

## **Attachment C: Air Quality and Greenhouse Gas Calculations**



# Assumptions



**Table 1: Construction Schedule**

Phase	Decorative Facility Start Date	Decorative Facility End Date	Functional Facility Start Date	Functional Facility End Date	Workdays
Additional Controls – Building Enclosure	N/A	N/A	1/1/2025	1/8/2025	6
Additional Controls – Air Pollution Control Devices Installation	N/A	N/A	1/9/2025	1/18/2025	6
Convert to Trivalent Chromium	1/17/2026	3/16/2026	1/19/2038	3/16/2038	41

**Table 2: Construction Equipment per Phase**

Phase/Equipment	Unit Amount	Hours/Day	Horsepower (HP)	Load Factor
<b>Additional Controls – Building Enclosure</b>				
Aerial lift	1	4	63	0.31
Forklift	1	4	89	0.20
Welders	1	4	46	0.45
<b>Additional Controls – Air Pollution Control Devices Installation</b>				
Aerial lift	1	4	63	0.31
Air Compressor	1	4	78	0.48
Forklift	1	4	89	0.20
Welders	1	4	46	0.45
<b>Convert to Trivalent Chromium</b>				
Aerial lift	1	4	63	0.31
Air Compressor	1	4	78	0.48
Forklift	1	4	89	0.20
Welders	1	4	46	0.45

**Table 3: Vehicle Trips per Phase**

Phase	Daily One-Way Worker Trips	Daily One-Way Vendor Trips	Total One-Way Haul Trips	Worker Trip Length (miles)	Vendor Trip Length (miles)	Hauling Trip Length (miles)
Additional Controls – Building Enclosure	10	2	2	14.7	6.9	20
Additional Controls – Air Pollution Control Devices Installation	12	2	4	14.7	6.9	20
Convert to Trivalent Chromium	12	2	4	14.7	6.9	20

**Table 4: Number of Chrome Plating Facilities by California Air District**

Air District	Decorative	Functional
South Coast Air Quality Management District	36	50
Ventura County Air Pollution Control District	0	1
Bay Area Air Quality Management District	4	6
San Joaquin Valley Air Pollution Control District	6	3
San Diego Air Pollution Control District	3	1
Feather River Air Quality Management District	1	0
Sacramento Metropolitan Air Quality Management District	1	1

# **Air Quality and GHG Emissions**





**Table 5: Annual Emissions (Tons Per Year)**

Phase	Year	ROG	NOx	CO	SO2	PM10	PM2.5	CO2	CH4	N2O	CO2e
Decorative Platers Convert to Trivalent Chromium	2026	0.00648	0.0455	0.0701	0.00012	0.00395	0.00225	10.569	0.00136	0.00016	10.6513
Functional Platers Convert to Trivalent Chromium	2038	0.00498	0.0342	0.0689	0.00013	0.00261	0.00095	10.7988	0.0004	0.00013	10.849
Functional Platers Install Air Pollution Control Devices	2025	0.00073	0.0052	0.0101	0.00002	0.00041	0.00015	1.6574	0.00006	0.00003	1.6684
Functional Platers Building Enclosures	2025	0.00059	0.00445	0.00658	0.00001	0.00044	0.00022	1.0495	0.00017	0.00003	1.0626

Note: See CalEEMod Outputs for Emission Calculations

**Table 6: Maximum Daily Emissions (Pounds Per Day)**

Phase	Year	ROG	NOx	CO	SO2	PM10	PM2.5
Decorative Platers Convert to Trivalent Chromium (Winter)	2026	0.3165	2.219	3.4171	0.00603	0.1961	0.1106
Decorative Platers Convert to Trivalent Chromium (Summer)	2026	0.3163	2.2112	3.4369	0.00607	0.1961	0.1106
Functional Platers Convert to Trivalent Chromium (Winter)	2038	0.2445	1.6687	3.3608	0.0062	0.1308	0.0474
Functional Platers Convert to Trivalent Chromium (Summer)	2038	0.2441	1.6622	3.3737	0.00625	0.1308	0.0474
Functional Platers Install Air Pollution Control Devices (Winter)	2025	0.2456	1.7354	3.3793	0.00647	0.1413	0.0507
Functional Platers Install Air Pollution Control Devices (Summer)	2025	0.2453	1.725	3.3918	0.00652	0.1413	0.0507
Functional Platers Building Enclosure (Winter)	2025	0.1202	0.9549	1.5495	0.00329	0.1095	0.0352
Functional Platers Building Enclosure (Summer)	2025	0.2	1.487	2.1944	0.00409	0.1498	0.0733

Note: See CalEEMod Outputs for Emission Calculations

Table 7: Construction Air Pollutant Emissions Compared to Air District Significance Thresholds<sup>a, b</sup>

Air District/Phase	ROG	NOx	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>South Coast Air Quality Management District</b>						
Decorative Chrome Plater Facilities Convert to Trivalent Chromium Operations (ppd)	11	80	124	<1	7	4
Functional Chrome Plater Facilities Convert to Trivalent Chromium (ppd)	12	83	169	<1	7	2
Functional Chrome Plater Facilities Install Air Pollution Control Devices and Construction Building Enclosures (ppd) <sup>b</sup>	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Daily Emissions (ppd)	12	83	169	<1	7	4
Significance Threshold (ppd)	75	100	550	150	150	55
Exceed Threshold (Yes or No)? <sup>c</sup>	No	No	No	No	No	No
<b>Ventura County Air Pollution Control District</b>						
Decorative Chrome Plater Facilities Convert to Trivalent Chromium Operations (ppd)	N/A	N/A	N/A	N/A	N/A	N/A
Functional Chrome Plater Facilities Convert to Trivalent Chromium (ppd)	<1	2	3	<1	<1	<1
Functional Chrome Plater Facilities Install Air Pollution Control Devices and Construction Building Enclosures (ppd)	<1	3	6	<1	<1	<1
Maximum Daily Emissions (ppd)	<1	3	6	<1	<1	<1
Significance Threshold (ppd)	25	25	N/A	N/A	N/A	N/A
Exceed Threshold (Yes or No)? <sup>d</sup>	No	No	N/A	N/A	N/A	N/A
<b>Bay Area Air Quality Management District</b>						
Decorative Chrome Plater Facilities Convert to Trivalent Chromium Operations (ppd)	1	9	14	<1	1	<1
Functional Chrome Plater Facilities Convert to Trivalent Chromium (ppd)	1	10	20	<1	1	<1
Functional Chrome Plater Facilities Install Air Pollution Control Devices and Construction Building Enclosures (ppd)	1	11	17	<1	1	<1
Maximum Daily Emissions (ppd)	1	11	20	<1	1	<1

Air District/Phase	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Significance Threshold (ppd)	54	54	N/A	N/A	82	54
Exceed Threshold (Yes or No)? <sup>e</sup>	No	No	N/A	N/A	No	No
<b>San Joaquin Valley Air Pollution Control District</b>						
Decorative Chrome Plater Facilities Convert to Trivalent Chromium Operations (tpy)	<1	<1	<1	<1	<1	<1
Functional Chrome Plater Facilities Convert to Trivalent Chromium (tpy)	<1	<1	<1	<1	<1	<1
Functional Chrome Plater Facilities Install Air Pollution Control Devices and Construction Building Enclosures (tpy)	<1	<1	<1	<1	<1	<1
Maximum Annual Emissions (tpy)	<1	<1	<1	<1	<1	<1
Significance Threshold (tpy)	10	10	100	27	15	15
Exceed Threshold (Yes or No)? <sup>f</sup>	No	No	No	No	No	No
<b>San Diego Air Pollution Control District</b>						
Decorative Chrome Plater Facilities Convert to Trivalent Chromium Operations (ppd)	1	7	10	<1	1	<1
Functional Chrome Plater Facilities Install Air Pollution Control Devices and Construction Building Enclosures (ppd)	<1	2	3	<1	<1	<1
Functional Chrome Plater Facilities Install Air Pollution Control Devices and Construction Building Enclosures (ppd)	<1	3	6	<1	<1	<1
Maximum Daily Emissions (ppd)	1	7	10	<1	1	<1
Significance Threshold (ppd)	N/A	250	550	250	100	67
Exceed Threshold (Yes or No)? <sup>g</sup>	N/A	No	No	No	No	No
<b>Feather River Air Quality Management District</b>						
Decorative Chrome Plater Facilities Convert to Trivalent Chromium Operations (ppd)	<1	2	3	<1	<1	<1
Functional Chrome Plater Facilities Install Air Pollution Control Devices and Construction Building Enclosures (ppd)	N/A	N/A	N/A	N/A	N/A	N/A
Functional Chrome Plater Facilities Install Air Pollution Control Devices and Construction Building Enclosures (ppd)	N/A	N/A	N/A	N/A	N/A	N/A
Maximum Daily Emissions (ppd)	<1	2	3	<1	<1	<1

Air District/Phase	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Significance Threshold (ppd)	25	25	N/A	N/A	80	N/A
Exceed Threshold (Yes or No)? <sup>h</sup>	No	No	N/A	N/A	No	N/A
<b>Sacramento Metropolitan Air Quality Management District</b>						
Decorative Chrome Plater Facilities Convert to Trivalent Chromium Operations (ppd)	<1	2	3	<1	<1	<1
Functional Chrome Plater Facilities Install Air Pollution Control Devices and Construction Building Enclosures (ppd)	<1	2	3	<1	<1	<1
Functional Chrome Plater Facilities Install Air Pollution Control Devices and Construction Building Enclosures (ppd)	<1	3	6	<1	<1	<1
Maximum Daily Emissions (ppd)	<1	2	3	<1	<1	<1
Significance Threshold (ppd)	N/A	85	N/A	N/A	80	82
Exceed Threshold (Yes or No)? <sup>i</sup>	N/A	No	N/A	N/A	No	No

Notes:

