

# APPENDIX C

## Stockton Source Apportionment

### Stockton CERP

San Joaquin Valley Air Pollution Control District

## STATIONARY SOURCE EMISSIONS INVENTORY

A community emissions inventory is the compilation of criteria pollutant and air toxics emissions data from air pollution sources that are within the community. The stationary source community emissions inventory includes emissions of volatile organic compounds & reactive organic gases (VOC/ROG), oxides of nitrogen (NOx), particulate matter of 2.5 microns (PM<sub>2.5</sub>), and toxic air contaminants (e.g. diesel PM).

The District has longstanding experience working with regulated facilities and collecting emissions inventory data on an annual basis from these facilities. The District's current criteria emissions inventory reporting processes provides an annual assessment of emissions from permitted facilities in the Valley. The inventory collection process begins early in the calendar year by requesting emissions-related information from stationary sources of pollution for the prior calendar year, using streamlined processes and forms developed over years of experience working with industry. The District then verifies or calculates emissions based on the inventory data received by the regulated facilities in the Valley.

### *Methodology*

The emissions inventory represents actual emissions from stationary sources. The actual emissions are typically based one of the following general quantification methods:

$$\text{Emissions (ton-pollutant/yr)} = \text{Process Rate (ton-throughput/yr)} \\ \times \text{Emission Factor (ton-pollutant/ton-throughput)}$$

$$\text{Emissions (ton-pollutant/yr)} = \text{Fuel Use (gal combusted/yr)} \\ \times \text{Emission Factor (ton-pollutant/gal combusted)}$$

$$\text{Emissions (ton-pollutant/yr)} = \text{Fuel Use (SCF combusted/yr)} \\ \times \text{Emission Factor (SCF combusted)}$$

The District relies on the regulated facility owners and operators to submit accurate process rate and/or fuel use data, and identify the approved emission factors as well identify necessary updates to those emission factors. Emission factors are established based on the best available information, and according to the following overarching data quality hierarchy:

1. Continuous Emissions Monitoring (CEM) on the equipment
2. Periodic source test on the equipment
3. Manufacturer's guarantee on the equipment
4. Continuous measurement for similarly configured emission sources
5. Source testing data for similar emission sources
6. Permitted emission limits and emission factors established during permitting actions and listed on the permit.
7. AP-42 or other state-approved industry derived emission factors.

*Stationary Source Facility-Level Emissions Inventories*

Based on the emissions inventory gathering process described above, the table below summarizes the emissions inventory for each District permitted facility in the Stockton Community for year 2018.

## Table Notes:

- The facilities listed below are identified in alphabetical order.
- Not all facilities emit all pollutants
- Facilities first operating in 2018 have no reported inventory for 2018
- Values have been rounded to two decimal places

