Prepared for
Anaplex Corporation
Paramount, California

Prepared by
Ramboll US Corporation
Los Angeles, California

Project Number
1690003769

Date
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RULE 1402 RISK REDUCTION PLAN

DECEMBER 2019 REVISION
ANAPLEX CORPORATION
PARAMOUNT, CALIFORNIA

CERTIFICATION OF RESPONSIBLE OFFICIAL [RULE 1402(F)(2)(I)]

I certify that this RRP meets the requirements of SCAQMD Rule 1402.

Carmen Campbell
President

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TABLES

APPENDICES

ACRONYMS AND ABBREVIATIONS

AB2588	SCAQMD Air Toxics "Hot Spot" Information and Assessment Act
APC	Air Pollution Control system
ATIR	Air Toxic Inventory Report
CARB	California Air Resources Board
EARP	Early Action Reduction Plan
HI	Hazard Index risk level
HRA	Health Risk Assessment
MEIR	Maximally Exposed Individual Resident
MEIW	Maximally Exposed Individual Worker
MEK	Methyl Ethyl Ketone
NAICS	North American Industry Classification System
Ramboll	Ramboll US Corporation
RRP	Risk Reduction Plan
PAR	Proposed Amended Rule
PMI	Point of Maximum Impact
PTC	Permit to Construct
SCAQMD	South Coast Air Quality Management District
TAC	Toxic Air Contaminants
ULPA	Ultra Low Particulate Air filters

1. INTRODUCTION

On June 13, 2017, Anaplex Corporation (Anaplex, Facility ID: 016951) submitted a Risk Reduction Plan (Original RRP), prepared by ALG, Inc. Per the request of South Coast Air Quality Management District (AQMD or SCAQMD) and in response to the December 8, 2017, and April 17, 2018 comments on the Original RRP, Anaplex submitted a revised Rule 1402(g)(4) Risk Reduction Plan (May 2018 Revised RRP). In late July and early August 2018, the SCAQMD insisted upon another revision the Health Risk Assessment (HRA) based on an operating schedule that SCAQMD has devised. As a companion to that September 2018 HRA revision, Anaplex submitted an additional revised RRP (September 2018 Revised RRP), which also includes the required elements per Rule 1402(f)(2). The risk reduction measures in the previous RRPs were sufficient to reduce risk significantly below Rule 1402 Action Risk Levels. Based on AQMD's April 24, 2019 letter in response to the September 2018 Revised RRP submittal and subsequent discussions with AQMD staff concerning potential additional risk reduction measures, Anaplex has prepared this RRP submittal (December 2019 Revised RRP) to include AQMD-suggested additional actions in the summary of risk reduction measures. This report follows the guidelines for RRP Reports as adopted by the SCAQMD in November 2016.[1]

As noted in Chapter 6 "Estimation of Post-Implementation Risk", Anaplex risk reduction measures (which were substantially implemented by the end of February 2017) have and will result in risk levels below the SCAQMD Rule 1402 action risk thresholds regardless of operating schedule.

[1] SCAQMD. 2016. SCAQMD Supplemental Guidelines for Preparing Risk Assessments and Risk Reduction Plan for the Air Toxics "Hot Spot" Information and Assessment Act (AB2588). Available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588-supplemental-guidelines.pdf?sfvrsn=9. Accessed April 2018.

2. FACILITY INFORMATION

Facility Name: Anaplex Corporation

SCAQMD Facility ID #: 016951

Facility Address: 15547 Garfield Avenue in Paramount, CA 90723

Standard Industrial Classification (SIC): 3471

The North American Industry Classification System (NAICS): 332813

3. CURRENT RISK CHARACTERIZATION

As discussed in Section 1, Anaplex previously submitted an AB2588 Health Risk Assessment (HRA) and RRP prepared by ALG, Inc to SCAQMD on June 13, 2017 ("Original 2016 HRA). Ramboll prepared a revised HRA ("May 2018 Revised 2016 HRA) in response to the SCAQMD comments on the Air Toxic Inventory Report (ATIR), and Original 2016 HRA. The May 2018 Revised 2016 HRA based on SCAQMD direction indicated the following health risk endpoints as shown in Table 1. These theoretical risks were calculated based on the 2016 emission inventory and include the following emission categories: 1) anodizing tanks 2) plating tanks, 3) boilers, 4) vapor degreaser, 5) spray booths, 6) solvent baths, 7) drying oven, 8) abrasive blasting, and 7) masking area. We note that alternate HRA analyses with manufacturer's filter control efficiency and chromate-containing paint usage ended by SCAQMD in April 2016 show lower risk levels. The May 2018 Revised RRP was based on the Revised 2016 AB2588 HRA per SCAQMD direction.

Based on the results of the Original and Revised 2016 HRA, cancer risk and acute Hazard Index (HI) exceeded Action Risk Level of 25 in a million and 3, respectively. As in the Original 2016 HRA, analysis of the AB2588 HRA results showed that more than 98 percent of the cancer risks and acute HI were due to emissions from the Spray Booth #2 and Methyl Ethyl Ketone (MEK) solvent cleaning, respectively. Upon learning these sources are the major risk contributors, in early 2017, Anaplex evaluated alternative process design or equipment upgrade options to reduce the Toxic Air Contaminants (TAC) emissions from theses emission sources and the associated risks. To this end, Anaplex took the following actions to reduce the impacts from several emission sources in late 2016 and early 2017:

- Discontinued spraying paints containing chromium compounds until a high efficiency filtration system can be installed
- Discontinued using Methyl Ethyl Ketone (MEK) as a solvent cleaner
- Covered the majority of chrome containing tanks at the facility when not in use
- Switched tank solutions for several tanks to non-chrome based solutions
- Taken several tanks out of service permanently
- Added polyballs to multiple chrome containing tanks
- Reduced the temperature in Tank 22

In addition, Anaplex was issued new permits-to-construct (PTCs) for certain anodizing processes and an air pollution control (APC) system in June 2017; the APC system has been constructed and adjustments/modifications are underway so full service operations can begin. Testing of the APC system is currently scheduled for mid-October 2018.

This September 2018 Revised RRP presents minor clarifications and describes the previous and on-going implementation of risk reduction measures at the facility, to further reduce risks in accordance with SCAQMD Rule 1402. Note that after MEK was removed, Nickel became the major driver, where the immune system is the target organ based on the Revised 2016 HRA results. Nearly all nickel emissions are from plating and anodizing tanks.

Table 1. Summary of September 2018 Revised HRA Results

Risk/Hazard Index	September 2018 Revised 2016 HRA with SCAQMD Operating Schedule (HRA1)	September 2018 Revised 2016 HRA with Anaplex Operating Schedule (HRA2)	September 2018 Alternate HRA3 (HRA2 with 95% filter efficiency)
Maximally Exposed Individual Resident cancer risk	931 in a million	356 in a million	127 in a million
Maximally Exposed Individual Worker cancer risk	2,836 in a million	5,133 in a million	1,730 in a million
Maximum Chronic Hazard Index, Resident	0.06	0.03	-
Maximum Chronic Hazard Index, Worker	2.01	1.46	-
Maximum 8-hour Chronic Hazard Index	0.11	0.07	-
Maximum Acute Hazard Index, Point of Maximum Impact (PMI)	24	24	-

4. SOURCES FOR RISK REDUCTION

In anticipation of risk reduction requirements in Rule 1402, Anaplex has taken actions to reduce emissions and associated risks since late 2016 as documented in the March 13, 2017 Early Action Reduction Plan (EARP). Results of the Original and Revised 2016 HRAs indicate that the cancer risks at the Maximally Exposed Individual Resident (MEIR) and Maximally Exposed Individual Worker cancer risk (MEIW), cancer burden, and acute HI at the PMI/MEIW exceed the SCAQMD Rule 1402 Action Risk Level of 25 in one million for cancer risk, 0.5 for cancer burden, and 3 for HI, respectively. Thus, identification of sources from which risk needs to be reduced, as required in SCAQMD Rule 1402(f)(2)(C), will focus on these risk metrics.