- <sup>a</sup> ppd = pounds per day; tpy = tons per year; ROG = reactive organic gases; NO<sub>x</sub> = oxides of nitrogen; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxide; PM<sub>10</sub> = particulate matter 10 micrometers or less in diameter; PM<sub>2.5</sub> = particulate matter 2.5 micrometers or less in diameter.
- <sup>b</sup> Since the South Coast Air Quality Management District (SCAQMD) already requires the installation of additional controls identified in the Proposed Amendments, it was assumed that all functional chrome plating facilities would already have relocated their tanks and installed air pollution control devices prior to the implementation of the Proposed Amendments.
- <sup>c</sup> South Coast AQMD. South Coast AQMD Air Quality Significance Thresholds, April 2019, Accessed on March 10, 2022, Accessible at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.
- <sup>d</sup> Ventura County APCD. Ventura County Air Quality Assessment Guidelines, October 2003, Accessed on March 10, 2022. Accessible at: <http://www.vcapcd.org/pubs/Planning/VCAQGuidelines.pdf>.
- <sup>e</sup> Bay Area AQMD. CEQA Air Quality Guidelines, May 2017, Accessed on March 10, 2022, Accessible at: [https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en&rev=0d2d971e661d41f28a56953f1776bdde](https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en&rev=0d2d971e661d41f28a56953f1776bdde).
- <sup>f</sup> San Joaquin Valley APCD. Air Quality Thresholds of Significance, March 19, 2015, Accessed on March 10, 2022, Accessible at: <http://www.valleyair.org/transportation/0714-GAMAQI-Criteria-Pollutant-Thresholds-of-Significance.pdf>.
- <sup>g</sup> San Diego AQMD. Rule 20.2 New Source Review Non-Major Stationary Sources, Accessed on March 10, 2022, Accessible at: <https://www.sdapcd.org/content/dam/sdapcd/documents/rules/current-rules/Rule-20.3.pdf>.
- <sup>h</sup> Feather River AQMD. Feather River AQMD Thresholds of Significance. June 7, 2010, Accessed on March 10, 2022, Accessible at <https://www.fraqmd.org/files/658e76309/Chapter+3.pdf>.
- <sup>i</sup> Sacramento Metropolitan AQMD. SMAQMD Thresholds of Significance Table, April 2020, Accessed on March 10, 2022, Accessible at: <https://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable4-2020.pdf>

**Table 8: Amortized Construction GHG Emissions Compared to SMAQD's Significance Thresholds**

Category	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
<b>Decorative Chromium Facilities (statewide)</b>				
Construction GHG Emissions	539	< 1	< 1	543
Amortized Emissions over 30 Years	18	< 1	< 1	18
<b>Functional Chromium Facilities (statewide)</b>				
Construction GHG Emissions	702	< 1	< 1	705
Amortized Emissions over 30 Years	23	< 1	< 1	23
SMAQMD Significance Threshold				1,100
Exceed Threshold (Yes or No)?				No

Notes:

<sup>a</sup> CO<sub>2</sub> = Carbon Dioxide; CH<sub>4</sub> = Methane; N<sub>2</sub>O = Nitrous Oxide



## CalEEMod Outputs







Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only  
Statewide , Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	0.00	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Austin Energy				
<b>CO2 Intensity (lb/MWhr)</b>	1083.07	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Construction Phase - Assumed converting a facility to trivalent chromium plating would occur over two months and installation additional controls and tank relocation would take 6 days.

Off-road Equipment - Assumed APCD installation would require one aerial lift, one air compressor, one forklift and one welder.

Off-road Equipment - Assumed converting to trivalent chromium operations would require 1 aerial lift, 1 air compressor, 1 forklift and 1 welder.

Off-road Equipment - Assumed converting to trivalent chromium operations would require 1 aerial lift, 1 air compressor, 1 forklift, and 1 welder.

Trips and VMT - Assumed construction trips: converting a facility to trivalent chromium plating would require 12 worker trips, 2 vendor trips and 2 haul trips. It was assumed 2 haul trips to transport hazardous waste to a disposal facility.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	0.00	41.00
tblConstructionPhase	NumDays	0.00	41.00

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tbITripsAndVMT	HaulingTripNumber	0.00	4.00
tbITripsAndVMT	HaulingTripNumber	0.00	4.00
tbITripsAndVMT	VendorTripNumber	0.00	2.00
tbITripsAndVMT	VendorTripNumber	0.00	2.00
tbITripsAndVMT	WorkerTripNumber	0.00	12.00
tbITripsAndVMT	WorkerTripNumber	0.00	12.00

**2.0 Emissions Summary**

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Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2026	6.4500e-003	0.0455	0.0701	1.2000e-004	2.2600e-003	1.6900e-003	3.9500e-003	6.1000e-004	1.6400e-003	2.2500e-003	0.0000	10.5690	10.5690	1.3600e-003	1.6000e-004	10.6513
2038	4.9800e-003	0.0342	0.0689	1.3000e-004	2.2600e-003	3.5000e-004	2.6100e-003	6.1000e-004	3.5000e-004	9.5000e-004	0.0000	10.7988	10.7988	4.0000e-004	1.3000e-004	10.8490
<b>Maximum</b>	<b>6.4500e-003</b>	<b>0.0455</b>	<b>0.0701</b>	<b>1.3000e-004</b>	<b>2.2600e-003</b>	<b>1.6900e-003</b>	<b>3.9500e-003</b>	<b>6.1000e-004</b>	<b>1.6400e-003</b>	<b>2.2500e-003</b>	<b>0.0000</b>	<b>10.7988</b>	<b>10.7988</b>	<b>1.3600e-003</b>	<b>1.6000e-004</b>	<b>10.8490</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2026	6.4500e-003	0.0455	0.0701	1.2000e-004	2.2600e-003	1.6900e-003	3.9500e-003	6.1000e-004	1.6400e-003	2.2500e-003	0.0000	10.5690	10.5690	1.3600e-003	1.6000e-004	10.6513
2038	4.9800e-003	0.0342	0.0689	1.3000e-004	2.2600e-003	3.5000e-004	2.6100e-003	6.1000e-004	3.5000e-004	9.5000e-004	0.0000	10.7988	10.7988	4.0000e-004	1.3000e-004	10.8490
<b>Maximum</b>	<b>6.4500e-003</b>	<b>0.0455</b>	<b>0.0701</b>	<b>1.3000e-004</b>	<b>2.2600e-003</b>	<b>1.6900e-003</b>	<b>3.9500e-003</b>	<b>6.1000e-004</b>	<b>1.6400e-003</b>	<b>2.2500e-003</b>	<b>0.0000</b>	<b>10.7988</b>	<b>10.7988</b>	<b>1.3600e-003</b>	<b>1.6000e-004</b>	<b>10.8490</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
4	11-3-2025	2-2-2026	0.0154	0.0154
5	2-3-2026	5-2-2026	0.0380	0.0380
52	11-3-2037	2-2-2038	0.0102	0.0102
53	2-3-2038	5-2-2038	0.0287	0.0287
		Highest	0.0380	0.0380

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Dec Convert to Tri	Building Construction	1/17/2026	3/16/2026	5	41	
2	Hard Convert to Tri	Building Construction	1/19/2038	3/16/2038	5	41	

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Dec Convert to Tri	Aerial Lifts	1	4.00	63	0.31
Dec Convert to Tri	Air Compressors	1	4.00	78	0.48
Dec Convert to Tri	Forklifts	1	4.00	89	0.20
Dec Convert to Tri	Welders	1	4.00	46	0.45
Hard Convert to Tri	Aerial Lifts	1	4.00	63	0.31
Hard Convert to Tri	Air Compressors	1	4.00	78	0.48
Hard Convert to Tri	Forklifts	1	4.00	89	0.20
Hard Convert to Tri	Welders	1	4.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Dec Convert to Tri	4	12.00	2.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Hard Convert to Tri	4	12.00	2.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Dec Convert to Tri - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.8300e-003	0.0431	0.0645	1.0000e-004		1.6600e-003	1.6600e-003		1.6200e-003	1.6200e-003	0.0000	8.3073	8.3073	1.3100e-003	0.0000	8.3400
<b>Total</b>	<b>5.8300e-003</b>	<b>0.0431</b>	<b>0.0645</b>	<b>1.0000e-004</b>		<b>1.6600e-003</b>	<b>1.6600e-003</b>		<b>1.6200e-003</b>	<b>1.6200e-003</b>	<b>0.0000</b>	<b>8.3073</b>	<b>8.3073</b>	<b>1.3100e-003</b>	<b>0.0000</b>	<b>8.3400</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	2.5000e-004	6.0000e-005	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1076	0.1076	0.0000	2.0000e-005	0.1128
Vendor	4.0000e-005	1.7100e-003	5.7000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7434	0.7434	1.0000e-005	1.1000e-004	0.7761
Worker	5.7000e-004	3.5000e-004	4.9700e-003	2.0000e-005	1.9600e-003	1.0000e-005	1.9700e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.4106	1.4106	4.0000e-005	4.0000e-005	1.4225
<b>Total</b>	<b>6.1000e-004</b>	<b>2.3100e-003</b>	<b>5.6000e-003</b>	<b>3.0000e-005</b>	<b>2.2600e-003</b>	<b>2.0000e-005</b>	<b>2.2900e-003</b>	<b>6.1000e-004</b>	<b>2.0000e-005</b>	<b>6.3000e-004</b>	<b>0.0000</b>	<b>2.2616</b>	<b>2.2616</b>	<b>5.0000e-005</b>	<b>1.7000e-004</b>	<b>2.3113</b>



Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Dec Convert to Tri - 2026**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.8300e-003	0.0431	0.0645	1.0000e-004		1.6600e-003	1.6600e-003		1.6200e-003	1.6200e-003	0.0000	8.3073	8.3073	1.3100e-003	0.0000	8.3400
<b>Total</b>	<b>5.8300e-003</b>	<b>0.0431</b>	<b>0.0645</b>	<b>1.0000e-004</b>		<b>1.6600e-003</b>	<b>1.6600e-003</b>		<b>1.6200e-003</b>	<b>1.6200e-003</b>	<b>0.0000</b>	<b>8.3073</b>	<b>8.3073</b>	<b>1.3100e-003</b>	<b>0.0000</b>	<b>8.3400</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	2.5000e-004	6.0000e-005	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1076	0.1076	0.0000	2.0000e-005	0.1128
Vendor	4.0000e-005	1.7100e-003	5.7000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7434	0.7434	1.0000e-005	1.1000e-004	0.7761
Worker	5.7000e-004	3.5000e-004	4.9700e-003	2.0000e-005	1.9600e-003	1.0000e-005	1.9700e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.4106	1.4106	4.0000e-005	4.0000e-005	1.4225
<b>Total</b>	<b>6.1000e-004</b>	<b>2.3100e-003</b>	<b>5.6000e-003</b>	<b>3.0000e-005</b>	<b>2.2600e-003</b>	<b>2.0000e-005</b>	<b>2.2900e-003</b>	<b>6.1000e-004</b>	<b>2.0000e-005</b>	<b>6.3000e-004</b>	<b>0.0000</b>	<b>2.2616</b>	<b>2.2616</b>	<b>5.0000e-005</b>	<b>1.7000e-004</b>	<b>2.3113</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Hard Convert to Tri - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.6000e-003	0.0321	0.0648	1.1000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	8.8979	8.8979	3.7000e-004	0.0000	8.9071
<b>Total</b>	<b>4.6000e-003</b>	<b>0.0321</b>	<b>0.0648</b>	<b>1.1000e-004</b>		<b>3.3000e-004</b>	<b>3.3000e-004</b>		<b>3.3000e-004</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>8.8979</b>	<b>8.8979</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>8.9071</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	2.3000e-004	6.0000e-005	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0903	0.0903	0.0000	1.0000e-005	0.0946
Vendor	4.0000e-005	1.6300e-003	5.5000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.6387	0.6387	1.0000e-005	9.0000e-005	0.6669
Worker	3.4000e-004	1.9000e-004	3.4900e-003	1.0000e-005	1.9600e-003	1.0000e-005	1.9600e-003	5.2000e-004	0.0000	5.2000e-004	0.0000	1.1719	1.1719	2.0000e-005	3.0000e-005	1.1805
<b>Total</b>	<b>3.8000e-004</b>	<b>2.0500e-003</b>	<b>4.1000e-003</b>	<b>2.0000e-005</b>	<b>2.2600e-003</b>	<b>2.0000e-005</b>	<b>2.2800e-003</b>	<b>6.1000e-004</b>	<b>1.0000e-005</b>	<b>6.2000e-004</b>	<b>0.0000</b>	<b>1.9009</b>	<b>1.9009</b>	<b>3.0000e-005</b>	<b>1.3000e-004</b>	<b>1.9419</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Hard Convert to Tri - 2038**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.6000e-003	0.0321	0.0648	1.1000e-004		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	8.8979	8.8979	3.7000e-004	0.0000	8.9070
<b>Total</b>	<b>4.6000e-003</b>	<b>0.0321</b>	<b>0.0648</b>	<b>1.1000e-004</b>		<b>3.3000e-004</b>	<b>3.3000e-004</b>		<b>3.3000e-004</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>8.8979</b>	<b>8.8979</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>8.9070</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	2.3000e-004	6.0000e-005	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0903	0.0903	0.0000	1.0000e-005	0.0946
Vendor	4.0000e-005	1.6300e-003	5.5000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.6387	0.6387	1.0000e-005	9.0000e-005	0.6669
Worker	3.4000e-004	1.9000e-004	3.4900e-003	1.0000e-005	1.9600e-003	1.0000e-005	1.9600e-003	5.2000e-004	0.0000	5.2000e-004	0.0000	1.1719	1.1719	2.0000e-005	3.0000e-005	1.1805
<b>Total</b>	<b>3.8000e-004</b>	<b>2.0500e-003</b>	<b>4.1000e-003</b>	<b>2.0000e-005</b>	<b>2.2600e-003</b>	<b>2.0000e-005</b>	<b>2.2800e-003</b>	<b>6.1000e-004</b>	<b>1.0000e-005</b>	<b>6.2000e-004</b>	<b>0.0000</b>	<b>1.9009</b>	<b>1.9009</b>	<b>3.0000e-005</b>	<b>1.3000e-004</b>	<b>1.9419</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.534553	0.059172	0.184219	0.133650	0.026610	0.006752	0.011227	0.011343	0.000804	0.000471	0.026281	0.000961	0.003957

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000



Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

**6.2 Area by SubCategory**

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>



Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**7.2 Water by Land Use**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.2 Waste by Land Use**

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only  
Statewide , Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	0.00	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Austin Energy				
<b>CO2 Intensity (lb/MWhr)</b>	1083.07	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Construction Phase - Assumed converting a facility to trivalent chromium plating would occur over two months and installation additional controls and tank relocation would take 6 days.

Off-road Equipment - Assumed APCD installation would require one aerial lift, one air compressor, one forklift and one welder.

Off-road Equipment - Assumed converting to trivalent chromium operations would require 1 aerial lift, 1 air compressor, 1 forklift and 1 welder.

Off-road Equipment - Assumed converting to trivalent chromium operations would require 1 aerial lift, 1 air compressor, 1 forklift, and 1 welder.

Trips and VMT - Assumed construction trips: converting a facility to trivalent chromium plating would require 12 worker trips, 2 vendor trips and 2 haul trips. It was assumed 2 haul trips to transport hazardous waste to a disposal facility.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	0.00	41.00
tblConstructionPhase	NumDays	0.00	41.00

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tbITripsAndVMT	HaulingTripNumber	0.00	4.00
tbITripsAndVMT	HaulingTripNumber	0.00	4.00
tbITripsAndVMT	VendorTripNumber	0.00	2.00
tbITripsAndVMT	VendorTripNumber	0.00	2.00
tbITripsAndVMT	WorkerTripNumber	0.00	12.00
tbITripsAndVMT	WorkerTripNumber	0.00	12.00

**2.0 Emissions Summary**

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Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	0.3163	2.2112	3.4369	6.0700e-003	0.1138	0.0822	0.1961	0.0305	0.0801	0.1106	0.0000	572.7582	572.7582	0.0731	8.5800e-003	577.1430
2038	0.2441	1.6622	3.3737	6.2500e-003	0.1138	0.0169	0.1308	0.0305	0.0169	0.0474	0.0000	584.3916	584.3916	0.0215	7.1400e-003	587.0584
<b>Maximum</b>	<b>0.3163</b>	<b>2.2112</b>	<b>3.4369</b>	<b>6.2500e-003</b>	<b>0.1138</b>	<b>0.0822</b>	<b>0.1961</b>	<b>0.0305</b>	<b>0.0801</b>	<b>0.1106</b>	<b>0.0000</b>	<b>584.3916</b>	<b>584.3916</b>	<b>0.0731</b>	<b>8.5800e-003</b>	<b>587.0584</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	0.3163	2.2112	3.4369	6.0700e-003	0.1138	0.0822	0.1961	0.0305	0.0801	0.1106	0.0000	572.7582	572.7582	0.0731	8.5800e-003	577.1430
2038	0.2441	1.6622	3.3737	6.2500e-003	0.1138	0.0169	0.1308	0.0305	0.0169	0.0474	0.0000	584.3916	584.3916	0.0215	7.1400e-003	587.0584
<b>Maximum</b>	<b>0.3163</b>	<b>2.2112</b>	<b>3.4369</b>	<b>6.2500e-003</b>	<b>0.1138</b>	<b>0.0822</b>	<b>0.1961</b>	<b>0.0305</b>	<b>0.0801</b>	<b>0.1106</b>	<b>0.0000</b>	<b>584.3916</b>	<b>584.3916</b>	<b>0.0731</b>	<b>8.5800e-003</b>	<b>587.0584</b>





Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Dec Convert to Tri	Building Construction	1/17/2026	3/16/2026	5	41	
2	Hard Convert to Tri	Building Construction	1/19/2038	3/16/2038	5	41	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Dec Convert to Tri	Aerial Lifts	1	4.00	63	0.31
Dec Convert to Tri	Air Compressors	1	4.00	78	0.48
Dec Convert to Tri	Forklifts	1	4.00	89	0.20
Dec Convert to Tri	Welders	1	4.00	46	0.45
Hard Convert to Tri	Aerial Lifts	1	4.00	63	0.31
Hard Convert to Tri	Air Compressors	1	4.00	78	0.48
Hard Convert to Tri	Forklifts	1	4.00	89	0.20
Hard Convert to Tri	Welders	1	4.00	46	0.45

**Trips and VMT**

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Dec Convert to Tri	4	12.00	2.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Hard Convert to Tri	4	12.00	2.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Dec Convert to Tri - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2843	2.1042	3.1443	4.8600e-003		0.0811	0.0811		0.0790	0.0790		446.6962	446.6962	0.0703		448.4544
<b>Total</b>	<b>0.2843</b>	<b>2.1042</b>	<b>3.1443</b>	<b>4.8600e-003</b>		<b>0.0811</b>	<b>0.0811</b>		<b>0.0790</b>	<b>0.0790</b>		<b>446.6962</b>	<b>446.6962</b>	<b>0.0703</b>		<b>448.4544</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Dec Convert to Tri - 2026**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2000e-004	0.0116	3.0300e-003	5.0000e-005	1.7100e-003	1.1000e-004	1.8200e-003	4.7000e-004	1.0000e-004	5.7000e-004		5.7838	5.7838	1.7000e-004	9.1000e-004	6.0605
Vendor	2.2500e-003	0.0799	0.0275	3.7000e-004	0.0136	5.3000e-004	0.0141	3.9000e-003	5.0000e-004	4.4100e-003		39.9402	39.9402	7.2000e-004	5.8300e-003	41.6960
Worker	0.0296	0.0155	0.2622	7.9000e-004	0.0986	4.6000e-004	0.0990	0.0262	4.3000e-004	0.0266		80.3379	80.3379	1.8500e-003	1.8400e-003	80.9320
<b>Total</b>	<b>0.0321</b>	<b>0.1071</b>	<b>0.2926</b>	<b>1.2100e-003</b>	<b>0.1138</b>	<b>1.1000e-003</b>	<b>0.1149</b>	<b>0.0305</b>	<b>1.0300e-003</b>	<b>0.0316</b>		<b>126.0619</b>	<b>126.0619</b>	<b>2.7400e-003</b>	<b>8.5800e-003</b>	<b>128.6885</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2843	2.1042	3.1443	4.8600e-003		0.0811	0.0811		0.0790	0.0790	0.0000	446.6962	446.6962	0.0703		448.4544
<b>Total</b>	<b>0.2843</b>	<b>2.1042</b>	<b>3.1443</b>	<b>4.8600e-003</b>		<b>0.0811</b>	<b>0.0811</b>		<b>0.0790</b>	<b>0.0790</b>	<b>0.0000</b>	<b>446.6962</b>	<b>446.6962</b>	<b>0.0703</b>		<b>448.4544</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Dec Convert to Tri - 2026**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.2000e-004	0.0116	3.0300e-003	5.0000e-005	1.7100e-003	1.1000e-004	1.8200e-003	4.7000e-004	1.0000e-004	5.7000e-004		5.7838	5.7838	1.7000e-004	9.1000e-004	6.0605
Vendor	2.2500e-003	0.0799	0.0275	3.7000e-004	0.0136	5.3000e-004	0.0141	3.9000e-003	5.0000e-004	4.4100e-003		39.9402	39.9402	7.2000e-004	5.8300e-003	41.6960
Worker	0.0296	0.0155	0.2622	7.9000e-004	0.0986	4.6000e-004	0.0990	0.0262	4.3000e-004	0.0266		80.3379	80.3379	1.8500e-003	1.8400e-003	80.9320
<b>Total</b>	<b>0.0321</b>	<b>0.1071</b>	<b>0.2926</b>	<b>1.2100e-003</b>	<b>0.1138</b>	<b>1.1000e-003</b>	<b>0.1149</b>	<b>0.0305</b>	<b>1.0300e-003</b>	<b>0.0316</b>		<b>126.0619</b>	<b>126.0619</b>	<b>2.7400e-003</b>	<b>8.5800e-003</b>	<b>128.6885</b>