**Table 1: Year 2018 Emissions Inventory for District Permitted Facilities**

| Region | ID  | Facility Name                           | NOX (tpy) | VOC (tpy) | PM2.5 (tpy) |
|--------|-----|---|-----------|-----------|-------------|
| N      | 4   | ACE ARMATURE & MOTOR SHOP (JOSHUA IRIS) | 0.10      | 0.01      | 0.01        |
| N      | 86  | MCM14 CORP                              | 0.00      | 1.39      | 0.00        |
| N      | 103 | ABDO THABIT NASHIR                      | 0.00      | 0.09      | 0.00        |
| N      | 150 | DURAFLAME WEST                          | 0.04      | 0.03      | 1.41        |
| N      | 151 | CALIFORNIA WATER SERVICE                | 0.01      | 0.02      | 0.00        |
| N      | 153 | LEHIGH SOUTHWEST CEMENT COMPANY         | 0.00      | 0.00      | 0.68        |
| N      | 157 | CALIFORNIA AMMONIA CO                   | 0.04      | 0.02      | 0.03        |
| N      | 172 | CANNON DRY CLEANING COMPANY             | 0.00      | 0.00      | 0.00        |
| N      | 175 | MOBIL STOCKTON #1/ABDO NASHIR           | 0.00      | 0.11      | 0.00        |
| N      | 227 | PENNY NEWMAN GRAIN COMPANY              | 0.00      | 0.00      | 0.91        |
| N      | 228 | CONTRACT COATINGS                       | 0.00      | 4.07      | 2.71        |
| N      | 258 | SRH FOOD & GAS MARKET                   | 0.00      | 0.45      | 0.00        |
| N      | 270 | METROPOLITAN STEVEDORE COMPANY          | 0.00      | 0.00      | 0.00        |
| N      | 285 | DIAMOND FOODS, LLC                      | 0.29      | 0.12      | 0.63        |
| N      | 298 | BEST EXPRESS FOODS INC                  | 0.00      | 0.00      | 0.00        |
| N      | 389 | HOGAN MFG INC                           | 0.01      | 1.06      | 0.22        |
| N      | 400 | HI-GRADE CLEANERS                       | 0.00      | 0.06      | 0.00        |
| N      | 454 | GSG GAS AND MART                        | 0.00      | 0.10      | 0.00        |
| N      | 524 | N.J. MCCUTCHEN, INC.                    | 0.00      | 0.35      | 0.21        |
| N      | 549 | MIRACLE MILE MARKET                     | 0.00      | 0.14      | 0.00        |
| N      | 553 | CONCRETE, INC.                          | 0.00      | 0.00      | 2.54        |
| N      | 577 | NEWARK SIERRA PAPERBOARD CORP.          | 0.01      | 0.00      | 0.00        |
| N      | 629 | SCHUFF STEEL COMPANY                    | 0.00      | 0.00      | 0.05        |
| N      | 645 | DTE STOCKTON, LLC                       | 95.68     | 1.98      | 13.84       |
| N      | 655 | WESTWAY FEED PRODUCTS LLC               | 0.00      | 0.00      | 0.00        |
| N      | 690 | RITE WAY CLEANERS                       | 0.00      | 0.03      | 0.00        |
| N      | 691 | CALPORTLAND COMPANY (STOCKTON WEST)     | 0.00      | 0.00      | 0.47        |
| N      | 722 | SAN JOAQUIN COUNTY                      | 0.05      | 0.06      | 0.00        |
| N      | 742 | SEPULVEDA'S TRUCK PAINTING              | 0.00      | 0.10      | 0.05        |
| N      | 788 | STATE OF CA. 2ND DIST. AG ASSO          | 0.00      | 0.00      | 0.00        |
| N      | 800 | CITY OF STOCKTON                        | 0.01      | 0.07      | 0.00        |
| N      | 805 | STOCKTON, CITY OF                       | 0.00      | 0.07      | 0.00        |
| N      | 810 | STOCKTON TRI-INDUSTRIES, INC            | 0.00      | 4.64      | 1.39        |
| N      | 811 | STOCKTON RWCF                           | 3.90      | 1.07      | 0.32        |
| N      | 818 | CAL STATE UNIV C/O GRUPE COMMERCIAL CO  | 0.00      | 0.00      | 0.00        |
| N      | 819 | LMG STOCKTON, INC DBA THE RECORD        | 0.00      | 0.10      | 0.00        |

| Region | ID   | Facility Name                            | NOX (tpy) | VOC (tpy) | PM2.5 (tpy) |
|--------|------|--|-----------|-----------|-------------|
| N      | 823  | STOCKTON EAST WATER DISTRICT             | 0.16      | 0.03      | 0.00        |
| N      | 828  | CITY OF STOCKTON - VAN BUSKIRK GOLF      | 0.00      | 0.00      | 0.00        |
| N      | 829  | NUSTAR TERMINALS OPS PARTNERSHIP LP      | 3.06      | 8.44      | 0.23        |
| N      | 845  | TESORO LOGISTICS OPERATIONS LLC          | 0.00      | 8.81      | 0.00        |
| N      | 898  | HDM AMERICA LLC                          | 0.00      | 0.00      | 0.08        |
| N      | 921  | VANCO TRUCK & AUTO PLAZA                 | 0.00      | 0.53      | 0.00        |
| N      | 954  | MCCOY TRUCK TIRE SVC CNTR                | 0.00      | 0.16      | 0.08        |
| N      | 983  | RANDHAWA PETROLEUM LLC DBA EL DORADO GAS | 0.00      | 0.19      | 0.00        |
| N      | 993  | 620 WEST CHARTER WAY LLC                 | 0.00      | 0.66      | 0.00        |
| N      | 997  | EAST BAY MUNICIPAL UTILITY DISTRICT      | 0.02      | 0.01      | 0.00        |
| N      | 1000 | SFPP, L.P.                               | 0.00      | 0.54      | 0.00        |
| N      | 1004 | CORT COMPANIES                           | 0.00      | 0.00      | 0.00        |
| N      | 1006 | KLEIN BROS LTD                           | 0.00      | 0.00      | 0.00        |
| N      | 1013 | PORT OF STOCKTON                         | 0.01      | 0.06      | 0.03        |
| N      | 1084 | AMERICAN BUILDING SUPPLY                 | 0.00      | 2.58      | 0.62        |
| N      | 1096 | CENTRAL VALLEY HARDWARE                  | 0.00      | 0.01      | 0.00        |
| N      | 1130 | CITY OF STOCKTON MUN. UTILITY            | 0.05      | 0.05      | 0.00        |
| N      | 1153 | MARTIN OPERATING PARTNERSHIP L P         | 0.22      | 0.01      | 0.07        |
| N      | 2369 | ARROW INFRASTRUCTURE HOLDING IA LLC      | 1.93      | 7.34      | 0.10        |
| N      | 2371 | BAGLIETTO SEEDS                          | 0.00      | 0.00      | 0.01        |
| N      | 2382 | STEVEN STEIN ENTERPRISES, INC            | 0.00      | 0.51      | 0.11        |
| N      | 2392 | DAMERON HOSPITAL                         | 0.74      | 0.05      | 0.07        |
| N      | 2403 | HAMAMOTO'S BODY SHOP                     | 0.00      | 0.00      | 0.00        |
| N      | 2412 | PACIFIC BELL TELEPHONE CO (DBA AT&T CA)  | 0.96      | 0.04      | 0.06        |
| N      | 2413 | WESTWAY FEED PRODUCTS LLC                | 0.06      | 0.05      | 0.15        |
| N      | 2456 | CITY OF STOCKTON/CB RICHARD ELLIS INC    | 0.00      | 0.00      | 0.00        |
| N      | 2500 | CALIFORNIA STOP                          | 0.00      | 0.13      | 0.00        |
| N      | 2518 | CHEMICAL TRANSFER CO., INC.              | 0.06      | 0.07      | 0.02        |
| N      | 2523 | CHARTER WAY PETRO INC.                   | 0.00      | 1.52      | 0.00        |
| N      | 2561 | STOCKTON MUNICIPAL UTILITY               | 1.79      | 0.22      | 0.01        |
| N      | 2642 | INDEPENDENT TRUCKING INC                 | 0.00      | 0.04      | 0.00        |
| N      | 2906 | SAN JOAQUIN COUNTY MOTOR POOL            | 0.00      | 0.03      | 0.00        |
| N      | 2943 | MAIN BODY SHOP                           | 0.00      | 0.00      | 0.00        |
| N      | 2986 | 209 EXPRESS AUTO BODY                    | 0.00      | 0.02      | 0.01        |
| N      | 3021 | ANH AUTO BODY & PAINT                    | 0.00      | 0.03      | 0.01        |
| N      | 3071 | MASONITE INTERNATIONAL INC               | 0.00      | 1.22      | 6.20        |
| N      | 3076 | SNOW CLEANERS INC                        | 0.00      | 3.60      | 0.00        |
| N      | 3183 | 501 W WEBER, LLC                         | 0.00      | 0.00      | 0.00        |