As shown in the May 2018 Revised 2016 HRA and summarized in the tables below, over 99% of the calculated cancer risk at the modeled MEIW is due to emissions from chromate compounds, largely from the chromate-containing paints. 98% of the calculated acute HI at the modeled MEIW is due to MEK from solvent cleaning. Therefore, the risk reduction focus is on the chromate emission sources. Further control of these potential point source and fugitive emissions will significantly reduce emissions and be sufficient to reduce the associated risk or HI below the Rule 1402 Action Risk Levels.

As noted in the May 2018 Revised 2016 HRA, Spray Booth #2 chromate emissions are based on total chromate-containing paint purchases, not actual usage (for which records are not complete and/or are not available). Anaplex halted the use of chromate-containing paints after April 20, 2016, based on a SCAQMD directive. In addition, Anaplex believes the spray booth filters control efficiency is at 95% or higher, while SCAQMD directed to use 90% for the 2016 HRA. Therefore, alternate HRA analyses were preformed assuming only 1/3rd of the purchased paints were used (e.g., 4 months out of 12) and 95% filter control efficiency. The cancer risks were substantially lower in the alternate HRA analysis (cancer risks in a million of 879 and 8 for off-site worker and residential receptor, respectively). Regardless, requirements for this RRP are based on the results in the table above (i.e., HRA based on chromate-containing paint purchases, not actual usage), which is conservative.

Table 2a. May 2018 2016 HRA Risk Breakdown at MEIR, MEIW, and PMI Locations (Reproduced from the May 2018 RRP)

Receptor Location	Health Effect	Total Risk or HI	Major Risk Contributors[1]		
			Chemical	Risk or HI by Chemical	Percentage of total
MEIR	Cancer	356	Strontium Chromate	340	95%
			Other chromate compounds[2]	16	4.5%
MEIW	Cancer	5,133	Strontium Chromate	5037	98%
			Other chromate compounds[2]	87	1.7%
PMI	Acute HI	24	MEK	23.4	98%

[1] Obtained from the AB2588 HRA using 2016 emissions inventory.
[2] Including hexavalent chromium, sodium dichromate, chromium trioxide, and barium chromate

Table 2b. September 2018 2016 HRA Risk Breakdown at MEIR, MEIW, and PMI Locations (SCAQMD operating schedule)

Receptor Location	Health Effect	Total Risk or HI	Major Risk Contributors[1]		
			Chemical	Risk or HI by Chemical	Percentage of total
MEIR	Cancer	931	Strontium Chromate	901	97%
			Other chromate compounds[2]	30	3.2%
MEIW	Cancer	2,836	Strontium Chromate	2780	98%
			Other chromate compounds[2]	53	1.8%
PMI	Acute HI	24	MEK	23.4	98%

[1] Obtained from the AB2588 HRA using 2016 emissions inventory.
[2] Including hexavalent chromium, sodium dichromate, chromium trioxide, and barium chromate

5. EVALUATION AND SPECIFICATION OF RISK REDUCTION MEASURES

Anaplex identified the risk reduction measures to reduce potential impacts from the major risk contributors: 1) spray booth, 2) solvent cleaning, and 3) other chromate compound emissions from anodizing and plating tanks at the facility. Proposed control methods with their control efficiency and implementation schedule are presented in Table 4. Description of risk reduction measures is provided below. Estimated emission/risk reductions approximate and are based on information known to date.

The September 2018 Revised RRP did not change any of the risk reduction measures in the May 2018 RRP, as most of them were implemented by early 2017 and the rest were/are being implemented through SCAQMD permitting (e.g., the APC system for select anodizing area tanks). Based on AQMD's April 24, 2019 letter in response to the September 2018 Revised RRP submittal and subsequent discussions with AQMD staff concerning potential additional risk reduction measures, Anaplex has prepared this RRP submittal (December 2019 Revised RRP) to include AQMD-suggested additional actions in the summary of risk reduction measures. Table 3a describes the May 2018 post-risk reduction measure risk by emission source for the Anaplex operating schedule and SCAQMD's direction to use a 90% spray booth filter efficiency. Table 3b describes the May 2018 post-risk reduction measure risk by emission source for the SCAQMD operating schedule and SCAQMD's direction to use a 90% spray booth filter efficiency (September 2018 HRA1). The completion dates provided in Table 4 are based upon best estimates at this time. Future issues that may arise from permitting and approval from the SCAQMD, local and/or other agencies or delays in procurement of certain equipment may affect proposed schedules presented herein.

Risk Reduction Measures for Spray Booth #2

Anaplex proposed to install higher particulate control on Spray Booth #2 using Ultra Low Particulate Air filters (ULPAs), which have a control efficiency up to 99.9995% control for particles of 3 microns or greater. The facility has temporarily discontinued use of chromate-containing paints and submitted a permit application for the proposed ULPA filter in March 2017. A permit-to-construct for the ULPA Air Pollution Control system (APC) was issued on October 9, 2017. Coating logs of paints used are also kept for all spray booths to ensure no chromate-containing paints are being used in the other spray booths. The permit-to-construct (PTC) for Spray Booth #2 was extended for one year (until October 2019) to allow time for related City permitting action.

Risk Reduction Measures for Anodizing Tanks

To control TAC emissions from multiple anodizing and plating tanks, Anaplex submitted a permit application to install APC equipment. A system of fume scrubbers and ULPA filters was proposed for Tanks 3, 4, and 22 to control hexavalent chromium emissions, nickel compounds emissions and acid emissions. A permit application for these tanks was submitted in January 20, 2017. Per SCAQMD, a more detailed APC permit application for five tanks (four anodizing, and one plating) and responses to additional information request were submitted in March and early April 2017. The APC includes a negative pressure collection system to minimize fugitive emissions for the anodizing tanks. After the Original RRP was prepared and the APC PTC was approved, the latest Proposed Amended Rule (PAR) 1469

presentations stated that chromium-containing tanks at less than 140 degrees with no air-agitation or electrolytic would not require venting to an APC. Tank #39 (Passivate Type II) on the plating side of Anaplex can be operated at 130 degrees without air agitation or rectification Based on this latest information, Anaplex requested on November 30, 2017 to have Tank #39 (Passivate Type II) conditions modified to reflect these conditions: heated (max temp: 130 degrees) with polyballs (rather than vented to the APC). Per a 12/6/2017 email from Azar Dabiri, the SCAQMD agreed that Plating Tank #39 no longer needs to be vented to the APC: "I have discussed with the management about your request. You can proceed with the changes requested on the email dated on November 30, 2017 for Tank #39. The District will update the final permit to operate with the modifications that you requested for Tank #39 (passivation tank) under Permit to Construct with A/N P/O # 594011." The Revised RRP risk reduction estimates were revised based on this change (e.g., polyballs, not vented to APC with ULPA).