**3.3 Hard Convert to Tri - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2245	1.5668	3.1606	5.2300e-003		0.0161	0.0161		0.0161	0.0161		478.4517	478.4517	0.0197		478.9437
<b>Total</b>	<b>0.2245</b>	<b>1.5668</b>	<b>3.1606</b>	<b>5.2300e-003</b>		<b>0.0161</b>	<b>0.0161</b>		<b>0.0161</b>	<b>0.0161</b>		<b>478.4517</b>	<b>478.4517</b>	<b>0.0197</b>		<b>478.9437</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Hard Convert to Tri - 2038**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1000e-004	0.0108	3.1100e-003	4.0000e-005	1.7100e-003	1.0000e-004	1.8100e-003	4.7000e-004	9.0000e-005	5.6000e-004		4.8521	4.8521	1.7000e-004	7.7000e-004	5.0853
Vendor	2.0500e-003	0.0761	0.0262	3.2000e-004	0.0136	4.9000e-004	0.0141	3.9000e-003	4.7000e-004	4.3700e-003		34.3142	34.3142	7.3000e-004	5.0100e-003	35.8252
Worker	0.0174	8.5900e-003	0.1837	6.6000e-004	0.0986	2.6000e-004	0.0988	0.0262	2.4000e-004	0.0264		66.7736	66.7736	9.5000e-004	1.3600e-003	67.2042
<b>Total</b>	<b>0.0196</b>	<b>0.0954</b>	<b>0.2131</b>	<b>1.0200e-003</b>	<b>0.1138</b>	<b>8.5000e-004</b>	<b>0.1147</b>	<b>0.0305</b>	<b>8.0000e-004</b>	<b>0.0313</b>		<b>105.9400</b>	<b>105.9400</b>	<b>1.8500e-003</b>	<b>7.1400e-003</b>	<b>108.1147</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2245	1.5668	3.1606	5.2300e-003		0.0161	0.0161		0.0161	0.0161	0.0000	478.4517	478.4517	0.0197		478.9437
<b>Total</b>	<b>0.2245</b>	<b>1.5668</b>	<b>3.1606</b>	<b>5.2300e-003</b>		<b>0.0161</b>	<b>0.0161</b>		<b>0.0161</b>	<b>0.0161</b>	<b>0.0000</b>	<b>478.4517</b>	<b>478.4517</b>	<b>0.0197</b>		<b>478.9437</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Hard Convert to Tri - 2038**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1000e-004	0.0108	3.1100e-003	4.0000e-005	1.7100e-003	1.0000e-004	1.8100e-003	4.7000e-004	9.0000e-005	5.6000e-004		4.8521	4.8521	1.7000e-004	7.7000e-004	5.0853
Vendor	2.0500e-003	0.0761	0.0262	3.2000e-004	0.0136	4.9000e-004	0.0141	3.9000e-003	4.7000e-004	4.3700e-003		34.3142	34.3142	7.3000e-004	5.0100e-003	35.8252
Worker	0.0174	8.5900e-003	0.1837	6.6000e-004	0.0986	2.6000e-004	0.0988	0.0262	2.4000e-004	0.0264		66.7736	66.7736	9.5000e-004	1.3600e-003	67.2042
<b>Total</b>	<b>0.0196</b>	<b>0.0954</b>	<b>0.2131</b>	<b>1.0200e-003</b>	<b>0.1138</b>	<b>8.5000e-004</b>	<b>0.1147</b>	<b>0.0305</b>	<b>8.0000e-004</b>	<b>0.0313</b>		<b>105.9400</b>	<b>105.9400</b>	<b>1.8500e-003</b>	<b>7.1400e-003</b>	<b>108.1147</b>



Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.534553	0.059172	0.184219	0.133650	0.026610	0.006752	0.011227	0.011343	0.000804	0.000471	0.026281	0.000961	0.003957

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.2 Energy by Land Use - NaturalGas**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only  
Statewide , Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	0.00	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Austin Energy				
<b>CO2 Intensity (lb/MWhr)</b>	1083.07	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Construction Phase - Assumed converting a facility to trivalent chromium plating would occur over two months and installation additional controls and tank relocation would take 6 days.

Off-road Equipment - Assumed APCD installation would require one aerial lift, one air compressor, one forklift and one welder.

Off-road Equipment - Assumed converting to trivalent chromium operations would require 1 aerial lift, 1 air compressor, 1 forklift and 1 welder.

Off-road Equipment - Assumed converting to trivalent chromium operations would require 1 aerial lift, 1 air compressor, 1 forklift, and 1 welder.

Trips and VMT - Assumed construction trips: converting a facility to trivalent chromium plating would require 12 worker trips, 2 vendor trips and 2 haul trips. It was assumed 2 haul trips to transport hazardous waste to a disposal facility.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	0.00	41.00
tblConstructionPhase	NumDays	0.00	41.00

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tbITripsAndVMT	HaulingTripNumber	0.00	4.00
tbITripsAndVMT	HaulingTripNumber	0.00	4.00
tbITripsAndVMT	VendorTripNumber	0.00	2.00
tbITripsAndVMT	VendorTripNumber	0.00	2.00
tbITripsAndVMT	WorkerTripNumber	0.00	12.00
tbITripsAndVMT	WorkerTripNumber	0.00	12.00

**2.0 Emissions Summary**

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Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	0.3165	2.2190	3.4171	6.0300e-003	0.1138	0.0822	0.1961	0.0305	0.0801	0.1106	0.0000	567.1408	567.1408	0.0732	8.7800e-003	571.5862
2038	0.2445	1.6687	3.3608	6.2000e-003	0.1138	0.0169	0.1308	0.0305	0.0169	0.0474	0.0000	579.6877	579.6877	0.0216	7.2800e-003	582.3989
<b>Maximum</b>	<b>0.3165</b>	<b>2.2190</b>	<b>3.4171</b>	<b>6.2000e-003</b>	<b>0.1138</b>	<b>0.0822</b>	<b>0.1961</b>	<b>0.0305</b>	<b>0.0801</b>	<b>0.1106</b>	<b>0.0000</b>	<b>579.6877</b>	<b>579.6877</b>	<b>0.0732</b>	<b>8.7800e-003</b>	<b>582.3989</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	0.3165	2.2190	3.4171	6.0300e-003	0.1138	0.0822	0.1961	0.0305	0.0801	0.1106	0.0000	567.1408	567.1408	0.0732	8.7800e-003	571.5862
2038	0.2445	1.6687	3.3608	6.2000e-003	0.1138	0.0169	0.1308	0.0305	0.0169	0.0474	0.0000	579.6877	579.6877	0.0216	7.2800e-003	582.3989
<b>Maximum</b>	<b>0.3165</b>	<b>2.2190</b>	<b>3.4171</b>	<b>6.2000e-003</b>	<b>0.1138</b>	<b>0.0822</b>	<b>0.1961</b>	<b>0.0305</b>	<b>0.0801</b>	<b>0.1106</b>	<b>0.0000</b>	<b>579.6877</b>	<b>579.6877</b>	<b>0.0732</b>	<b>8.7800e-003</b>	<b>582.3989</b>



Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Dec Convert to Tri	Building Construction	1/17/2026	3/16/2026	5	41	
2	Hard Convert to Tri	Building Construction	1/19/2038	3/16/2038	5	41	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Dec Convert to Tri	Aerial Lifts	1	4.00	63	0.31
Dec Convert to Tri	Air Compressors	1	4.00	78	0.48
Dec Convert to Tri	Forklifts	1	4.00	89	0.20
Dec Convert to Tri	Welders	1	4.00	46	0.45
Hard Convert to Tri	Aerial Lifts	1	4.00	63	0.31
Hard Convert to Tri	Air Compressors	1	4.00	78	0.48
Hard Convert to Tri	Forklifts	1	4.00	89	0.20
Hard Convert to Tri	Welders	1	4.00	46	0.45