| Region | ID   | Facility Name                            | NOX (tpy) | VOC (tpy) | PM2.5 (tpy) |
|--------|------|--|-----------|-----------|-------------|
| N      | 3204 | DENTONI'S WELDING WORKS, INC.            | 0.00      | 0.73      | 0.56        |
| N      | 3317 | SAN FRANCISCO AUTOBODY FRAME             | 0.00      | 0.07      | 0.01        |
| N      | 3353 | CITY OF STOCKTON; FIRE STAT.#2           | 0.00      | 0.01      | 0.00        |
| N      | 3367 | WRENCHER'S                               | 0.00      | 2.38      | 0.00        |
| N      | 3451 | EL DORADO GAS AND MART                   | 0.00      | 0.11      | 0.00        |
| N      | 3765 | DURAFLAME, INC.                          | 0.05      | 0.00      | 0.00        |
| N      | 3791 | MARBLE PALACE INC                        | 0.00      | 0.75      | 0.38        |
| N      | 3841 | AZTLAN ORNAMENTAL IRON FAB               | 0.00      | 0.03      | 0.03        |
| N      | 3845 | COUNTRY MARKETPLACE                      | 0.00      | 0.83      | 0.00        |
| N      | 3870 | BIG W SALES                              | 0.00      | 1.31      | 0.29        |
| N      | 3905 | MARINE SERVICES                          | 0.00      | 1.22      | 0.02        |
| N      | 3932 | PLYMOUTH SQUARE                          | 0.04      | 0.00      | 0.00        |
| N      | 4017 | COMCAST CABLE COMMUNICATIONS INC         | 0.01      | 0.00      | 0.00        |
| N      | 4022 | LEHIGH SOUTHWEST CEMENT COMPANY          | 0.00      | 0.00      | 0.00        |
| N      | 4064 | H.J.BAKER & BRO. LLC                     | 0.00      | 0.00      | 0.37        |
| N      | 4158 | VALLEY PACIFIC PETROLEUM SERVICES INC    | 0.00      | 0.16      | 0.00        |
| N      | 4212 | UNIFIRST CORP                            | 0.13      | 0.06      | 0.11        |
| N      | 4283 | DELTA CHARTER INC                        | 0.00      | 0.16      | 0.00        |
| N      | 4347 | QWEST COMMUNICATIONS CORPORATION         | 0.02      | 0.00      | 0.00        |
| N      | 4375 | DPI2 CA 18 ARMY COURT, LLC               | 0.33      | 0.01      | 0.01        |
| N      | 4399 | ALL FOREIGN & DOMESTIC BODY SHOP         | 0.00      | 0.84      | 0.26        |
| N      | 4419 | APRO LLC                                 | 0.00      | 0.52      | 0.00        |
| N      | 4425 | CALIFORNIA PORTLAND CEMENT COMPANY       | 0.00      | 0.00      | 0.19        |
| N      | 4453 | CALTRANS STOCKTON MAINTENANCE STATION    | 0.02      | 0.04      | 0.00        |
| N      | 4489 | HEADWATERS RESOURCES INC                 | 0.00      | 0.00      | 0.17        |
| N      | 4560 | VERIZON WIRELESS - STOCKTON MSC          | 0.03      | 0.00      | 0.00        |
| N      | 4571 | BANK OF AGRICULTURE & COMMERCE           | 0.02      | 0.00      | 0.00        |
| N      | 4677 | SAN JOAQUIN COUNTY PUBLIC HEALTH SERVICE | 0.04      | 0.00      | 0.00        |
| N      | 4774 | QUIKSERVE ENT INC DBA BURGER KING #2268  | 0.05      | 0.04      | 0.14        |
| N      | 4899 | CITY OF STOCKTON                         | 0.00      | 0.00      | 0.00        |
| N      | 4986 | STATE OF CALIFORNIA, DEPT OF TRANS       | 0.00      | 0.03      | 0.00        |
| N      | 4997 | CLEAN PLANET, INC.                       | 0.00      | 0.00      | 0.17        |
| N      | 5133 | STOCKDALE PREMIER FINISHES               | 0.00      | 0.00      | 0.00        |
| N      | 5278 | JOE DANGTRAN                             | 0.00      | 0.53      | 0.00        |
| N      | 6059 | HOLT OF CALIFORNIA                       | 0.00      | 0.00      | 0.00        |
| N      | 6591 | UNION PACIFIC RAILROAD                   | 0.00      | 0.00      | 0.00        |
| N      | 7082 | CALAMCO COGEN LLC                        | 0.17      | 0.06      | 0.46        |
| N      | 7177 | CITY OF STOCKTON                         | 0.21      | 0.02      | 0.00        |