In addition, a mist eliminator will be installed to remove moisture from the ULPA inlet to ensure the integrity of the filter efficiency, per the APC PTC (see Appendix A). The APC PTC was issued on June 13, 2017 and was extended to December 12, 2018. Anaplex has installed the air pollution control (APC) system (Permit-to-Construct (PTC) #593136) and began initial mechanical testing and commissioning of the system on June 12, 2018. Anaplex is currently working to finalize the APC system and related tank modifications so that full service operations can begin and required source testing done. Anaplex is continuing to work on the system (i.e. gauges, pressure, etc.). A source testing protocol was submitted to SCAQMD on August 24, 2018 and conditionally approved by SCAQMD on September 6, 2018.

Table 3a. Summary of Reduction Measures (Updated from the May 2018 RRP with Additional AQMD-Suggested Actions)

Operation Area	Emission Source	HRA Reported Risk			Risk Reduction Measures					Post Risk Reduction Measure Risk	
		Carcinogen (risk in a million)	Acute (PMI)[2]	Risk and Pollutant of Concern	Available Measures / Risk Reduction Potential	Anticipated Implementation Time	Risk Reduction Measure to Be Implemented	Anticipated Permit Application Submittal	Anticipated Schedule for Implementation	Carcinogen	Acute (PMI)[2]
Anodizing	**Tank 1**	3.25 (MEIW) 1.59 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	1) Reformulated to a non-chromium based solution. 2) Operate tank at ambient temperatures.	--	Implemented 4/21/2017	0.00 (MEIW) 0.00 (MEIR)	0.00
Anodizing	**Tank 3**	1.24 (MEIW) 0.57 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Will connect to APC (fume scrubber and ULPA).	Submitted 3/30/2017	Permitted 9/2017; Implemented 10/2018	< 0.01 (MEIW) < 0.01 (MEIR)	0.00
Anodizing	**Tank 4**	0.62 (MEIW) 0.02 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Will connect to APC (fume scrubber and ULPA).	Submitted 3/30/2017	Permitted 9/2017; Implemented 10/2018	< 0.01 (MEIW) < 0.01 (MEIR)	0.00
Anodizing	**Tank 19**	0.31 (MEIW) 0.15 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Will connect to APC (ULPA only).	Submitted 3/30/2017	Permitted 9/2017; Implemented 10/2018	< 0.01 (MEIW) < 0.01 (MEIR)	0.00
Anodizing	**Tank 22**	17.4 (MEIW) 7.9 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	1) Will connect to APC (fume scrubber and ULPA). 2) Air sparging has been discontinued.	Submitted 3/30/2017	Permitted 9/2017; Implemented 10/2018 Air sparging discontinued 12/2016	< 0.01 (MEIW) < 0.01 (MEIR)	0.00
Anodizing	**Tank 33**	3.1 (MEIW) 0.24 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Reformulated to a non-chromium based solution.	--	Implemented 2/22/2017	0.00 (MEIW) 0.00 (MEIR)	0.00
Anodizing	**Tank 37**	0.00 (MEIW) 0.00 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	1) Polyballs have been added to the tank. 2) Air sparging has been discontinued.	--	Polyballs added 2/2017 Air sparging discontinued 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Anodizing	**Tank 42**	0.00 (MEIW) 0.00 (MEIR)	0.00	Acute/ Nitric Acid	See Table 4	See Table 4	Tank was permanently removed from service.	--	Tank removed 11/2016	0.00 (MEIW) 0.00 (MEIR)	0.00

Table 3a. Summary of Reduction Measures (Updated from the May 2018 RRP with Additional AQMD-Suggested Actions)

Operation Area	Emission Source	HRA Reported Risk			Risk Reduction Measures					Post Risk Reduction Measure Risk	
		Carcinogen (risk in a million)	Acute (PMI)[2]	Risk and Pollutant of Concern	Available Measures / Risk Reduction Potential	Anticipated Implementation Time	Risk Reduction Measure to Be Implemented	Anticipated Permit Application Submittal	Anticipated Schedule for Implementation	Carcinogen	Acute (PMI)[2]
Anodizing	**Tank 43**	0.82 (MEIW) 0.39 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Air sparging has been discontinued.	--	Air sparging discontinued 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Anodizing	**Tank 46**	< 0.01 (MEIW) < 0.01 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Tank was permanently removed from service.	--	Tank removed 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Plating	**Tank 27**	0.00 (MEIW) 0.00 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Reformulated to a non-chromium based solution.	--	Implemented 2/22/2017	0.00 (MEIW) 0.00 (MEIR)	0.00
Plating	**Tank 32**	0.03 (MEIW) 0.02 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	1) Polyballs have been added to the tank. 2) Air sparging has been discontinued.	--	1) Added 2/2017 2) Discontinued 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Plating	**Tank 39**	1.03 (MEIW) 0.47 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Polyballs will be added the tank.	Submitted 3/30/2017	Polyballs added; no further permitted controls needed (per AQMD)	0.36 (MEIW) 0.16 (MEIR)	0.00
Plating	**Tank 39-A**	0.00 (MEIW) 0.00 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Tank was permanently removed from service.	--	Tank removed 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Plating	**Tank 50**	0.00 (MEIW) 0.00 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	1) Polyballs have been added to the tank. 2) Air sparging has been discontinued.	--	1) Added 2/2017 2) Discontinued 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Plating	**Tank 52**	0.00 (MEIW) 0.00 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Polyballs have been added to the tank.	--	Added 2/2017	0.00 (MEIW) 0.00 (MEIR)	0.00
Plating	**Tank 56**	0.00 (MEIW) 0.00 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Tank was permanently removed from service.	--	Tank removed 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Plating	**Tank 60**	0.00 (MEIW) 0.00 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Tank was permanently removed from service.	--	Tank removed 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Spray Booths	**#2**	5,106 (MEIW) 344 (MEIR)	0.00	Carcinogen/ Chrome	1) Operational changes. 2) Connection to APC (ULPA filter)	1) Immediate. 2) w/in 1 year of issuance of a PTC.	1) Temporarily discontinued use of chrome containing paints. 2) Re-permit with an ULPA filtration system to reduce risk of chrome-containing paints.	March 20, 2017 for HEPA; updated submittal with ULPA.	1) before April 20, 2016 2) ULPA implemented 9/2019	1.97 (MEIW) 0.11 (MEIR)	0.00

Table 3a. Summary of Reduction Measures (Updated from the May 2018 RRP with Additional AQMD-Suggested Actions)