**Trips and VMT**

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Dec Convert to Tri	4	12.00	2.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Hard Convert to Tri	4	12.00	2.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Dec Convert to Tri - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2843	2.1042	3.1443	4.8600e-003		0.0811	0.0811		0.0790	0.0790		446.6962	446.6962	0.0703		448.4544
<b>Total</b>	<b>0.2843</b>	<b>2.1042</b>	<b>3.1443</b>	<b>4.8600e-003</b>		<b>0.0811</b>	<b>0.0811</b>		<b>0.0790</b>	<b>0.0790</b>		<b>446.6962</b>	<b>446.6962</b>	<b>0.0703</b>		<b>448.4544</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Dec Convert to Tri - 2026**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-004	0.0123	3.0800e-003	5.0000e-005	1.7100e-003	1.1000e-004	1.8200e-003	4.7000e-004	1.0000e-004	5.7000e-004		5.7912	5.7912	1.7000e-004	9.2000e-004	6.0683
Vendor	2.1400e-003	0.0847	0.0284	3.8000e-004	0.0136	5.3000e-004	0.0141	3.9000e-003	5.1000e-004	4.4100e-003		40.0170	40.0170	7.2000e-004	5.8500e-003	41.7775
Worker	0.0299	0.0178	0.2413	7.4000e-004	0.0986	4.6000e-004	0.0990	0.0262	4.3000e-004	0.0266		74.6364	74.6364	2.0100e-003	2.0100e-003	75.2861
<b>Total</b>	<b>0.0323</b>	<b>0.1148</b>	<b>0.2728</b>	<b>1.1700e-003</b>	<b>0.1138</b>	<b>1.1000e-003</b>	<b>0.1149</b>	<b>0.0305</b>	<b>1.0400e-003</b>	<b>0.0316</b>		<b>120.4446</b>	<b>120.4446</b>	<b>2.9000e-003</b>	<b>8.7800e-003</b>	<b>123.1318</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2843	2.1042	3.1443	4.8600e-003		0.0811	0.0811		0.0790	0.0790	0.0000	446.6962	446.6962	0.0703		448.4544
<b>Total</b>	<b>0.2843</b>	<b>2.1042</b>	<b>3.1443</b>	<b>4.8600e-003</b>		<b>0.0811</b>	<b>0.0811</b>		<b>0.0790</b>	<b>0.0790</b>	<b>0.0000</b>	<b>446.6962</b>	<b>446.6962</b>	<b>0.0703</b>		<b>448.4544</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Dec Convert to Tri - 2026**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0000e-004	0.0123	3.0800e-003	5.0000e-005	1.7100e-003	1.1000e-004	1.8200e-003	4.7000e-004	1.0000e-004	5.7000e-004		5.7912	5.7912	1.7000e-004	9.2000e-004	6.0683
Vendor	2.1400e-003	0.0847	0.0284	3.8000e-004	0.0136	5.3000e-004	0.0141	3.9000e-003	5.1000e-004	4.4100e-003		40.0170	40.0170	7.2000e-004	5.8500e-003	41.7775
Worker	0.0299	0.0178	0.2413	7.4000e-004	0.0986	4.6000e-004	0.0990	0.0262	4.3000e-004	0.0266		74.6364	74.6364	2.0100e-003	2.0100e-003	75.2861
<b>Total</b>	<b>0.0323</b>	<b>0.1148</b>	<b>0.2728</b>	<b>1.1700e-003</b>	<b>0.1138</b>	<b>1.1000e-003</b>	<b>0.1149</b>	<b>0.0305</b>	<b>1.0400e-003</b>	<b>0.0316</b>		<b>120.4446</b>	<b>120.4446</b>	<b>2.9000e-003</b>	<b>8.7800e-003</b>	<b>123.1318</b>

**3.3 Hard Convert to Tri - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2245	1.5668	3.1606	5.2300e-003		0.0161	0.0161		0.0161	0.0161		478.4517	478.4517	0.0197		478.9437
<b>Total</b>	<b>0.2245</b>	<b>1.5668</b>	<b>3.1606</b>	<b>5.2300e-003</b>		<b>0.0161</b>	<b>0.0161</b>		<b>0.0161</b>	<b>0.0161</b>		<b>478.4517</b>	<b>478.4517</b>	<b>0.0197</b>		<b>478.9437</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Hard Convert to Tri - 2038**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9000e-004	0.0114	3.1600e-003	4.0000e-005	1.7100e-003	1.0000e-004	1.8100e-003	4.7000e-004	9.0000e-005	5.6000e-004		4.8588	4.8588	1.7000e-004	7.7000e-004	5.0923
Vendor	1.9200e-003	0.0807	0.0272	3.2000e-004	0.0136	4.9000e-004	0.0141	3.9000e-003	4.7000e-004	4.3700e-003		34.3854	34.3854	7.2000e-004	5.0200e-003	35.9004
Worker	0.0179	9.8200e-003	0.1699	6.1000e-004	0.0986	2.6000e-004	0.0988	0.0262	2.4000e-004	0.0264		61.9919	61.9919	1.0500e-003	1.4900e-003	62.4624
<b>Total</b>	<b>0.0200</b>	<b>0.1019</b>	<b>0.2002</b>	<b>9.7000e-004</b>	<b>0.1138</b>	<b>8.5000e-004</b>	<b>0.1147</b>	<b>0.0305</b>	<b>8.0000e-004</b>	<b>0.0313</b>		<b>101.2361</b>	<b>101.2361</b>	<b>1.9400e-003</b>	<b>7.2800e-003</b>	<b>103.4551</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2245	1.5668	3.1606	5.2300e-003		0.0161	0.0161		0.0161	0.0161	0.0000	478.4517	478.4517	0.0197		478.9437
<b>Total</b>	<b>0.2245</b>	<b>1.5668</b>	<b>3.1606</b>	<b>5.2300e-003</b>		<b>0.0161</b>	<b>0.0161</b>		<b>0.0161</b>	<b>0.0161</b>	<b>0.0000</b>	<b>478.4517</b>	<b>478.4517</b>	<b>0.0197</b>		<b>478.9437</b>



Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.3 Hard Convert to Tri - 2038**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9000e-004	0.0114	3.1600e-003	4.0000e-005	1.7100e-003	1.0000e-004	1.8100e-003	4.7000e-004	9.0000e-005	5.6000e-004		4.8588	4.8588	1.7000e-004	7.7000e-004	5.0923
Vendor	1.9200e-003	0.0807	0.0272	3.2000e-004	0.0136	4.9000e-004	0.0141	3.9000e-003	4.7000e-004	4.3700e-003		34.3854	34.3854	7.2000e-004	5.0200e-003	35.9004
Worker	0.0179	9.8200e-003	0.1699	6.1000e-004	0.0986	2.6000e-004	0.0988	0.0262	2.4000e-004	0.0264		61.9919	61.9919	1.0500e-003	1.4900e-003	62.4624
<b>Total</b>	<b>0.0200</b>	<b>0.1019</b>	<b>0.2002</b>	<b>9.7000e-004</b>	<b>0.1138</b>	<b>8.5000e-004</b>	<b>0.1147</b>	<b>0.0305</b>	<b>8.0000e-004</b>	<b>0.0313</b>		<b>101.2361</b>	<b>101.2361</b>	<b>1.9400e-003</b>	<b>7.2800e-003</b>	<b>103.4551</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.534553	0.059172	0.184219	0.133650	0.026610	0.006752	0.011227	0.011343	0.000804	0.000471	0.026281	0.000961	0.003957

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.2 Energy by Land Use - NaturalGas**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Chrome Plating ATCM Amendments - Tri Conversion Construction Emissions Only - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Chrome Plating ATCM Amendments - Installation of APCD  
Statewide , Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	0.00	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Austin Energy				
<b>CO2 Intensity (lb/MW hr)</b>	1083.07	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Construction Phase - Assumed installing APCD's at a hard functional plating facility would occur over a 6 day period.

Off-road Equipment - Assumed APCD installation would require one aerial lift, one air compressor, one forklift and one welder.

Off-road Equipment - Assumed installation of APCD require 1 aerial lift, 1 air compressor, 1 forklift, 1 welder.

Trips and VMT - Assumed construction trips: APCD installation would require 12 worker trips, 2 vendor trips and 2 haul trips. Assumed 2 haul trips to transport a hazardous waste to a disposal facility.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	0.00	6.00
tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	0.00	12.00



Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2038	7.3000e-004	5.2000e-003	0.0101	2.0000e-005	3.6000e-004	5.0000e-005	4.1000e-004	1.0000e-004	5.0000e-005	1.5000e-004	0.0000	1.6574	1.6574	6.0000e-005	3.0000e-005	1.6684
Maximum	7.3000e-004	5.2000e-003	0.0101	2.0000e-005	3.6000e-004	5.0000e-005	4.1000e-004	1.0000e-004	5.0000e-005	1.5000e-004	0.0000	1.6574	1.6574	6.0000e-005	3.0000e-005	1.6684

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2038	7.3000e-004	5.2000e-003	0.0101	2.0000e-005	3.6000e-004	5.0000e-005	4.1000e-004	1.0000e-004	5.0000e-005	1.5000e-004	0.0000	1.6574	1.6574	6.0000e-005	3.0000e-005	1.6684
Maximum	7.3000e-004	5.2000e-003	0.0101	2.0000e-005	3.6000e-004	5.0000e-005	4.1000e-004	1.0000e-004	5.0000e-005	1.5000e-004	0.0000	1.6574	1.6574	6.0000e-005	3.0000e-005	1.6684

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
52	11-3-2037	2-2-2038	0.0071	0.0071
		Highest	0.0071	0.0071

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Hard APCD Installation	Building Construction	1/9/2038	1/18/2038	5	6	

**Acres of Grading (Site Preparation Phase): 0**

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Hard APCD Installation	Aerial Lifts	1	4.00	63	0.31
Hard APCD Installation	Air Compressors	1	4.00	78	0.48
Hard APCD Installation	Forklifts	1	4.00	89	0.20
Hard APCD Installation	Welders	1	4.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Hard APCD Installation	4	12.00	2.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Hard APCD Installation - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7000e-004	4.7000e-003	9.4800e-003	2.0000e-005		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	1.3021	1.3021	5.0000e-005	0.0000	1.3035
<b>Total</b>	<b>6.7000e-004</b>	<b>4.7000e-003</b>	<b>9.4800e-003</b>	<b>2.0000e-005</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.3021</b>	<b>1.3021</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.3035</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	2.3000e-004	6.0000e-005	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0903	0.0903	0.0000	1.0000e-005	0.0946
Vendor	1.0000e-005	2.4000e-004	8.0000e-005	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0935	0.0935	0.0000	1.0000e-005	0.0976
Worker	5.0000e-005	3.0000e-005	5.1000e-004	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.1715	0.1715	0.0000	0.0000	0.1728
<b>Total</b>	<b>6.0000e-005</b>	<b>5.0000e-004</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>3.7000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.3553</b>	<b>0.3553</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.3650</b>

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Hard APCD Installation - 2038**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7000e-004	4.7000e-003	9.4800e-003	2.0000e-005		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	1.3021	1.3021	5.0000e-005	0.0000	1.3035
<b>Total</b>	<b>6.7000e-004</b>	<b>4.7000e-003</b>	<b>9.4800e-003</b>	<b>2.0000e-005</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>		<b>5.0000e-005</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.3021</b>	<b>1.3021</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.3035</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	2.3000e-004	6.0000e-005	0.0000	3.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0903	0.0903	0.0000	1.0000e-005	0.0946
Vendor	1.0000e-005	2.4000e-004	8.0000e-005	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0935	0.0935	0.0000	1.0000e-005	0.0976
Worker	5.0000e-005	3.0000e-005	5.1000e-004	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.1715	0.1715	0.0000	0.0000	0.1728
<b>Total</b>	<b>6.0000e-005</b>	<b>5.0000e-004</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>3.6000e-004</b>	<b>0.0000</b>	<b>3.7000e-004</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.3553</b>	<b>0.3553</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.3650</b>

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.534553	0.059172	0.184219	0.133650	0.026610	0.006752	0.011227	0.011343	0.000804	0.000471	0.026281	0.000961	0.003957







Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

**6.2 Area by SubCategory**

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**7.2 Water by Land Use**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.2 Waste by Land Use**

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Chrome Plating ATCM Amendments - Installation of APCD  
Statewide , Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	0.00	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Austin Energy				
<b>CO2 Intensity (lb/MW hr)</b>	1083.07	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Construction Phase - Assumed installing APCD's at a hard functional plating facility would occur over a 6 day period.