| Region | ID   | Facility Name                            | NOX (tpy) | VOC (tpy) | PM2.5 (tpy) |
|--------|------|--|-----------|-----------|-------------|
| N      | 7186 | WEYERHAEUSER NR COMPANY                  | 0.00      | 0.00      | 0.00        |
| N      | 7232 | M & L MOULDING AND MACHINE INC           | 0.00      | 0.00      | 0.34        |
| N      | 7249 | O H I COMPANY                            | 0.00      | 0.01      | 0.05        |
| N      | 7329 | PACIFIC GAS & ELECTRIC                   | 0.00      | 0.00      | 0.00        |
| N      | 7365 | PACIFIC ETHANOL STOCKTON LLC             | 3.78      | 9.34      | 5.52        |
| N      | 7489 | M&L COMMODITIES, INC                     | 0.00      | 0.00      | 0.00        |
| N      | 7592 | ADVANCED GEOENVIRONMENTAL INC            | 0.00      | 0.00      | 0.00        |
| N      | 7612 | PENNY-NEWMAN GRAIN CO                    | 0.00      | 0.00      | 0.38        |
| N      | 7643 | VERIZON WIRELESS - PORT OF STOCKTON      | 0.00      | 0.00      | 0.00        |
| N      | 7777 | PACIFIC BELL ENVIRONMENTAL MANAGEMENT    | 0.00      | 0.00      | 0.00        |
| N      | 7811 | LKQ                                      | 0.00      | 0.00      | 0.00        |
| N      | 7900 | MCI                                      | 0.04      | 0.00      | 0.00        |
| N      | 7933 | SAN JOAQUIN COUNTY                       | 0.07      | 0.00      | 0.00        |
| N      | 7986 | COVE CONTRACTORS, INC.                   | 0.05      | 0.01      | 0.00        |
| N      | 8081 | BNSF RAILWAY COMPANY - MORMAN YARD       | 0.02      | 0.00      | 0.00        |
| N      | 8141 | WILLIAMS TANK LINES                      | 0.00      | 0.00      | 0.00        |
| N      | 8179 | ARANDAS TORTILLA CO INC                  | 0.38      | 0.02      | 0.03        |
| N      | 8237 | HERNANDEZ AUTO BODY AND PAINT            | 0.00      | 0.02      | 0.01        |
| N      | 8273 | CARRY TRANSIT                            | 0.00      | 0.00      | 0.00        |
| N      | 8332 | DENTONI'S WELDING WORKS INC              | 0.00      | 0.37      | 0.00        |
| N      | 8529 | DEPARTMENT OF TRANSPORTATION             | 0.01      | 0.00      | 0.00        |
| N      | 8540 | ABDO THABIT NASHIR                       | 0.00      | 0.48      | 0.00        |
| N      | 8622 | WILMAR OILS & FATS STOCKTON LLC          | 0.06      | 0.06      | 0.08        |
| N      | 8634 | CASTLE METALS                            | 0.00      | 0.00      | 0.00        |
| N      | 8662 | PSC INDUSTRIAL OUTSOURCING LP            | 0.00      | 0.00      | 0.00        |
| N      | 8703 | GPT PROP TRUST/REIT MNGMT & RESEARCH LLC | 0.00      | 0.00      | 0.00        |
| N      | 8727 | TRAIL COFFEE                             | 0.01      | 0.00      | 0.00        |
| N      | 8790 | BIMBO BAKERIES USA C/O STANTEC           | 0.00      | 0.00      | 0.00        |
| N      | 8830 | ELEANOR SADE                             | 0.01      | 0.00      | 0.00        |
| N      | 8925 | AC PAINTING                              | 0.00      | 0.00      | 0.00        |
| N      | 8932 | RAMIREZ AUTO BODY & REPAIR               | 0.00      | 0.00      | 0.00        |
| N      | 9031 | CITY OF STOCKTON - SMG STOCKTON          | 0.00      | 0.00      | 0.00        |
| N      | 9129 | JUDICIAL COUNCIL OF CALIFORNIA           | 0.10      | 0.01      | 0.00        |
| N      | 9153 | VERIZON WIRELESS                         | 0.00      | 0.00      | 0.00        |
| N      | 9186 | ABC RADIATORS                            | 0.00      | 0.00      | 0.00        |
| N      | 9209 | SAN JOAQUIN COUNTY                       | 0.07      | 0.01      | 0.00        |
| N      | 9211 | SAN JOAQUIN COUNTY                       | 0.10      | 0.01      | 0.01        |
| N      | 9212 | SAN JOAQUIN COUNTY                       | 0.00      | 0.00      | 0.00        |

