Substance %						Substance (W%)	Emissions (lbs/yr)			
			SB 1	SB 2	SB 3	SB 4		Part 1 - Base		Part 2 - Catalyst		Part 3 - Water			SB 1	SB 2	SB 3	SB 4
MIL-PRF-85285 TY I CL H CATALYST	PT-785#38903-Q	Methyl Ethyl Ketone	0.3	0.0	0.0		8.35	2.5	1	0	0	0	0	2.50%	0.06	0.00	0.00	0.00
MIL-PRF-85285 POLYURETHANE TOP COAT	852851-27038	Propylene glycol monome	1.0	1.0	0.0		8.35	6.0	2	0	1	0	0	4.00%	0.33	0.33	0.00	0.00
MIL-PRF-85285 POLYURETHANE TOP COAT	852851-27038	Methyl Isobutyl Ketone	1.0	1.0	0.0		8.35	4.0	2	0	1	0	0	2.67%	0.22	0.22	0.00	0.00
MIL-PRF-85285 POLYURETHANE TOP COAT	852851-27038	Methyl ethyl Ketone	1.0	1.0	0.0		8.35	3.0	2	0	1	0	0	2.00%	0.17	0.17	0.00	0.00
MIL-PRF-85285 POLYURETHANE TOP COAT	852851-27038	Ethylbenzene	1.0	1.0	0.0		8.35	0.1	2	0	1	0	0	0.05%	0.00	0.00	0.00	0.00
DESOTHANE HS CA8300 HS POLYURETHANE TOPC	03GY346	No listed toxics	1.0	1.0	0.0		8.35	0.0	1	0	1	0	0	0.00%	0.00	0.00	0.00	0.00
CA/CA7501 EPOXY PRIMER	CA 7501	Xylene	0.0	0.0	0.0		10.23	3.0	1	0	1	0	0	1.50%	0.00	0.00	0.00	0.00
HI SOLID EPOXY TOPCOAT	466-21-9710	Titanium Dioxide	0.0	0.0	1.0		8.35	10.0	3	0	1	0	0	7.50%	0.63	0.00	0.00	0.00
HI SOLID EPOXY TOPCOAT	466-21-9710	Methyl Isobutyl Ketone	0.0	0.0	1.0		8.35	10.0	3	0	1	0	0	7.50%	0.63	0.00	0.00	0.00
HI SOLID EPOXY TOPCOAT	466-21-9710	Silicon Dioxide	0.0	0.0	1.0		8.35	10.0	3	0	1	0	0	7.50%	0.63	0.00	0.00	0.00
HI SOLID EPOXY TOPCOAT	466-21-9710	2-butoxyethanol	0.0	0.0	1.0		8.35	5.0	3	0	1	0	0	3.75%	0.31	0.00	0.00	0.00
HI SOLID EPOXY TOPCOAT	466-21-9710	Methyl Ethyl Ketone	0.0	0.0	1.0		8.35	10.0	3	0	1	0	0	7.50%	0.63	0.00	0.00	0.00
HI SOLID EPOXY TOPCOAT	466-21-9710	Xylene	0.0	0.0	1.0		8.35	5.0	3	0	1	0	0	3.75%	0.31	0.00	0.00	0.00
HI SOLID EPOXY TOPCOAT	466-21-9710	Propylene glycol monome	0.0	0.0	1.0		8.35	5.0	3	0	1	0	0	3.75%	0.31	0.00	0.00	0.00
HI SOLID EPOXY TOPCOAT	466-21-9710	Ethyl Benzene	0.0	0.0	1.0		8.35	1.0	3	0	1	0	0	0.75%	0.06	0.00	0.00	0.00
683-3-2 CLEAR POLYURETHANE TOPCOAT	683-3-2	Propylene glycol monome	0.0	0.0	0.8		8.35	60.0	2	0	1	0	0.3	36.36%	2.28	0.00	0.00	0.00
POLYURETHANE TOPCOAT	85285-17178	Propylene glycol monome	1.0	1.0	1.0		8.35	5.0	1	0	1	0	0	2.50%	0.63	3.13	3.13	0.00
POLYURETHANE TOPCOAT	85285-17178	Xylene	1.0	1.0	1.0		8.35	4.0	1	0	1	0	0	2.00%	0.50	2.00	2.00	0.00
POLYURETHANE TOPCOAT	85285-17178	Ethyl Benzene	1.0	1.0	1.0		8.35	3.1	1	0	1	0	0	1.53%	0.38	1.17	1.17	0.00
PG-21 Series/PH - 63 Polyurethane top Coat	PG-21-W1/PH-63	Methyl Isobutyl Ketone	2.0	2.0	2.0		8.35	5.0	1	0	1	0	0	2.50%	1.25	12.53	25.05	0.00
PG-21 Series/PH - 63 Polyurethane top Coat	PG-21-W1/PH-63	Xylene	2.0	2.0	2.0		8.35	5.0	1	0	1	0	0	2.50%	1.25	12.53	25.05	0.00
PG-21 Series/PH - 63 Polyurethane top Coat	PG-21-W1/PH-63	Ethyl Benzene	2.0	2.0	2.0		8.35	1.0	1	0	1	0	0	0.50%	0.25	0.50	1.00	0.00
33538yELLOW LACQUER	20A-33538	Toluene	0.0	2.0	2.0		8.35	9.0	1	0	0	0	0	9.00%	3.01	0.00	0.00	0.00
33538yELLOW LACQUER	20A-33538	Methyl Ethyl Ketone	0.0	2.0	2.0		8.35	5.0	1	0	0	0	0	5.00%	1.67	0.00	0.00	0.00
33538yELLOW LACQUER	20A-33538	Xylene	0.0	2.0	2.0		8.35	4.0	1	0	0	0	0	4.00%	1.34	0.00	0.00	0.00
33538yELLOW LACQUER	20A-33538	Hexane	0.0	2.0	2.0		8.35	1.0	1	0	0	0	0	1.00%	0.33	0.00	0.00	0.00
33538yELLOW LACQUER	20A-33538	Methyl Isobutyl Ketone	0.0	2.0	2.0		8.35	1.0	1	0	0	0	0	1.00%	0.33	0.00	0.00	0.00
33538yELLOW LACQUER	20A-33538	Ethyl Benzene	0.0	2.0	2.0		8.35	0.5	1	0	0	0	0	0.53%	0.18	0.00	0.00	0.00