Off-road Equipment - Assumed APCD installation would require one aerial lift, one air compressor, one forklift and one welder.

Off-road Equipment - Assumed installation of APCD require 1 aerial lift, 1 air compressor, 1 forklift, 1 welder.

Trips and VMT - Assumed construction trips: APCD installation would require 12 worker trips, 2 vendor trips and 2 haul trips. Assumed 2 haul trips to transport a hazardous waste to a disposal facility.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	0.00	6.00
tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	0.00	12.00

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2038	0.2453	1.7250	3.3918	6.5200e-003	0.1238	0.0175	0.1413	0.0333	0.0174	0.0507	0.0000	612.6958	612.6958	0.0225	0.0116	616.7228
Maximum	0.2453	1.7250	3.3918	6.5200e-003	0.1238	0.0175	0.1413	0.0333	0.0174	0.0507	0.0000	612.6958	612.6958	0.0225	0.0116	616.7228

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2038	0.2453	1.7250	3.3918	6.5200e-003	0.1238	0.0175	0.1413	0.0333	0.0174	0.0507	0.0000	612.6958	612.6958	0.0225	0.0116	616.7228
Maximum	0.2453	1.7250	3.3918	6.5200e-003	0.1238	0.0175	0.1413	0.0333	0.0174	0.0507	0.0000	612.6958	612.6958	0.0225	0.0116	616.7228



Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Hard APCD Installation	Building Construction	1/9/2038	1/18/2038	5	6	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Hard APCD Installation	Aerial Lifts	1	4.00	63	0.31
Hard APCD Installation	Air Compressors	1	4.00	78	0.48
Hard APCD Installation	Forklifts	1	4.00	89	0.20
Hard APCD Installation	Welders	1	4.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Hard APCD Installation	4	12.00	2.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Hard APCD Installation - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2245	1.5668	3.1606	5.2300e-003		0.0161	0.0161		0.0161	0.0161		478.4517	478.4517	0.0197		478.9437
<b>Total</b>	<b>0.2245</b>	<b>1.5668</b>	<b>3.1606</b>	<b>5.2300e-003</b>		<b>0.0161</b>	<b>0.0161</b>		<b>0.0161</b>	<b>0.0161</b>		<b>478.4517</b>	<b>478.4517</b>	<b>0.0197</b>		<b>478.9437</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4200e-003	0.0736	0.0213	3.1000e-004	0.0117	6.8000e-004	0.0124	3.2000e-003	6.5000e-004	3.8500e-003		33.1563	33.1563	1.1800e-003	5.2500e-003	34.7496
Vendor	2.0500e-003	0.0761	0.0262	3.2000e-004	0.0136	4.9000e-004	0.0141	3.9000e-003	4.7000e-004	4.3700e-003		34.3142	34.3142	7.3000e-004	5.0100e-003	35.8252
Worker	0.0174	8.5900e-003	0.1837	6.6000e-004	0.0986	2.6000e-004	0.0988	0.0262	2.4000e-004	0.0264		66.7736	66.7736	9.5000e-004	1.3600e-003	67.2042
<b>Total</b>	<b>0.0208</b>	<b>0.1582</b>	<b>0.2312</b>	<b>1.2900e-003</b>	<b>0.1238</b>	<b>1.4300e-003</b>	<b>0.1252</b>	<b>0.0333</b>	<b>1.3600e-003</b>	<b>0.0346</b>		<b>134.2442</b>	<b>134.2442</b>	<b>2.8600e-003</b>	<b>0.0116</b>	<b>137.7790</b>

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Hard APCD Installation - 2038**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2245	1.5668	3.1606	5.2300e-003		0.0161	0.0161		0.0161	0.0161	0.0000	478.4517	478.4517	0.0197		478.9437
<b>Total</b>	<b>0.2245</b>	<b>1.5668</b>	<b>3.1606</b>	<b>5.2300e-003</b>		<b>0.0161</b>	<b>0.0161</b>		<b>0.0161</b>	<b>0.0161</b>	<b>0.0000</b>	<b>478.4517</b>	<b>478.4517</b>	<b>0.0197</b>		<b>478.9437</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4200e-003	0.0736	0.0213	3.1000e-004	0.0117	6.8000e-004	0.0124	3.2000e-003	6.5000e-004	3.8500e-003		33.1563	33.1563	1.1800e-003	5.2500e-003	34.7496
Vendor	2.0500e-003	0.0761	0.0262	3.2000e-004	0.0136	4.9000e-004	0.0141	3.9000e-003	4.7000e-004	4.3700e-003		34.3142	34.3142	7.3000e-004	5.0100e-003	35.8252
Worker	0.0174	8.5900e-003	0.1837	6.6000e-004	0.0986	2.6000e-004	0.0988	0.0262	2.4000e-004	0.0264		66.7736	66.7736	9.5000e-004	1.3600e-003	67.2042
<b>Total</b>	<b>0.0208</b>	<b>0.1582</b>	<b>0.2312</b>	<b>1.2900e-003</b>	<b>0.1238</b>	<b>1.4300e-003</b>	<b>0.1252</b>	<b>0.0333</b>	<b>1.3600e-003</b>	<b>0.0346</b>		<b>134.2442</b>	<b>134.2442</b>	<b>2.8600e-003</b>	<b>0.0116</b>	<b>137.7790</b>

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.534553	0.059172	0.184219	0.133650	0.026610	0.006752	0.011227	0.011343	0.000804	0.000471	0.026281	0.000961	0.003957



Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.2 Energy by Land Use - NaturalGas**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Chrome Plating ATCM Amendments - Installation of APCD  
Statewide , Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	0.00	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Austin Energy				
<b>CO2 Intensity (lb/MW hr)</b>	1083.07	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Construction Phase - Assumed installing APCD's at a hard functional plating facility would occur over a 6 day period.

Off-road Equipment - Assumed APCD installation would require one aerial lift, one air compressor, one forklift and one welder.

Off-road Equipment - Assumed installation of APCD require 1 aerial lift, 1 air compressor, 1 forklift, 1 welder.

Trips and VMT - Assumed construction trips: APCD installation would require 12 worker trips, 2 vendor trips and 2 haul trips. Assumed 2 haul trips to transport a hazardous waste to a disposal facility.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	0.00	6.00
tblTripsAndVMT	HaulingTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	0.00	12.00

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2038	0.2456	1.7354	3.3793	6.4700e-003	0.1238	0.0175	0.1413	0.0333	0.0174	0.0507	0.0000	608.0308	608.0308	0.0226	0.0118	612.1039
<b>Maximum</b>	<b>0.2456</b>	<b>1.7354</b>	<b>3.3793</b>	<b>6.4700e-003</b>	<b>0.1238</b>	<b>0.0175</b>	<b>0.1413</b>	<b>0.0333</b>	<b>0.0174</b>	<b>0.0507</b>	<b>0.0000</b>	<b>608.0308</b>	<b>608.0308</b>	<b>0.0226</b>	<b>0.0118</b>	<b>612.1039</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2038	0.2456	1.7354	3.3793	6.4700e-003	0.1238	0.0175	0.1413	0.0333	0.0174	0.0507	0.0000	608.0308	608.0308	0.0226	0.0118	612.1039
<b>Maximum</b>	<b>0.2456</b>	<b>1.7354</b>	<b>3.3793</b>	<b>6.4700e-003</b>	<b>0.1238</b>	<b>0.0175</b>	<b>0.1413</b>	<b>0.0333</b>	<b>0.0174</b>	<b>0.0507</b>	<b>0.0000</b>	<b>608.0308</b>	<b>608.0308</b>	<b>0.0226</b>	<b>0.0118</b>	<b>612.1039</b>





Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Hard APCD Installation	Building Construction	1/9/2038	1/18/2038	5	6	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Hard APCD Installation	Aerial Lifts	1	4.00	63	0.31
Hard APCD Installation	Air Compressors	1	4.00	78	0.48
Hard APCD Installation	Forklifts	1	4.00	89	0.20
Hard APCD Installation	Welders	1	4.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Hard APCD Installation	4	12.00	2.00	4.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Hard APCD Installation - 2038**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2245	1.5668	3.1606	5.2300e-003		0.0161	0.0161		0.0161	0.0161		478.4517	478.4517	0.0197		478.9437
<b>Total</b>	<b>0.2245</b>	<b>1.5668</b>	<b>3.1606</b>	<b>5.2300e-003</b>		<b>0.0161</b>	<b>0.0161</b>		<b>0.0161</b>	<b>0.0161</b>		<b>478.4517</b>	<b>478.4517</b>	<b>0.0197</b>		<b>478.9437</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3100e-003	0.0781	0.0216	3.1000e-004	0.0117	6.8000e-004	0.0124	3.2000e-003	6.5000e-004	3.8500e-003		33.2019	33.2019	1.1700e-003	5.2600e-003	34.7973
Vendor	1.9200e-003	0.0807	0.0272	3.2000e-004	0.0136	4.9000e-004	0.0141	3.9000e-003	4.7000e-004	4.3700e-003		34.3854	34.3854	7.2000e-004	5.0200e-003	35.9004
Worker	0.0179	9.8200e-003	0.1699	6.1000e-004	0.0986	2.6000e-004	0.0988	0.0262	2.4000e-004	0.0264		61.9919	61.9919	1.0500e-003	1.4900e-003	62.4624
<b>Total</b>	<b>0.0211</b>	<b>0.1686</b>	<b>0.2187</b>	<b>1.2400e-003</b>	<b>0.1238</b>	<b>1.4300e-003</b>	<b>0.1252</b>	<b>0.0333</b>	<b>1.3600e-003</b>	<b>0.0346</b>		<b>129.5792</b>	<b>129.5792</b>	<b>2.9400e-003</b>	<b>0.0118</b>	<b>133.1601</b>