| Region | ID   | Facility Name                         | NOX (tpy) | VOC (tpy) | PM2.5 (tpy) |
|--------|------|---------------------------------------|-----------|-----------|-------------|
| N      | 9238 | GMA GARNET USA CORPORATION            | 0.00      | 0.00      | 0.00        |
| N      | 9331 | TIGER-SUL PRODUCTS LLC                | 0.00      | 0.00      | 0.64        |
| N      | 9404 | TRANSLOAD SOLUTIONS LLC               | 0.00      | 0.00      | 0.00        |
| N      | 9424 | ARANDAS TORTILLA COMPANY              | 0.00      | 0.00      | 0.00        |
| N      | 9487 | AURORA COLLISION CENTER               | 0.00      | 0.01      | 0.00        |
| N      | 9510 | CALIFORNIA WATER SERVICE COMPANY      | 0.00      | 0.00      | 0.00        |
| N      | 9529 | FAM AUTOBODY                          | 0.00      | 0.00      | 0.00        |
| N      | 9532 | SAN JOAQUIN REGIONAL TRANSIT DISTRICT | 0.00      | 0.00      | 0.00        |
| N      | 9550 | OHI COMPANY, INC.                     | 0.00      | 0.00      | 0.00        |
| N      | 9572 | SUNSHINE HAWAIIAN BBQ                 | 0.00      | 0.00      | 0.00        |
| N      | 9582 | MISAKI SUSHI & BAR                    | 0.00      | 0.00      | 0.00        |
| N      | 9633 | DIAMOND AUTO BODY & SERVICES INC      | 0.00      | 0.00      | 0.00        |
| N      | 9634 | DURAFLAME INC.                        | 0.00      | 0.00      | 0.00        |
| N      | 9759 | 7-ELEVEN #38877                       | 0.00      | 0.00      | 0.00        |
| N      | 9767 | JUVA STOCKTON, INC                    | 0.00      | 0.00      | 0.00        |
| P      | 7720 | CITY OF STOCKTON                      | 0.00      | 0.00      | 0.00        |

#### *Forecasting Emissions - Stationary Sources:*

For assessing future growth for the years 2025 and 2030, the District used growth and control factors) supplied by the Air Resources Board (ARB). The District assigned growth and control factors to each permitted process type in the community using the most appropriate Emissions Inventory Code (EIC). The EIC is determined using the following method:

- a) For each facility located in Stockton and corresponding process, compare the County EIC, Source Classification Code (SCC) and Standard industrial Classification (SIC) from ARB's table (Growth and control factors table) with the EIC, SCC, and SIC from the District database information related to facilities within the selected community.
- b) If the facility and process EIC, SCC, and SIC from ARB's table and District database all match, then the District uses the applicable growth factor.
- c) If the facility and process EIC, SCC, and SIC from ARB's table and District database do NOT ALL match, then identify facilities and corresponding process for which EIC, SIC, and area-wide EIC match.
- d) If the facility and process EIC, SCC, and area-wide EIC from ARB's table and District database match, then the District uses the applicable growth factor.



- e) If the facility and process EIC, SCC, and area-wide EIC from ARB's table and District database do NOT ALL match, then for each corresponding facility, the District is only using the EIC between ARB's table and the District database.
- f) If the EIC between ARB's table and the District database do not match for specific facilities, then the District assumes no growth or change in emission control for the affected facility.