Operation Area	Emission Source	HRA Reported Risk			Risk Reduction Measures					Post Risk Reduction Measure Risk	
		Carcinogen (risk in a million)	Acute (PMI)[2]	Risk and Pollutant of Concern	Available Measures / Risk Reduction Potential	Anticipated Implementation Time	Risk Reduction Measure to Be Implemented	Anticipated Permit Application Submittal	Anticipated Schedule for Implementation	Carcinogen	Acute (PMI)[2]
Solvent Degreaser - Manual Operations (Outside)	**Solvent Use**	0.00 (MEIW) 0.00 (MEIR)	22.49	Acute/ MEK	Operational changes.	Discontinued 12/2016	Discontinued use of methyl ethyl ketone (MEK) solvent and replaced with acetone.	--	Discontinued 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Action 1 – Roof Coating	**--**	--	--	--	--	--	1) Removal of loose materials on the roof, cleaning and coating of all vent casings, cleaning of vent pipes, and sealing of 90% of roof vents. 2) HEPA vacuuming of rooftop. 3) As a part of ULPA APC construction, primed the roof of 15547 Garfield Avenue with elastomeric coating, re-sealed associated vents. 4) HEPA vacuumed and applied elastomeric coatings to the roofs of 15547 and 15555 Garfield Avenue.	--	1) Completed 12/2016 2) 2017-2019 3) 10/2018 4) 11/2/2019	--	--
Action 2 – Housekeeping and Maintenance	**--**	--	--	--	--	--	Anaplex will continue housekeeping actions listed in Appendix B.	--	Ongoing since 3/2017	--	--
Action 3 – Roof Blowers and Vents	**--**	--	--	--	--	--	Redirected air from blowers from the Tier III tanks in a skyward direction and permanently sealed the four roof vents above the chromic and sodium dichromate tanks.	--	10/2018	--	--
Action 4 – Plastic Strip Curtains	**--**	--	--	--	--	**--**	Continue to use a plastic curtain to divide the anodizing and shipping areas and comply with the Rule 1469(e)(1) enclosure requirements.	--	4/2017	--	--
Action 5 – Ducting and Stack Cleaning	**--**	--	--	--	--	--	Thoroughly clean all spray booths and relevant ducting and stacks.	--	2/2017	--	--
Action 6 – Minimization of Hexavalent Chromium	**--**	--	--	--	--	--	Procedures to minimize the potential to disturb/create hexavalent chromium containing fugitive dust as detailed in Appendix C.	--	Continuing. Additional recordkeeping began 7/2019	--	--

Table 3a. Summary of Reduction Measures (Updated from the May 2018 RRP with Additional AQMD-Suggested Actions)

Operation Area	Emission Source	HRA Reported Risk			Risk Reduction Measures					Post Risk Reduction Measure Risk	
		Carcinogen (risk in a million)	Acute (PMI)[2]	Risk and Pollutant of Concern	Available Measures / Risk Reduction Potential	Anticipated Implementation Time	Risk Reduction Measure to Be Implemented	Anticipated Permit Application Submittal	Anticipated Schedule for Implementation	Carcinogen	Acute (PMI)[2]
Overall Facility Total[1]		5,133 (MEIW) 356 (MEIR)	23.80							5.82 (MEIW) 0.69 (MEIR)	2.89

Notes:

[1] Facility total includes risk values from operations at the facility which do not require risk reduction and which are not shown on this risk reduction table.

[2] The acute risk reported for Solvent Degreaser above is based on the respiratory system at the PMI (receptor #17), and the majority of the risk is from MEK. Once MEK was removed, Nickel became the major driver, where immune system is the target organ at receptor #3 on the eastern boundary of the facility. Nearly all nickel emissions are from plating and anodizing tanks. Therefore, for risk reduction purposes, the acute HI for plating and anodizing tanks presented in this table is based on the new PMI location after MEK was removed.

Table 3b. Summary of Reduction Measures (Updated from the May 2018 RRP with RRP with Additional AQMD-Suggested Actions and SCAQMD Operating Schedule)

Operation Area	Emission Source	HRA Reported Risk			Risk Reduction Measures					Post Risk Reduction Measure Risk	
		Carcinogen (risk in a million)	Acute (PMI)[2]	Risk and Pollutant of Concern	Available Measures / Risk Reduction Potential	Anticipated Implementation Time	Risk Reduction Measure to Be Implemented	Anticipated Permit Application Submittal	Anticipated Schedule for Implementation	Carcinogen	Acute (PMI)[2]
Anodizing	**Tank 1**	2.13 (MEIW) 2.35 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	1) Reformulated to a non-chromium based solution. 2) Operate tank at ambient temperatures.	--	Implemented 4/21/2017	0.00 (MEIW) 0.00 (MEIR)	0.00
Anodizing	**Tank 3**	0.81 (MEIW) 0.87 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Will connect to APC (fume scrubber and ULPA).	Submitted 3/30/2017	Permitted 9/2017; Implemented 10/2018	< 0.01 (MEIW) < 0.01 (MEIR)	0.00
Anodizing	**Tank 4**	0.41 (MEIW) 0.44 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Will connect to APC (fume scrubber and ULPA).	Submitted 3/30/2017	Permitted 9/2017; Implemented 10/2018	< 0.01 (MEIW) < 0.01 (MEIR)	0.00
Anodizing	**Tank 19**	0.21 (MEIW) 0.23 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Will connect to APC (ULPA only).	Submitted 3/30/2017	Permitted 9/2017; Implemented 10/2018	< 0.01 (MEIW) < 0.01 (MEIR)	0.00

Table 3b. Summary of Reduction Measures (Updated from the May 2018 RRP with RRP with Additional AQMD-Suggested Actions and SCAQMD Operating Schedule)

Operation Area	Emission Source	HRA Reported Risk			Risk Reduction Measures					Post Risk Reduction Measure Risk	
		Carcinogen (risk in a million)	Acute (PMI)[2]	Risk and Pollutant of Concern	Available Measures / Risk Reduction Potential	Anticipated Implementation Time	Risk Reduction Measure to Be Implemented	Anticipated Permit Application Submittal	Anticipated Schedule for Implementation	Carcinogen	Acute (PMI)[2]
Anodizing	**Tank 22**	11.3 (MEIW) 12.2 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	1) Will connect to APC (fume scrubber and ULPA). 2) Air sparging has been discontinued.	Submitted 3/30/2017	Permitted 9/2017; Implemented 10/2018 Air sparging discontinued 12/2016	< 0.01 (MEIW) < 0.01 (MEIR)	0.00
Anodizing	**Tank 33**	1.7 (MEIW) 0.59 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Reformulated to a non-chromium based solution.	--	Implemented 2/22/2017	0.00 (MEIW) 0.00 (MEIR)	0.00
Anodizing	**Tank 37**	0.00 (MEIW) 0.00 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	1) Polyballs have been added to the tank. 2) Air sparging has been discontinued.	--	Polyballs added 2/2017 Air sparging discontinued 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Anodizing	**Tank 42**	0.00 (MEIW) 0.00 (MEIR)	0.00	Acute/ Nitric Acid	See Table 4	See Table 4	Tank was permanently removed from service.	--	Tank removed 11/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Anodizing	**Tank 43**	0.54 (MEIW) 0.60 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Air sparging has been discontinued.	--	Air sparging discontinued 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Anodizing	**Tank 46**	< 0.01 (MEIW) < 0.01 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Tank was permanently removed from service.	--	Tank removed 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Plating	**Tank 27**	0.00 (MEIW) 0.00 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Reformulated to a non-chromium based solution.	--	Implemented 2/22/2017	0.00 (MEIW) 0.00 (MEIR)	0.00
Plating	**Tank 32**	0.02 (MEIW) 0.02 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	1) Polyballs have been added to the tank. 2) Air sparging has been discontinued.	--	1) Added 2/2017 2) Discontinued 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Plating	**Tank 39**	0.67 (MEIW) 0.72 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Polyballs will be added the tank.	Submitted 3/30/2017	Polyballs added; no further permitted controls needed (per AQMD)	0.24 (MEIW) 0.25 (MEIR))	0.00

Table 3b. Summary of Reduction Measures (Updated from the May 2018 RRP with RRP with Additional AQMD-Suggested Actions and SCAQMD Operating Schedule)