E = U x D x W% x Cr6% x (1 - TE) x (1 -CE), where

E = Air toxic emissions (lbs)

U = Material usage (gals)

D = Material density (lb/gals)

W% = Weight fraction of substance (%)

Cr6% = Weight percent of hex chrome (%)

TE = Transfer Efficiency (%)

CE = Control efficiency (%)

Notes:

1. Spray booth filter efficiency only applied to chromium emissions
2. For volatile emissions, transfer and control efficiencies = 0%
3. For enclosed spray booths, capture efficiency equals 100%
4. Default coating density = 8.35 lb/gal (if no data available)
5. Spray Booth #4 is very low volume booth.
6. Spray booth operating hours: 16 hrs/5 days/52 weeks
7. Coating mix ratios applied, as applicable.

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2019 AIR TOXICS INVENTORY REPORT - COMBUSTION EMISSIONS

Bowman Plating
2631 E. 126th Street
Compton, CA
SCAQMD ID No. 18989

Summary of Substances - Combustion Equipment				Emissions (lbs/year)						
Pollutant	**CAS No.**	**TAC Code**	**Emission Factor (lb/mmscf)**	**Spray Booth 4 Heater**	**Boiler 1**	**Boiler 2**	**Boiler 3**	**Oven 1**	**Oven 2**	**Oven 3**
Benzene	71432	2	5.80E-03	1.37E-02	2.60E-02	2.60E-02	2.60E-02	4.11E-03	1.37E-02	1.37E-02
Formaldehyde	50000	12	1.23E-02	2.90E-02	5.52E-02	5.52E-02	5.52E-02	8.71E-03	2.90E-02	2.90E-02
PAHs (excl. Napthalene)	1151	19	1.00E-04	2.36E-04	4.49E-04	4.49E-04	4.49E-04	7.09E-05	2.36E-04	2.36E-04
Napthalene	91203	19	3.00E-04	7.09E-04	1.35E-03	1.35E-03	1.35E-03	2.13E-04	7.09E-04	7.09E-04
Acetaldehyde	75070	29	3.10E-03	7.32E-03	1.39E-02	1.39E-02	1.39E-02	2.20E-03	7.32E-03	7.32E-03
Acrolein	107028	30	2.70E-03	6.38E-03	1.21E-02	1.21E-02	1.21E-02	1.91E-03	6.38E-03	6.38E-03
Ammonia	7664417	32	1.80E+01	4.25E+01	8.08E+01	8.08E+01	8.08E+01	1.28E+01	4.25E+01	4.25E+01
Ethyl Benzene	100414	40	6.90E-03	1.63E-02	3.10E-02	3.10E-02	3.10E-02	4.89E-03	1.63E-02	1.63E-02
Hexane	110543	44	4.60E-03	1.09E-02	2.06E-02	2.06E-02	2.06E-02	3.26E-03	1.09E-02	1.09E-02
Toluene	108883	68	2.65E-02	6.26E-02	1.19E-01	1.19E-01	1.19E-01	1.88E-02	6.26E-02	6.26E-02
Xylene	1330207	70	1.97E-02	4.65E-02	8.84E-02	8.84E-02	8.84E-02	1.40E-02	4.65E-02	4.65E-02
Burner Rating (mmBtu/hr):			9.00	1.00	1.90	1.90	1.90	0.30	1.00	1.00
% Total:			100%	11.11%	21.11%	21.11%	21.11%	3.33%	11.11%	11.11%
2019 Natural Gas Usage (mmscf):			21.256	2.36	4.49	4.49	4.49	0.71	2.36	2.36