Projected emissions were calculated using the 2018 emissions inventory as the base year to project emissions for 2025 and 2030. The 2018 emissions inventory values were used to project emissions by multiplying these emissions by the ratio of the growth factors and control factors for each process. The emissions are projected for each permitted unit and then totaled to grow the facility emissions. The following equation represents the formula for forecasting emissions in a future year from a specific emissions unit (i.e. equipment type):

$$2024 \text{ NOx (ton/yr)} = 2017 \text{ NOx emissions} \times \left[ \frac{2024 \text{ NOx GF}}{2017 \text{ NOx GF}} \times \frac{2024 \text{ NOx CF}}{2017 \text{ NOx CF}} \right]$$

Where,

GF= Growth factor

CF = Control factor

*Forecasted Stationary Source Emissions Inventories*

Based on the forecasting process described above, Tables 2 and 3 below summarize the emissions inventory for each District permitted facility in the South Central Community for years 2025 and 2030.

**Table 2: Year 2025 Projected Emissions Inventory for District Permitted Facilities**

| Region | ID  | Facility Name                           | NOX (tpy) | VOC (tpy) | PM2.5 (tpy) |
|--------|-----|---|-----------|-----------|-------------|
| N      | 4   | ACE ARMATURE & MOTOR SHOP (JOSHUA IRIS) | 0.10      | 0.01      | 0.01        |
| N      | 86  | MCM14 CORP                              | 0.00      | 1.44      | 0.00        |
| N      | 103 | ABDO THABIT NASHIR                      | 0.00      | 0.10      | 0.00        |
| N      | 150 | DURAFLAME WEST                          | 0.03      | 0.03      | 1.41        |
| N      | 151 | CALIFORNIA WATER SERVICE                | 0.01      | 0.02      | 0.00        |
| N      | 153 | LEHIGH SOUTHWEST CEMENT COMPANY         | 0.00      | 0.00      | 0.68        |
| N      | 157 | CALIFORNIA AMMONIA CO                   | 0.04      | 0.02      | 0.03        |
| N      | 172 | CANNON DRY CLEANING COMPANY             | 0.00      | 0.00      | 0.00        |
| N      | 175 | MOBIL STOCKTON #1/ABDO NASHIR           | 0.00      | 0.12      | 0.00        |
| N      | 227 | PENNY NEWMAN GRAIN COMPANY              | 0.00      | 0.00      | 0.91        |
| N      | 228 | CONTRACT COATINGS                       | 0.00      | 4.07      | 2.71        |
| N      | 258 | SRH FOOD & GAS MARKET                   | 0.00      | 0.47      | 0.00        |
| N      | 270 | METROPOLITAN STEVEDORE COMPANY          | 0.00      | 0.00      | 0.00        |
| N      | 285 | DIAMOND FOODS, LLC                      | 0.27      | 0.12      | 0.63        |
| N      | 298 | BEST EXPRESS FOODS INC                  | 0.00      | 0.00      | 0.00        |
| N      | 389 | HOGAN MFG INC                           | 0.01      | 1.06      | 0.22        |
| N      | 400 | HI-GRADE CLEANERS                       | 0.00      | 0.06      | 0.00        |
| N      | 454 | GSG GAS AND MART                        | 0.00      | 0.11      | 0.00        |
| N      | 524 | N.J. MCCUTCHEN, INC.                    | 0.00      | 0.36      | 0.21        |
| N      | 549 | MIRACLE MILE MARKET                     | 0.00      | 0.15      | 0.00        |
| N      | 553 | CONCRETE, INC.                          | 0.00      | 0.00      | 2.54        |
| N      | 577 | NEWARK SIERRA PAPERBOARD CORP.          | 0.01      | 0.00      | 0.00        |
| N      | 629 | SCHUFF STEEL COMPANY                    | 0.00      | 0.00      | 0.05        |
| N      | 645 | DTE STOCKTON, LLC                       | 97.56     | 2.02      | 14.05       |
| N      | 655 | WESTWAY FEED PRODUCTS LLC               | 0.00      | 0.00      | 0.00        |
| N      | 690 | RITE WAY CLEANERS                       | 0.00      | 0.04      | 0.00        |
| N      | 691 | CALPORTLAND COMPANY (STOCKTON WEST)     | 0.00      | 0.00      | 0.47        |
| N      | 722 | SAN JOAQUIN COUNTY                      | 0.05      | 0.06      | 0.00        |
| N      | 742 | SEPULVEDA'S TRUCK PAINTING              | 0.00      | 0.10      | 0.05        |
| N      | 788 | STATE OF CA. 2ND DIST. AG ASSO          | 0.00      | 0.00      | 0.00        |