Operation Area	Emission Source	HRA Reported Risk			Risk Reduction Measures					Post Risk Reduction Measure Risk	
		Carcinogen (risk in a million)	Acute (PMI)[2]	Risk and Pollutant of Concern	Available Measures / Risk Reduction Potential	Anticipated Implementation Time	Risk Reduction Measure to Be Implemented	Anticipated Permit Application Submittal	Anticipated Schedule for Implementation	Carcinogen	Acute (PMI)[2]
Plating	**Tank 39-A**	0.00 (MEIW) 0.00 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Tank was permanently removed from service.	--	Tank removed 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Plating	**Tank 50**	0.00 (MEIW) 0.00 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	1) Polyballs have been added to the tank. 2) Air sparging has been discontinued.	--	1) Added 2/2017 2) Discontinued 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Plating	**Tank 52**	0.00 (MEIW) 0.00 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Polyballs have been added to the tank.	--	Added 2/2017	0.00 (MEIW) 0.00 (MEIR)	0.00
Plating	**Tank 56**	0.00 (MEIW) 0.00 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Tank was permanently removed from service.	--	Tank removed 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Plating	**Tank 60**	0.00 (MEIW) 0.00 (MEIR)	0.00	Carcinogen/ Chrome	See Table 4	See Table 4	Tank was permanently removed from service.	--	Tank removed 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Spray Booths	**#2**	2,186 (MEIW) 912 (MEIR)	0.49	Carcinogen/ Chrome	1) Operational changes. 2) Connection to APC (ULPA filter)	1) Immediate. 2) w/in 1 year of issuance of a PTC.	1) Temporarily discontinued use of chrome containing paints. 2) Re-permit with an ULPA filtration system to reduce risk of chrome-containing paints.	March 20, 2017 for HEPA; updated submittal with ULPA.	1) before April 20, 2016 2) ULPA implemented 9/2019	1.09 (MEIW) 0.26 (MEIR)	0.49
Solvent Degreaser - Manual Operations (Outside)	**Solvent Use**	0.00 (MEIW) 0.00 (MEIR)	22.49	Acute/ MEK	Operational changes.	Discontinued 12/2016	Discontinued use of methyl ethyl ketone (MEK) solvent and replaced with acetone.	--	Discontinued 12/2016	0.00 (MEIW) 0.00 (MEIR)	0.00
Action 1 – Roof Coating	**--**	--	--	--	--	--	1) Removal of loose materials on the roof, cleaning and coating of all vent casings, cleaning of vent pipes, and sealing of 90% of roof vents. 2) HEPA vacuuming of rooftop. 3) As a part of ULPA APC construction, primed the roof of 15547 Garfield Avenue with elastomeric coating, re-sealed associated vents. 1) HEPA vacuumed and applied elastomeric coatings to the roofs of 15547 and 15555 Garfield Avenue.	--	1) Completed 12/2016 2) 2017-2019 3) 10/2018 4) 11/2/2019	--	--
Action 2 – Housekeeping and Maintenance	**--**	--	--	--	--	--	Anaplex will continue housekeeping actions listed in Appendix B.	--	Ongoing since 3/2017	--	--

Table 3b. Summary of Reduction Measures (Updated from the May 2018 RRP with RRP with Additional AQMD-Suggested Actions and SCAQMD Operating Schedule)

Operation Area	Emission Source	HRA Reported Risk			Risk Reduction Measures					Post Risk Reduction Measure Risk	
		Carcinogen (risk in a million)	Acute (PMI)[2]	Risk and Pollutant of Concern	Available Measures / Risk Reduction Potential	Anticipated Implementation Time	Risk Reduction Measure to Be Implemented	Anticipated Permit Application Submittal	Anticipated Schedule for Implementation	Carcinogen	Acute (PMI)[2]
Action 3 – Roof Blowers and Vents	**--**	--	--	--	--	--	Redirected air from blowers from the Tier III tanks in a skyward direction and permanently sealed the four roof vents above the chromic and sodium dichromate tanks.	--	10/2018	--	--
Action 4 – Plastic Strip Curtains	**--**	--	--	--	--	**--**	Continue to use a plastic curtain to divide the anodizing and shipping areas and comply with the Rule 1469(e)(1) enclosure requirements.	--	4/2017	--	--
Action 5 – Ducting and Stack Cleaning	**--**	--	--	--	--	--	Thoroughly clean all spray booths and relevant ducting and stacks.	--	2/2017	--	--
Action 6 – Minimization of Hexavalent Chromium	**--**	--	--	--	--	--	Procedures to minimize the potential to disturb/create hexavalent chromium containing fugitive dust as detailed in Appendix C.	--	Continuing. Additional recordkeeping began 7/2019	--	--
Overall Facility Total[1]		2,836 (MEIW) 931 (MEIR)	23.80							3.35 (MEIW) 1.27 (MEIR)	2.90

Notes:

[1] Facility total includes risk values from operations at the facility which do not require risk reduction and which are not shown on this risk reduction table.

[2] The acute risk reported for Solvent Degreaser above is based on the respiratory system at the PMI (receptor #17), and the majority of the risk is from MEK. Once MEK was removed, Nickel became the major driver, where immune system is the target organ at receptor #3 on the eastern boundary of the facility. Nearly all nickel emissions are from plating and anodizing tanks. Therefore, for risk reduction purposes, the acute HI for plating and anodizing tanks presented in this table is based on the new PMI location after MEK was removed.

Table 4. Available Control Measures and Implementation Schedule

Control Type	% Control	Implementation Time	Notes
Reformulate Solution	100%	w/in 6 months Completed in February 2017	Reformulation not possible for all tanks
Connect to APC (Fume Scrubber)	99%	w/in 1 year after PTC is issued PTC extended to December 2018 to complete commissioning and source testing	To abate acids
Connect to APC (ULPA Filter)	99.9995%	w/in 1 year after PTC is issued PTC extended to October 2019 No chromate-containing paint spraying allowed until APC connection	To abate particulate matter
Use of Fume Suppressant	96.8%	w/in 2 months after approval of June 2017 RRP Completed for tanks approved by SCAQMD	--
Use of Polyballs	65%	w/in 2 months after approval of June 2017 RRP Completed for tanks approved by SCAQMD	
Other process/ operational changes	variable	variable	--

6. ESTIMATION OF POST-IMPLEMENTATION RISK

Based on the estimated emissions reductions associated with the proposed or equivalent Risk Reduction Measures currently implemented and/or proposed and discussed in Section 5 above, Anaplex has projected the facility-wide risk that would remain after the implementation of all the above-described measures using the emission ratio of pre-control and post-control. A summary of the key results metrics are summarized in Table 5:

Table 5. Post-Implementation Risk Summary

	MEIW	MEIR	PMI
SCAQMD operating schedule and 90% filter (HRA1 – September 2018 HRA)	3.4 in a million	1.3 in a million	2.89
Anaplex operating schedule and SCAQMD 90% filter (HRA2 – September 2018 HRA)	5.8 in a million	0.7 in a million	2.89
24/7/365 operating schedule and SCAQMD 90% filter	2.5 in a million	1.5 in a million	2.89
Rule 1402 Thresholds	25 in a million	25 in a million	3
Percent of Threshold	10% - 23%	3% - 6%	96%

As shown above, implementation of the proposed or equivalent risk reduction measures, modeled cancer risks at the MEIW and MEIR for Anaplex's operating schedule will be reduced to 5.8 and 0.7 in a million, respectively, and modeled acute HI at PMI will be reduced to 2.89. ***Regardless of operating schedule, the cancer risks are below public notification threshold of 10 and below the SCAQMD Rule 1402 Action Risk Level of 25 in a million for cancer risk.*** Both the chronic HI and acute HI at the MEIW are also below the SCAQMD Rule 1402 Action Risk Level of 3. The modeled maximum chronic HIs all remain below the SCAQMD Rule 1402 Action Risk Levels as those stated in the 2016 HRA. In summary, Anaplex's future operations (regardless of operating schedule) and risk profile satisfy Rule 1402 standards, based on implementation of the measures proposed (or equivalent measures).