Notes:
1. Default emission factors for external combustion of natural gas (SCAQMD Annual Emission Reporting Program)
2. Metered natural gas usage proportionately divided between combustion sources based on maximum burner ratings.

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2019 AIR TOXICS INVENTORY REPORT - COMBUSTION EMISSIONS

Bowman Plating
2631 E. 126th Street
Compton, CA

2019 Natural Gas Usage - Facility Wide

From	To	Meter 1734011	Meter 19230112005
11/29/2018	12/31/2018	2904	13757
12/31/2018	1/30/2019	3588	14714
1/30/2019	3/1/2019	3703	15987
3/1/2019	4/1/2019	3405	15606
4/1/2019	4/30/2019	3305	13462
4/30/2019	5/30/2019	3543	14734
5/30/2019	6/28/2019	3413	13097
6/28/2019	7/30/2019	3225	14645
7/30/2019	8/28/2019	3110	15395
8/28/2019	9/27/2019	2952	14833
9/27/2019	10/28/2019	3179	15328
10/28/2019	11/27/2019	3336	17233
Subtotals (Therms)		39663	178791
Total (Therms)		218454.00	
Total (mmscf)		21.26	

1 therm = 0.0000973 mmscf based on default HHV for Natural Gas, AER Help and Support.

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2019 AIR TOXICS INVENTORY REPORT - ABRASIVE BLASTING

Bowman Plating
2631 E. 126th Street
Compton, CA
SCAQMD ID No. 18989

Summary of Substances - Abrasive Blasting

Permit ID	AER ID	Equipment Name	Substance Name	CAS No.	Annual (lb/year)	Max Hour (lb/hr)	Hourly (g/s)
G55996	ES28	Abrasive Blasting Cabinet (Boeing Mesa)	Nickel	7440-02-0	1.94E-02	1.14E-04	1.43E-05
			Lead	7439-92-1	1.70E-05	1.00E-07	1.26E-08
			Copper	7440-50-8	3.23E-04	1.90E-06	2.39E-07
F83389	ES11	Abrasive Blasting Room	-	-	-		

Notes:
1. Hourly emission rates taken from SCAQMD permit engineering files.
2. Estimated 170 hours of operation for Abrasive Blasting Cabinet.

FORM A	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AB 2588 Program, 21865 COPLEY DR., DIAMOND BAR CA 91765-0949	INVENTORY YEAR 20_____

AB 2588 AIR TOXICS DOCUMENT CERTIFICATION & SUBMITTAL FORM

Please check the appropriate boxes for purpose of submittal:

☐ *INITIAL INFORMATION for ATIR*	☐ *EARLY ACTION REDUCTION PLAN (EARP)*	☐ *INITIAL*
☐ *AIR TOXICS INVENTORY REPORT (ATIR)*	☐ *VOLUNTARY RISK REDUCTION PLAN (VRRP)*	☐ *REVISION*
☐ *HEALTH RISK ASSESSMENT (HRA)*	☐ *IMPLEMENTATION PROGRESS REPORT for VRRP/RRP*	☐ *FINAL*
☐ *RISK REDUCTION PLAN (RRP)*	☐ *OTHER:* _____	

Does your facility participate or wish to participate in VRRP program pursuant to Rule 1402(h)? *YES* ☐ ☐

Please provide the following information:

Facility name

South Coast AQMD ID

Facility SIC/NAICS CODE

Facility Location Address

Mailing Address

Contact Person (Company Official)

Name: **Title:**

Telephone: **eMail:**

Preparer (if different from above)

Name: **Title:**

Company:

Telephone: **eMail:**

FAILURE TO SUBMIT REQUIRED INFORMATION OR KNOWINGLY SUPPLYING FALSE INFORMATION IS PUNISHABLE TO THE EXTENT DEFINED IN HEALTH AND SAFETY CODE SECTIONS 44381(a) AND 44381(b), WHICH INCLUDES MINIMUM FINES OF NOT LESS THAN FIVE HUNDRED DOLLARS.

Signature Of Responsible Company Official

Date

Name Of Responsible Company Official

Title