| Region | ID   | Facility Name                            | NOX (tpy) | VOC (tpy) | PM2.5 (tpy) |
|--------|------|--|-----------|-----------|-------------|
| N      | 800  | CITY OF STOCKTON                         | 0.01      | 0.07      | 0.00        |
| N      | 805  | STOCKTON, CITY OF                        | 0.00      | 0.08      | 0.00        |
| N      | 810  | STOCKTON TRI-INDUSTRIES, INC             | 0.00      | 4.63      | 1.39        |
| N      | 811  | STOCKTON RWCF                            | 3.87      | 1.07      | 0.32        |
| N      | 818  | CAL STATE UNIV C/O GRUPE COMMERCIAL CO   | 0.00      | 0.00      | 0.00        |
| N      | 819  | LMG STOCKTON, INC DBA THE RECORD         | 0.00      | 0.10      | 0.00        |
| N      | 823  | STOCKTON EAST WATER DISTRICT             | 0.14      | 0.02      | 0.00        |
| N      | 828  | CITY OF STOCKTON - VAN BUSKIRK GOLF      | 0.00      | 0.00      | 0.00        |
| N      | 829  | NUSTAR TERMINALS OPS PARTNERSHIP LP      | 3.06      | 7.53      | 0.23        |
| N      | 845  | TESORO LOGISTICS OPERATIONS LLC          | 0.00      | 7.98      | 0.00        |
| N      | 898  | HDM AMERICA LLC                          | 0.00      | 0.00      | 0.08        |
| N      | 921  | VANCO TRUCK & AUTO PLAZA                 | 0.00      | 0.56      | 0.00        |
| N      | 954  | MCCOY TRUCK TIRE SVC CNTR                | 0.00      | 0.16      | 0.08        |
| N      | 983  | RANDHAWA PETROLEUM LLC DBA EL DORADO GAS | 0.00      | 0.20      | 0.00        |
| N      | 993  | 620 WEST CHARTER WAY LLC                 | 0.00      | 0.69      | 0.00        |
| N      | 997  | EAST BAY MUNICIPAL UTILITY DISTRICT      | 0.02      | 0.01      | 0.00        |
| N      | 1000 | SFPP, L.P.                               | 0.00      | 0.54      | 0.00        |
| N      | 1004 | CORT COMPANIES                           | 0.00      | 0.00      | 0.00        |
| N      | 1006 | KLEIN BROS LTD                           | 0.00      | 0.00      | 0.00        |
| N      | 1013 | PORT OF STOCKTON                         | 0.01      | 0.06      | 0.03        |
| N      | 1084 | AMERICAN BUILDING SUPPLY                 | 0.00      | 2.78      | 0.62        |
| N      | 1096 | CENTRAL VALLEY HARDWARE                  | 0.00      | 0.01      | 0.00        |
| N      | 1130 | CITY OF STOCKTON MUN. UTILITY            | 0.05      | 0.05      | 0.00        |
| N      | 1153 | MARTIN OPERATING PARTNERSHIP L P         | 0.22      | 0.01      | 0.07        |
| N      | 2369 | ARROW INFRASTRUCTURE HOLDING IA LLC      | 1.72      | 6.55      | 0.09        |
| N      | 2371 | BAGLIETTO SEEDS                          | 0.00      | 0.00      | 0.01        |
| N      | 2382 | STEVEN STEIN ENTERPRISES, INC            | 0.00      | 0.51      | 0.11        |
| N      | 2392 | DAMERON HOSPITAL                         | 0.66      | 0.05      | 0.07        |
| N      | 2403 | HAMAMOTO'S BODY SHOP                     | 0.00      | 0.00      | 0.00        |
| N      | 2412 | PACIFIC BELL TELEPHONE CO (DBA AT&T CA)  | 0.84      | 0.04      | 0.05        |
| N      | 2413 | WESTWAY FEED PRODUCTS LLC                | 0.06      | 0.05      | 0.15        |
| N      | 2456 | CITY OF STOCKTON/CB RICHARD ELLIS INC    | 0.00      | 0.00      | 0.00        |
| N      | 2500 | CALIFORNIA STOP                          | 0.00      | 0.14      | 0.00        |
| N      | 2518 | CHEMICAL TRANSFER CO., INC.              | 0.06      | 0.07      | 0.02        |
| N      | 2523 | CHARTER WAY PETRO INC.                   | 0.00      | 1.58      | 0.00        |
| N      | 2561 | STOCKTON MUNICIPAL UTILITY               | 1.85      | 0.23      | 0.01        |
| N      | 2642 | INDEPENDENT TRUCKING INC                 | 0.00      | 0.04      | 0.00        |