Source Testing

Upon completion of the mitigation measures described in this RRP, Anaplex plans to conduct testing of the new control devices. Anaplex will submit to SCAQMD a source test protocol at least 3 weeks prior to conducting the testing, which must be approved by SCAQMD before testing is conducted.

7. REFERENCES

California Air Resources Board (CARB). 2015. Hotspots Analysis and Reporting Program (HARP). California Environmental Protection Agency. Version 2. April. Available online at http://www.arb.ca.gov/toxics/harp/harp.htm.

Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February. Available online at http://oehha.ca.gov/air/hot_spots/hotspots2015.html.

South Coast Air Quality Management District (SCAQMD). 2016. Supplemental Guidelines for Preparing Risk Assessments and Risk Reduction Plan for the Air Toxics "Hot Spot" Information and Assessment Act (AB2588). November. Available online at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588-supplemental-guidelines.pdf?sfvrsn=9.

APPENDIX A
PERMIT TO CONSTRUCT FOR ANODIZING TANKS #3, 4, 19 AND 22 AIR POLLUTION CONTROL (APC)

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

PERMIT TO CONSTRUCT

Application No. 593136

Granted as of 6/13/2017

ID 16951

Legal Owner or Operator:

ANAPLEX CORP
15547 GARFIELD AVE
PARAMOUNT, CA 90723-4033

Equipment Location: 15547 GARFIELD AVE, PARAMOUNT, CA 90723-4033

Equipment Description :

Air Pollution Control System Consisting of:

1. Five Two-stage Mesh Pad Mist Eliminators, RB Fiberglass Products, Model No. RB Mist, Consisting of:
   a) Tank No. 3 (Dow 17) Stage 1 & 2 Mesh Pads, Each 1'-4" W. x 4'-1" L. x 0'-4" D.
   b) Tank No. 4 (Dow 7) Stage 1 & 2 Mesh Pads, Each 1'-4" W. x 4'-1" L. x 0'-4" D.
   c) Tank No. 19 (Chromic Acid Anodizing) Stage 1 & 2 Mesh Pads, Each 1'-7" W. x 10'-0" L. x 0'-4" D.
   d) Tank No. 22 (Dichromate Seal) Stage 1 & 2 Mesh Pads, Each 1'-7" W. x 8'-4" L. x 0'-4" D.
   e) ~~Tank No. 39 (Passivate Type II) Stage 1 & 2 Mesh Pads, Each 1'-3" W. x 6'-1" L. x 0'-4" D.~~ N/A
2. Wet Scrubber, RB Fiberglass Products, Model No. RB ANAS, Horizontal Packed Bed Type, 5'-0" Dia. x 11'-3" L., with 6-ft. of 3.5" Lanpac Packing Media, Pre- and Post-treatment Mist Eliminators, and a Recirculation Pump, Venting Tank Nos. 3 (Dow 17), 4 (Dow 7), 22 (Dichromate Seal), and ~~39 (Passivate Type II)~~. N/A
3. ULPA Filtration System, RB Fiberglass Products, Model No. FRP ULPA Anaplex, 7'-7" W. x 9'-6" L. x 7'-7" H., with Nine 24" x 24" x 1" Pre-filters and Nine 24" x 24" x 12" ULPA Filters, Venting Tank Nos. 3 (Dow 17), 4 (Dow 7), 19 (Chromic Acid Anodizing), 22 (Dichromate Seal), and ~~39 (Passivate Type II)~~. N/A
4. Exhaust System, 17,500 CFM, with a 40-H.P. Blower.

Conditions :

1. Operation of this equipment shall be conducted in accordance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
2. This equipment shall be properly maintained and kept in good operating condition at all times.

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3. This equipment shall be in full use whenever any of the tanks vented to it is in operation, or has an above-ambient temperature, or is air-sparged.

4. This equipment shall be operated in compliance with Rule 1155.

5. The ULPA filters used in this equipment shall be individually DOP (or equivalent) tested with 0.3 micron particles and certified to have an efficiency of no less than 99.9995%.

6. The ULPA filters used in this equipment shall be high capacity filters with a rated air flow capacity not less than 2000 scfm.

7. A flow meter, indicating gallons per minute, shall be installed and maintained in the solution supply line to the scrubber nozzles.

8. The total flow rate of the scrubbing solution supplied to the nozzles shall not be less than 185 gallons per minute whenever the scrubber is in operation.

9. The blowdown rate of the scrubber shall be maintained at 0.5 gpm.

10. A pH measuring device shall be installed and maintained to indicate the pH in the scrubbing solution.

11. The scrubbing solution shall be maintained at a pH value between 7.5 and 8.

12. The pH measuring device shall be calibrated at least once per month, and more often, if necessary, to ensure the accuracy of the indicator readings.

13. The viewing ports associated with the scrubber nozzles shall be kept clean, so as not to obstruct viewing of the nozzles.

14. Separate mechanical gauges shall be installed and maintained to indicate, in inches of water column, the static pressure differential across each stage of the filters. The scale on the gauges shall not exceed four times the limits specified in Condition No. 15.

15. The static pressure differential shall remain within the following ranges:

Mesh Pad (Combined Across Stgs 1 & 2)	1"	-	3"
Packed Bed	1"	-	3"
Scrubber Pre-treatment M.E.	1.25"	-	3.25"
Scrubber Post-treatment M.E.	0"	-	1.5"
Pre-filter for ULPA	0"	-	0.3"
ULPA	1.1"	-	3.5"

16. The gauges described in this permit shall be located so that they can be easily viewed and are in clear sight of the operation and maintenance personnel.

17. The operator shall maintain a weekly record of the static pressure differentials to verify compliance with Condition No. 15.

18. The specific operation and maintenance activities identified in the Operation and Maintenance (O&M) Plan shall be instituted if the static pressure differential across any filter stage exceeds its respective static pressure differential limit.

19. The exhaust stack of this equipment shall discharge in an upward direction, with no weather cap, and the height of the exhaust outlet shall not be less than 24 feet above ground level.

20. Hexavalent chromium emissions discharged to the atmosphere from Tank Nos. 3 (Dow 17) and 19 (Chromic Acid Anodizing) shall not exceed 0.0015 milligram per ampere-hour.

21. The operator shall comply with the inspection and maintenance requirements listed below:

    A. Quarterly visual inspection of the equipment to ensure there is proper drainage, no unusual chromic acid buildup and no evidence of chemical attack that affects the structural integrity of the equipment.

    B. Quarterly visual inspection of the ULPA filters to ensure there is no breakthrough of chromic acid mist.

    C. Quarterly visual inspection of the ductwork from the tanks to the control device to ensure there are no leaks.

    D. Repair any leaks detected before further operating the equipment.

    E. Replace mesh pads, packing media and ULPA filters whenever necessary in accordance with the manufacturer's recommendations.