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Hard APCD Installation - 2038**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2245	1.5668	3.1606	5.2300e-003		0.0161	0.0161		0.0161	0.0161	0.0000	478.4517	478.4517	0.0197		478.9437
<b>Total</b>	<b>0.2245</b>	<b>1.5668</b>	<b>3.1606</b>	<b>5.2300e-003</b>		<b>0.0161</b>	<b>0.0161</b>		<b>0.0161</b>	<b>0.0161</b>	<b>0.0000</b>	<b>478.4517</b>	<b>478.4517</b>	<b>0.0197</b>		<b>478.9437</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3100e-003	0.0781	0.0216	3.1000e-004	0.0117	6.8000e-004	0.0124	3.2000e-003	6.5000e-004	3.8500e-003		33.2019	33.2019	1.1700e-003	5.2600e-003	34.7973
Vendor	1.9200e-003	0.0807	0.0272	3.2000e-004	0.0136	4.9000e-004	0.0141	3.9000e-003	4.7000e-004	4.3700e-003		34.3854	34.3854	7.2000e-004	5.0200e-003	35.9004
Worker	0.0179	9.8200e-003	0.1699	6.1000e-004	0.0986	2.6000e-004	0.0988	0.0262	2.4000e-004	0.0264		61.9919	61.9919	1.0500e-003	1.4900e-003	62.4624
<b>Total</b>	<b>0.0211</b>	<b>0.1686</b>	<b>0.2187</b>	<b>1.2400e-003</b>	<b>0.1238</b>	<b>1.4300e-003</b>	<b>0.1252</b>	<b>0.0333</b>	<b>1.3600e-003</b>	<b>0.0346</b>		<b>129.5792</b>	<b>129.5792</b>	<b>2.9400e-003</b>	<b>0.0118</b>	<b>133.1601</b>

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.534553	0.059172	0.184219	0.133650	0.026610	0.006752	0.011227	0.011343	0.000804	0.000471	0.026281	0.000961	0.003957

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.2 Energy by Land Use - NaturalGas**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>



Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Chrome Plating ATCM Amendments - Installation of APCD - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Chrome Plating ATCM Amendments - Building Enclosure  
Statewide , Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	0.00	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Austin Energy				
<b>CO2 Intensity (lb/MWhr)</b>	1083.07	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Construction Phase - Assumed constructing building enclosures (including tank relocation) would occur over a 6 day period.

Off-road Equipment - Assumed APCD installation would require one aerial lift, one air compressor, one forklift and one welder.

Off-road Equipment - Assumed tank relocation would require 1 aerial lift, 1 forklift, 1 welder.

Trips and VMT - Assumed construction trips: tank relocation would require 10 worker trips, 2 vendor trips. Assumed two haul trips to transport hazardous waste to a disposal site.

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	0.00	6.00
tblOffRoadEquipment	LoadFactor	0.20	0.20
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tbITripsAndVMT	HaulingTripNumber	0.00	2.00
tbITripsAndVMT	VendorTripNumber	0.00	2.00
tbITripsAndVMT	WorkerTripNumber	0.00	10.00

**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	5.9000e-004	4.4500e-003	6.5800e-003	1.0000e-005	3.0000e-004	1.4000e-004	4.4000e-004	8.0000e-005	1.4000e-004	2.2000e-004	0.0000	1.0495	1.0495	1.7000e-004	3.0000e-005	1.0626
<b>Maximum</b>	<b>5.9000e-004</b>	<b>4.4500e-003</b>	<b>6.5800e-003</b>	<b>1.0000e-005</b>	<b>3.0000e-004</b>	<b>1.4000e-004</b>	<b>4.4000e-004</b>	<b>8.0000e-005</b>	<b>1.4000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>1.0495</b>	<b>1.0495</b>	<b>1.7000e-004</b>	<b>3.0000e-005</b>	<b>1.0626</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	5.9000e-004	4.4500e-003	6.5800e-003	1.0000e-005	3.0000e-004	1.4000e-004	4.4000e-004	8.0000e-005	1.4000e-004	2.2000e-004	0.0000	1.0495	1.0495	1.7000e-004	3.0000e-005	1.0626
<b>Maximum</b>	<b>5.9000e-004</b>	<b>4.4500e-003</b>	<b>6.5800e-003</b>	<b>1.0000e-005</b>	<b>3.0000e-004</b>	<b>1.4000e-004</b>	<b>4.4000e-004</b>	<b>8.0000e-005</b>	<b>1.4000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>1.0495</b>	<b>1.0495</b>	<b>1.7000e-004</b>	<b>3.0000e-005</b>	<b>1.0626</b>

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

**2.2 Overall Operational**

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Hard Tank Relocation	Building Construction	1/1/2025	1/8/2025	5	6	

**Acres of Grading (Site Preparation Phase): 0**

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Hard Tank Relocation	Forklifts	1	4.00	89	0.20
Hard Tank Relocation	Aerial Lifts	1	4.00	63	0.31
Hard Tank Relocation	Welders	1	4.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Hard Tank Relocation	3	10.00	2.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Hard Tank Relocation - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.1000e-004	4.0300e-003	5.8200e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.3000e-004	1.3000e-004	0.0000	0.7061	0.7061	1.6000e-004	0.0000	0.7102
<b>Total</b>	<b>5.1000e-004</b>	<b>4.0300e-003</b>	<b>5.8200e-003</b>	<b>1.0000e-005</b>		<b>1.4000e-004</b>	<b>1.4000e-004</b>		<b>1.3000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.7061</b>	<b>0.7061</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>0.7102</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.3000e-004	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0550	0.0550	0.0000	1.0000e-005	0.0576
Vendor	1.0000e-005	2.5000e-004	9.0000e-005	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1109	0.1109	0.0000	2.0000e-005	0.1158
Worker	7.0000e-005	5.0000e-005	6.5000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1775	0.1775	0.0000	0.0000	0.1790
<b>Total</b>	<b>8.0000e-005</b>	<b>4.3000e-004</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>3.0000e-004</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.3434</b>	<b>0.3434</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.3525</b>



Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Hard Tank Relocation - 2025**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.1000e-004	4.0300e-003	5.8200e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.3000e-004	1.3000e-004	0.0000	0.7061	0.7061	1.6000e-004	0.0000	0.7102
<b>Total</b>	<b>5.1000e-004</b>	<b>4.0300e-003</b>	<b>5.8200e-003</b>	<b>1.0000e-005</b>		<b>1.4000e-004</b>	<b>1.4000e-004</b>		<b>1.3000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.7061</b>	<b>0.7061</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>0.7102</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.3000e-004	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0550	0.0550	0.0000	1.0000e-005	0.0576
Vendor	1.0000e-005	2.5000e-004	9.0000e-005	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1109	0.1109	0.0000	2.0000e-005	0.1158
Worker	7.0000e-005	5.0000e-005	6.5000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1775	0.1775	0.0000	0.0000	0.1790
<b>Total</b>	<b>8.0000e-005</b>	<b>4.3000e-004</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>3.0000e-004</b>	<b>0.0000</b>	<b>3.0000e-004</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.3434</b>	<b>0.3434</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.3525</b>

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.534553	0.059172	0.184219	0.133650	0.026610	0.006752	0.011227	0.011343	0.000804	0.000471	0.026281	0.000961	0.003957





Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

**6.2 Area by SubCategory**

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**7.2 Water by Land Use**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.2 Waste by Land Use**

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Chrome Plating ATCM Amendments - Building Enclosure**

**Statewide , Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	0.00	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Austin Energy				
<b>CO2 Intensity (lb/MWhr)</b>	1083.07	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Construction Phase - Assumed constructing building enclosures (including tank relocation) would occur over a 6 day period.

Off-road Equipment - Assumed APCD installation would require one aerial lift, one air compressor, one forklift and one welder.

Off-road Equipment - Assumed tank relocation would require 1 aerial lift, 1 forklift, 1 welder.

Trips and VMT - Assumed construction trips: tank relocation would require 10 worker trips, 2 vendor trips. Assumed two haul trips to transport hazardous waste to a disposal site.

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	0.00	6.00
tblOffRoadEquipment	LoadFactor	0.20	0.20
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tbITripsAndVMT	HaulingTripNumber	0.00	2.00
tbITripsAndVMT	VendorTripNumber	0.00	2.00
tbITripsAndVMT	WorkerTripNumber	0.00	10.00

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	0.1999	1.4776	2.2120	4.1400e-003	0.1015	0.0482	0.1498	0.0273	0.0460	0.0733	0.0000	389.4392	389.4392	0.0632	0.0108	394.2271
<b>Maximum</b>	<b>0.1999</b>	<b>1.4776</b>	<b>2.2120</b>	<b>4.1400e-003</b>	<b>0.1015</b>	<b>0.0482</b>	<b>0.1498</b>	<b>0.0273</b>	<b>0.0460</b>	<b>0.0733</b>	<b>0.0000</b>	<b>389.4392</b>	<b>389.4392</b>	<b>0.0632</b>	<b>0.0108</b>	<b>394.2271</b>

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	0.1999	1.4776	2.2120	4.1400e-003	0.1015	0.0482	0.1498	0.0273	0.0460	0.0733	0.0000	389.4392	389.4392	0.0632	0.0108	394.2271
<b>Maximum</b>	<b>0.1999</b>	<b>1.4776</b>	<b>2.2120</b>	<b>4.1400e-003</b>	<b>0.1015</b>	<b>0.0482</b>	<b>0.1498</b>	<b>0.0273</b>	<b>0.0460</b>	<b>0.0733</b>	<b>0.0000</b>	<b>389.4392</b>	<b>389.4392</b>	<b>0.0632</b>	<b>0.0108</b>	<b>394.2271</b>



Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Hard Tank Relocation	Building Construction	1/1/2025	1/8/2025	5	6	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Hard Tank Relocation	Forklifts	1	4.00	89	0.20
Hard Tank Relocation	Aerial Lifts	1	4.00	63	0.31
Hard Tank Relocation	Welders	1	4.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Hard Tank Relocation	3	10.00	2.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**



Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Hard Tank Relocation - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1706	1.3425	1.9410	2.8900e-003		0.0469	0.0469		0.0448	0.0448		259.4343	259.4343	0.0602		260.9396
<b>Total</b>	<b>0.1706</b>	<b>1.3425</b>	<b>1.9410</b>	<b>2.8900e-003</b>		<b>0.0469</b>	<b>0.0469</b>		<b>0.0448</b>	<b>0.0448</b>		<b>259.4343</b>	<b>259.4343</b>	<b>0.0602</b>		<b>260.9396</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.5000e-004	0.0402	0.0103	1.9000e-004	5.8400e-003	3.7000e-004	6.2100e-003	1.6000e-003	3.5000e-004	1.9500e-003		20.1922	20.1922	5.7000e-004	3.1900e-003	21.1577
Vendor	2.3000e-003	0.0806	0.0279	3.8000e-004	0.0136	5.3000e-004	0.0141	3.9000e-003	5.1000e-004	4.4100e-003		40.7295	40.7295	7.2000e-004	5.9500e-003	42.5197
Worker	0.0263	0.0143	0.2328	6.8000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.7000e-004	0.0222		69.0832	69.0832	1.7000e-003	1.6300e-003	69.6100
<b>Total</b>	<b>0.0293</b>	<b>0.1351</b>	<b>0.2710</b>	<b>1.2500e-003</b>	<b>0.1015</b>	<b>1.3100e-003</b>	<b>0.1028</b>	<b>0.0273</b>	<b>1.2300e-003</b>	<b>0.0285</b>		<b>130.0049</b>	<b>130.0049</b>	<b>2.9900e-003</b>	<b>0.0108</b>	<b>133.2875</b>

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Hard Tank Relocation - 2025**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1706	1.3425	1.9410	2.8900e-003		0.0469	0.0469		0.0448	0.0448	0.0000	259.4343	259.4343	0.0602		260.9396
<b>Total</b>	<b>0.1706</b>	<b>1.3425</b>	<b>1.9410</b>	<b>2.8900e-003</b>		<b>0.0469</b>	<b>0.0469</b>		<b>0.0448</b>	<b>0.0448</b>	<b>0.0000</b>	<b>259.4343</b>	<b>259.4343</b>	<b>0.0602</b>		<b>260.9396</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.5000e-004	0.0402	0.0103	1.9000e-004	5.8400e-003	3.7000e-004	6.2100e-003	1.6000e-003	3.5000e-004	1.9500e-003		20.1922	20.1922	5.7000e-004	3.1900e-003	21.1577
Vendor	2.3000e-003	0.0806	0.0279	3.8000e-004	0.0136	5.3000e-004	0.0141	3.9000e-003	5.1000e-004	4.4100e-003		40.7295	40.7295	7.2000e-004	5.9500e-003	42.5197
Worker	0.0263	0.0143	0.2328	6.8000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.7000e-004	0.0222		69.0832	69.0832	1.7000e-003	1.6300e-003	69.6100
<b>Total</b>	<b>0.0293</b>	<b>0.1351</b>	<b>0.2710</b>	<b>1.2500e-003</b>	<b>0.1015</b>	<b>1.3100e-003</b>	<b>0.1028</b>	<b>0.0273</b>	<b>1.2300e-003</b>	<b>0.0285</b>		<b>130.0049</b>	<b>130.0049</b>	<b>2.9900e-003</b>	<b>0.0108</b>	<b>133.2875</b>

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.534553	0.059172	0.184219	0.133650	0.026610	0.006752	0.011227	0.011343	0.000804	0.000471	0.026281	0.000961	0.003957

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.2 Energy by Land Use - NaturalGas**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**Chrome Plating ATCM Amendments - Building Enclosure**

**Statewide , Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	0.00	0.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	54
<b>Climate Zone</b>	11			<b>Operational Year</b>	2024
<b>Utility Company</b>	Austin Energy				
<b>CO2 Intensity (lb/MWhr)</b>	1083.07	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Construction Phase - Assumed constructing building enclosures (including tank relocation) would occur over a 6 day period.

Off-road Equipment - Assumed APCD installation would require one aerial lift, one air compressor, one forklift and one welder.

Off-road Equipment - Assumed tank relocation would require 1 aerial lift, 1 forklift, 1 welder.

Trips and VMT - Assumed construction trips: tank relocation would require 10 worker trips, 2 vendor trips. Assumed two haul trips to transport hazardous waste to a disposal site.

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	0.00	6.00
tblOffRoadEquipment	LoadFactor	0.20	0.20
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

tbITripsAndVMT	HaulingTripNumber	0.00	2.00
tbITripsAndVMT	VendorTripNumber	0.00	2.00
tbITripsAndVMT	WorkerTripNumber	0.00	10.00

**2.0 Emissions Summary**

**2.1 Overall Construction (Maximum Daily Emission)**

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	0.2000	1.4870	2.1944	4.0900e-003	0.1015	0.0482	0.1498	0.0273	0.0460	0.0733	0.0000	384.6376	384.6376	0.0633	0.0109	389.4808
<b>Maximum</b>	<b>0.2000</b>	<b>1.4870</b>	<b>2.1944</b>	<b>4.0900e-003</b>	<b>0.1015</b>	<b>0.0482</b>	<b>0.1498</b>	<b>0.0273</b>	<b>0.0460</b>	<b>0.0733</b>	<b>0.0000</b>	<b>384.6376</b>	<b>384.6376</b>	<b>0.0633</b>	<b>0.0109</b>	<b>389.4808</b>

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	0.2000	1.4870	2.1944	4.0900e-003	0.1015	0.0482	0.1498	0.0273	0.0460	0.0733	0.0000	384.6376	384.6376	0.0633	0.0109	389.4808
<b>Maximum</b>	<b>0.2000</b>	<b>1.4870</b>	<b>2.1944</b>	<b>4.0900e-003</b>	<b>0.1015</b>	<b>0.0482</b>	<b>0.1498</b>	<b>0.0273</b>	<b>0.0460</b>	<b>0.0733</b>	<b>0.0000</b>	<b>384.6376</b>	<b>384.6376</b>	<b>0.0633</b>	<b>0.0109</b>	<b>389.4808</b>



Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Hard Tank Relocation	Building Construction	1/1/2025	1/8/2025	5	6	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Hard Tank Relocation	Forklifts	1	4.00	89	0.20
Hard Tank Relocation	Aerial Lifts	1	4.00	63	0.31
Hard Tank Relocation	Welders	1	4.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Hard Tank Relocation	3	10.00	2.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Hard Tank Relocation - 2025**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1706	1.3425	1.9410	2.8900e-003		0.0469	0.0469		0.0448	0.0448		259.4343	259.4343	0.0602		260.9396
<b>Total</b>	<b>0.1706</b>	<b>1.3425</b>	<b>1.9410</b>	<b>2.8900e-003</b>		<b>0.0469</b>	<b>0.0469</b>		<b>0.0448</b>	<b>0.0448</b>		<b>259.4343</b>	<b>259.4343</b>	<b>0.0602</b>		<b>260.9396</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.9000e-004	0.0426	0.0105	1.9000e-004	5.8400e-003	3.7000e-004	6.2100e-003	1.6000e-003	3.5000e-004	1.9500e-003		20.2178	20.2178	5.7000e-004	3.2000e-003	21.1845
Vendor	2.1900e-003	0.0855	0.0289	3.8000e-004	0.0136	5.3000e-004	0.0141	3.9000e-003	5.1000e-004	4.4100e-003		40.8069	40.8069	7.2000e-004	5.9600e-003	42.6020
Worker	0.0265	0.0164	0.2140	6.3000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.7000e-004	0.0222		64.1786	64.1786	1.8300e-003	1.7800e-003	64.7548
<b>Total</b>	<b>0.0294</b>	<b>0.1445</b>	<b>0.2534</b>	<b>1.2000e-003</b>	<b>0.1015</b>	<b>1.3100e-003</b>	<b>0.1029</b>	<b>0.0273</b>	<b>1.2300e-003</b>	<b>0.0285</b>		<b>125.2033</b>	<b>125.2033</b>	<b>3.1200e-003</b>	<b>0.0109</b>	<b>128.5412</b>

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**3.2 Hard Tank Relocation - 2025**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1706	1.3425	1.9410	2.8900e-003		0.0469	0.0469		0.0448	0.0448	0.0000	259.4343	259.4343	0.0602		260.9396
<b>Total</b>	<b>0.1706</b>	<b>1.3425</b>	<b>1.9410</b>	<b>2.8900e-003</b>		<b>0.0469</b>	<b>0.0469</b>		<b>0.0448</b>	<b>0.0448</b>	<b>0.0000</b>	<b>259.4343</b>	<b>259.4343</b>	<b>0.0602</b>		<b>260.9396</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.9000e-004	0.0426	0.0105	1.9000e-004	5.8400e-003	3.7000e-004	6.2100e-003	1.6000e-003	3.5000e-004	1.9500e-003		20.2178	20.2178	5.7000e-004	3.2000e-003	21.1845
Vendor	2.1900e-003	0.0855	0.0289	3.8000e-004	0.0136	5.3000e-004	0.0141	3.9000e-003	5.1000e-004	4.4100e-003		40.8069	40.8069	7.2000e-004	5.9600e-003	42.6020
Worker	0.0265	0.0164	0.2140	6.3000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.7000e-004	0.0222		64.1786	64.1786	1.8300e-003	1.7800e-003	64.7548
<b>Total</b>	<b>0.0294</b>	<b>0.1445</b>	<b>0.2534</b>	<b>1.2000e-003</b>	<b>0.1015</b>	<b>1.3100e-003</b>	<b>0.1029</b>	<b>0.0273</b>	<b>1.2300e-003</b>	<b>0.0285</b>		<b>125.2033</b>	<b>125.2033</b>	<b>3.1200e-003</b>	<b>0.0109</b>	<b>128.5412</b>

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.534553	0.059172	0.184219	0.133650	0.026610	0.006752	0.011227	0.011343	0.000804	0.000471	0.026281	0.000961	0.003957



Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**5.2 Energy by Land Use - NaturalGas**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
<b>Total</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>		<b>2.3000e-004</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Chrome Plating ATCM Amendments - Building Enclosure - Statewide , Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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