22. The operator shall maintain inspection and maintenance records for the mesh pads, packing media, ULPA filters, ductwork and the monitoring equipment to document compliance with the inspection and maintenance requirements of this permit. The records shall identify:

    A. The device inspected.

    B. The date and time of inspection.

    C. The working condition of the device during the inspection.

    D. Any maintenance activities performed on the mesh pads, packing media, the ULPA filters, ductwork or the parameter monitoring system.

    E. Any actions taken to correct deficiencies found during the inspection.

23. The operator shall prepare an Operation and Maintenance (O&M) Plan. The O&M Plan shall incorporate the inspection and maintenance requirements identified in this permit and shall include the following elements:

    A. A standardized checklist to document the operation and maintenance of the source, the add-on air pollution control device and the process and control system monitoring equipment.

B. The procedures to be followed to ensure that the equipment is properly maintained.

24. The operator shall keep the written O&M Plan on record, after it is developed, to be made available for inspection upon request by District personnel. Any changes made to the plan shall be documented in an addendum to the plan and signed by the operator or appropriate designee.

25. The operator shall report breakdowns as required by District Rule 430 and shall maintain records of the occurrence, duration, causes (if known), and action taken on each breakdown.

26. The operator shall maintain records of any exceedances of the emission limit and/or parameter limits contained in this permit. The records shall include the date of the occurrence, the duration, the causes (if known), and, whenever possible, the magnitude of any excess emissions.

27. The operator shall complete, by February 1 of each year, an ongoing annual compliance status report of the preceding calendar year. The report shall contain the information identified in Appendix 3 of Rule 1469. The report shall be made available to any District representative upon request.

28. The operator shall maintain all documentation supporting the notifications and reports required by Rule 1469.

29. All records and reports required by this permit shall be retained on file for five years, with the most recent two years' kept on site. All records and reports shall be made available to any District representative upon request.

30. All tanks vented to this equipment shall be designed to meet Industrial Ventilation - 26th Edition guidelines, as specified in Sections 13.70 ("Open Surface Tanks") and 13.72 ("Push-pull Ventilation"). Guidelines include, but are not limited to:

A. Tank freeboard shall be maintained at 6 to 8 inches while parts are immersed.

B. Push manifold shall be mounted on the tank such that there is little to no gap between the nozzle and the tank edge.

C. Push manifold openings shall have a 1/8 to 1/4 inch diameter.

D. The outer holes of the push manifold shall be 1/2 to 1 inch inside the tank edge.

E. The flow at the push manifold shall not be less than 10 cfm per foot of manifold length.

F. The exhaust hood opening shall extend the full width of the tank (including flanges).

G. The exhaust shall be sized to achieve a minimum of 2000 fpm slot velocity.

H. The flow at the exhaust hood shall not be less than 400 cfm per foot of tank length.

I. The exhaust flow shall not be less than 150 cfm per sq. foot of tank area.

J. The jet flow in the push-pull system shall be parallel to the part or tank obstructions to minimize jet flow deflection and spillage when removing or placing the parts in the tank.

K. Enclosure hoods shall be used for each vented tank, if process will allow.

L. Removable covers shall be used on each vented tank, if possible.

M. Baffles shall be installed on vented tanks to reduce cross-drafts. If the exhaust hood is on the side of the tank against a building wall or close to it, it is perfectly baffled.

31. The operator of this equipment shall conduct two separate triplicate source tests, pursuant to the following conditions to measure the total chromium and hexavalent chromium emissions at the outlet of the air pollution control equipment.

A. The source tests shall be conducted within 90 calendar days after the initial start-up of the air pollution control equipment, unless otherwise approved in writing by the Executive Officer.

B. The source tests shall be conducted by a testing laboratory approved by the District under the Laboratory Approval Program (LAP) in the required test methods for each toxic pollutant to be measured and in compliance with District Rule 304 (no conflict of interest).

C. A minimum of three test runs shall be performed while Tank Nos. 3 (Dow 17) and 19 (Chromic Acid Anodizing) are operating at maximum load (current and parts processed). Chromium and hexavalent chromium emissions data measured shall be reported in units of pounds per hour, milligrams per dry standard cubic feet and milligrams per ampere-hour. Tank Nos. 4 (Dow 7), 22 (Dichromate Seal), and 39 (Passivate Type II) shall not be in operation during these test runs.

D. A minimum of three test runs shall be performed while Tank Nos. 4 (Dow 7), 22 (Dichromate Seal), and 39 (Passivate Type II) are operating at maximum load. Chromium and hexavalent emissions data measured shall be reported in units of pounds per hour and milligrams per dry standard cubic feet. Tank Nos. 3 (Dow 17) and 19 (Chromic Acid Anodizing) shall not be in operation during these test runs.

E. A smoke test shall be conducted on each tank prior to the actual source test to demonstrate that no fugitive emissions will occur during operation.

32. The following data shall be monitored and recorded for each tank vented to this Air Pollution Control System during the source tests:

A. The concentration of chromium compounds in the chromium-containing tanks, in percent by weight, during each test run.

B. The quantity of water and chromium compounds added to the tanks during the tests.

C. The totalizing current readings, in amperes, at the start and end of each test run.

D. The pressure drops across the stage-1 mesh pad, stage-2 mesh pad, packed bed, and ULPA filters. The pressure drop data shall be recorded at intervals of time not less than once every hour during each test run.

E. The type and quantity of parts processed during the tests.

F. The tank operating temperature during the tests.

G. The flow rate and slot velocity for all the slots during the tests.

H. Measure the surface tension during each test run.

33. A source test protocol shall be submitted to the District engineer identified below no later than 45 calendar days prior to the proposed test date and shall be approved by the District before the test commences. The protocol shall include the following, at a minimum:

A. The identity of the testing laboratory.

B. A statement from the testing laboratory certifying it meets the criteria in District Rule 304(k).

C. A list of contaminants to be tested.

D. Testing procedures for each contaminant and a description of all sampling and analytical procedures to be used.

E. The location of points of sampling.

F. Quality assurance measures.

G. Experience in testing procedures.

H. Proposed operating conditions as stated in Condition No. 32.

Sampling facilities shall comply with the attached District "Guidelines for Construction of Sampling and Testing Facilities," pursuant to Rule 217.

34. The source test report shall include, at a minimum, the results of the smoke test, the source test, the operating parameters outlined in the permit conditions and all items listed in the District Source Test Checklist Forms ST-1 and ST-2. Two copies of the report shall be submitted to the District not later than 21 calendar days after the final source test date. A copy of the source test report shall be kept on file and shall be made available to any District representative upon request.

35. The District engineer identified below shall be notified of the date and time of the test at least 14 calendar days prior to the test, or within a time period agreed upon by the District engineer.

PERMIT TO CONSTRUCT

Approval or denial of this application for Permit to Operate the above equipment will be made after an inspection to determine if the equipment has been constructed in accordance with the approved plans and specifications and if the equipment can be operated in compliance with all applicable Rules and Regulations of the South Coast Air Quality Management District (SCAQMD).

Please notify SINAE KIM at (909) 396 - 2397 when construction of equipment is complete.

This Permit to Construct is based on plans, specifications, and data submitted as it pertains to the release of air contaminants and control measures to reduce air contaminants. No approval or opinion concerning safety and other factors in design, construction or operation of equipment is expressed or implied.

This Permit to Construct shall serve as a temporary Permit to Operate provided the Executive Officer is given prior notice of such intent to operate.

This Permit to Construct will become invalid if the Permit to Operate is denied or if the application is cancelled. This PERMIT TO CONSTRUCT SHALL EXPIRE ONE YEAR FROM THE DATE OF ISSUANCE unless an extension is granted by the Executive Officer.

DMB/SK12

By Dorris M Bailey

DORRIS M.BAILEY
Principal office Assistant

ORIGINAL

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

APPENDIX B
HOUSEKEEPING AND MAINTENANCE PROCEDURES

Anaplex will continue the following housekeeping actions:

- Flat Surface Areas
- Exhaust Fans, Indoor Walls, and Ceilings
- Storage Areas
- Cleaning Procedures
- HEPA-Vacs
- Mops
- Record Keeping

More Detailed Description of Actions

- Flat Surface Areas

  All flat surface areas (table tops, carts, tops of equipment, shelves, floors, areas of potential track out, splash guards, etc.) excluding surfaces near the ceiling area shall be maintained free from accumulations of dust and/or residue by use of a Rule 1469 approved cleaning method (e.g., wet mop, damp cloth, wet wash, low pressure spray nozzle, HEPA vacuum, or other method as approved by the Executive Officer) at least once per operating shift and no later than one hour after performing any maintenance on equipment, ducts, or ventilation systems. All HEPA-vacs shall be stored in sealed, leak-tight containers, such as plastic wrap. All used or contaminated cloths shall be immediately disposed sealed, leak-tight containers and managed in accordance with applicable Local, State, and Federal regulations.

- Exhaust Fans, Indoor Walls, and Ceilings

  All exhaust fans and their housings, indoor walls, ceilings, elevated railings and machinery, and other flat surfaces in proximity to ceilings shall cleared of any accumulations of dust and/or residue by use of a Rule 1469 approved cleaning method (e.g., wet mop, damp cloth, wet wash, low pressure spray nozzle, HEPA vacuum, or other method as approved by the Executive Officer) before performing any maintenance or activities on nearby equipment, ducts, or ventilation systems. All HEPA-vacs shall be stored in sealed, leak-tight containers, such as plastic wrap. All used or contaminated cloths shall be immediately disposed sealed, leak-tight containers and managed in accordance with applicable Local, State, and Federal regulations.

- Storage Areas

  All areas used to store materials containing hexavalent chromium, including chromic acid flakes and sodium dichromate, shall be maintained free from accumulations of dust and/or residue by use of a Rule 1469 approved cleaning method (e.g., wet mop, damp cloth, wet wash, low pressure spray nozzle, HEPA vacuum, or other method as approved by the Executive Officer) as often as necessary and at least once per week. All HEPA-vacs shall be stored in sealed, leak-tight containers, such as plastic wrap. All used or contaminated cloths shall be immediately disposed sealed, leak-tight containers and managed in accordance with applicable Local, State, and Federal regulations.

- Cleaning Procedures
    - Dry Residues

      All dry residues shall be cleaned up by the use of a Rule 1469 approved cleaning method (e.g., wet mop, damp cloth, wet wash, low pressure spray nozzle, HEPA vacuum, or other method as approved by the Executive Officer) at least once per operating shift. All HEPA-vacs shall be stored in sealed, leak-tight containers, such as plastic wrap. All used or contaminated cloths shall be immediately disposed sealed, leak-tight containers and managed in accordance with applicable Local, State, and Federal regulations.

    - Spilled Liquids

      All spills in liquid form shall be immediately wiped up using a rag or sorbent, and in no case later than one hour after being spilled. All used or contaminated rags and sorbents shall be placed in appropriate sealed, leak-proof containers prior to being moved through the work area and shall be managed in accordance with applicable Local, State, and Federal regulations.

    - Spilled Solids

      All spills in solid form shall be immediately cleaned up by a Rule 1469 approved cleaning method (e.g., wet mop, damp cloth, wet wash, low pressure spray nozzle, HEPA vacuum, or other method as approved by the Executive Officer), and in no case later than one hour after being spilled. All HEPA-filtered vacuums shall be stored in sealed, leak-tight containers, such as plastic wrap.

- HEPA-VACS

  All emptying, cleaning, and maintaining of HEPA-vacs, including all filter replacements, shall be conducted within a permanent or temporary total enclosure (PTE or TTE) vented to HEPA filters that have been individually DOP (or equivalent) tested with 0.3-micron particles and certified to have an efficiency of not less than 99.97 %. Each HEPA-vac shall be wiped down with a damp cloth prior to being returned to storage or removed from a building (or work area if used outdoors) and at least once during each shift in which it is used. All HEPA-vacs shall be stored in sealed, leak-tight containers, such as plastic wrap.

- Mops

  All contaminated mops shalt be transported and stored in sealed, leak-tight containers, such as closed plastic containers or poly bags taped around the mop handle.

- Record Keeping

  Records documenting inspection, training, waste collection and disposal, HEPA-vac emptying, cleaning, and maintenance (including filter replacement), shall be maintained for five years and made available to SCAQMD upon request.

APPENDIX C
MINIMIZATION OF HEXAVALENT CHROMIUM CONTAINING FUGITIVE DUST

Anaplex will conduct plant activities with the potential to disturb/create hexavalent chromium containing fugitive dust as follows:

- Spray booth #2 - Hexavalent chromium containing coatings will only be permitted in Spray Booth #2. The spray booth will not be operated unless all exhaust air passes through a four-stage filter system consisting of pre-filters, panel filter media, pocket-type filter media, and ULPA filter media, as required by Permit to Construct 592868.
- All other spray booths – No hexavalent chromium containing coatings will be sprayed in these booths, per SCAQMD permit conditions.
- Chromium flake storage – Chromium flakes will be stored in small (~ 50 pound) containers in a separate storage shed, outside of the tank enclosure area. The storage shed will be kept closed at all times. When the tanks require additional chromium flakes, the entire container will be removed from the shed, and poured into the tank. Flakes will not be transferred from one storage container to another.
- Roof disturbances – Any roof cleaning will be done with an AQMD-approved HEPA vacuum. Any roof construction involving cutting into or physically altering the roof will be conducted within a temporary enclosure operated under negative air and vented to a South Coast AQMD-permitted High Efficiency Particulate Air (HEPA) filtration system.
- Internal wall or ceiling disturbances - Any construction or other activities on the internal walls, ceilings or structures attached to them, such as utility or other affixed lines or equipment, will be conducted within a temporary enclosure operated under negative air and vented to a South Coast AQMD-permitted High Efficiency Particulate Air (HEPA) filtration system if feasible (and/or using SCAQMD approved methods if not technically feasible) prior and/or during these activities.
- Escorting and recordkeeping of contractors and other visitors. Any contractor performing installation, repair or maintenance activity must follow the procedures listed below will:
  - sign-in and announce themselves to the front office.
  - be escorted by Anaplex personnel trained in hexavalent chromium dust mitigation procedures.
  - clean any dry residues or resultant dust using AQMD-approved cleaning method(s), which may require an AQMD-approved HEPA vacuum, provided by Anaplex, in order to minimize fugitive airborne dust.
  - minimize any fugitive dust emissions from construction-related cutting activities using methods such as temporary enclosure and/or HEPA vacuuming.
  - properly dispose of any material that has been in contact with hexavalent chromium. All such materials must be reported to appropriate personnel at Anaplex for proper disposal.
  - not use any compressed air near any Tier III tanks, as identified by Anaplex personnel.
  - Abide by the Anaplex construction procedures listed above.