| Region | ID   | Facility Name                            | NOX (tpy) | VOC (tpy) | PM2.5 (tpy) |
|--------|------|--|-----------|-----------|-------------|
| N      | 2906 | SAN JOAQUIN COUNTY MOTOR POOL            | 0.00      | 0.03      | 0.00        |
| N      | 2943 | MAIN BODY SHOP                           | 0.00      | 0.00      | 0.00        |
| N      | 2986 | 209 EXPRESS AUTO BODY                    | 0.00      | 0.02      | 0.01        |
| N      | 3021 | ANH AUTO BODY & PAINT                    | 0.00      | 0.03      | 0.01        |
| N      | 3071 | MASONITE INTERNATIONAL INC               | 0.00      | 1.37      | 6.83        |
| N      | 3076 | SNOW CLEANERS INC                        | 0.00      | 3.94      | 0.00        |
| N      | 3183 | 501 W WEBER, LLC                         | 0.00      | 0.00      | 0.00        |
| N      | 3204 | DENTONI'S WELDING WORKS, INC.            | 0.00      | 0.73      | 0.56        |
| N      | 3317 | SAN FRANCISCO AUTOBODY FRAME             | 0.00      | 0.07      | 0.01        |
| N      | 3353 | CITY OF STOCKTON; FIRE STAT.#2           | 0.00      | 0.01      | 0.00        |
| N      | 3367 | WRENCHER'S                               | 0.00      | 2.38      | 0.00        |
| N      | 3451 | EL DORADO GAS AND MART                   | 0.00      | 0.11      | 0.00        |
| N      | 3765 | DURAFLAME, INC.                          | 0.04      | 0.00      | 0.00        |
| N      | 3791 | MARBLE PALACE INC                        | 0.00      | 0.81      | 0.41        |
| N      | 3841 | AZTLAN ORNAMENTAL IRON FAB               | 0.00      | 0.03      | 0.03        |
| N      | 3845 | COUNTRY MARKETPLACE                      | 0.00      | 0.86      | 0.00        |
| N      | 3870 | BIG W SALES                              | 0.00      | 1.31      | 0.29        |
| N      | 3905 | MARINE SERVICES                          | 0.00      | 1.23      | 0.02        |
| N      | 3932 | PLYMOUTH SQUARE                          | 0.03      | 0.00      | 0.00        |
| N      | 4017 | COMCAST CABLE COMMUNICATIONS INC         | 0.01      | 0.00      | 0.00        |
| N      | 4022 | LEHIGH SOUTHWEST CEMENT COMPANY          | 0.00      | 0.00      | 0.00        |
| N      | 4064 | H.J.BAKER & BRO. LLC                     | 0.00      | 0.00      | 0.37        |
| N      | 4158 | VALLEY PACIFIC PETROLEUM SERVICES INC    | 0.00      | 0.16      | 0.00        |
| N      | 4212 | UNIFIRST CORP                            | 0.13      | 0.06      | 0.12        |
| N      | 4283 | DELTA CHARTER INC                        | 0.00      | 0.17      | 0.00        |
| N      | 4347 | QWEST COMMUNICATIONS CORPORATION         | 0.02      | 0.00      | 0.00        |
| N      | 4375 | DPI2 CA 18 ARMY COURT, LLC               | 0.33      | 0.01      | 0.01        |
| N      | 4399 | ALL FOREIGN & DOMESTIC BODY SHOP         | 0.00      | 0.84      | 0.26        |
| N      | 4419 | APRO LLC                                 | 0.00      | 0.54      | 0.00        |
| N      | 4425 | CALIFORNIA PORTLAND CEMENT COMPANY       | 0.00      | 0.00      | 0.19        |
| N      | 4453 | CALTRANS STOCKTON MAINTENANCE STATION    | 0.02      | 0.04      | 0.00        |
| N      | 4489 | HEADWATERS RESOURCES INC                 | 0.00      | 0.00      | 0.17        |
| N      | 4560 | VERIZON WIRELESS - STOCKTON MSC          | 0.02      | 0.00      | 0.00        |
| N      | 4571 | BANK OF AGRICULTURE & COMMERCE           | 0.02      | 0.00      | 0.00        |
| N      | 4677 | SAN JOAQUIN COUNTY PUBLIC HEALTH SERVICE | 0.04      | 0.00      | 0.00        |
| N      | 4774 | QUIKSERVE ENT INC DBA BURGER KING #2268  | 0.05      | 0.04      | 0.16        |
| N      | 4899 | CITY OF STOCKTON                         | 0.00      | 0.00      | 0.00        |
| N      | 4986 | STATE OF CALIFORNIA, DEPT OF TRANS       | 0.00      | 0.03      | 0.00        |

| Region | ID   | Facility Name                            | NOX (tpy) | VOC (tpy) | PM2.5 (tpy) |
|--------|------|--|-----------|-----------|-------------|
| N      | 4997 | CLEAN PLANET, INC.                       | 0.00      | 0.00      | 0.17        |
| N      | 5133 | STOCKDALE PREMIER FINISHES               | 0.00      | 0.00      | 0.00        |
| N      | 5278 | JOE DANGTRAN                             | 0.00      | 0.55      | 0.00        |
| N      | 6059 | HOLT OF CALIFORNIA                       | 0.00      | 0.00      | 0.00        |
| N      | 6591 | UNION PACIFIC RAILROAD                   | 0.00      | 0.00      | 0.00        |
| N      | 7082 | CALAMCO COGEN LLC                        | 0.18      | 0.06      | 0.48        |
| N      | 7177 | CITY OF STOCKTON                         | 0.18      | 0.01      | 0.00        |
| N      | 7186 | WEYERHAEUSER NR COMPANY                  | 0.00      | 0.00      | 0.00        |
| N      | 7232 | M & L MOULDING AND MACHINE INC           | 0.00      | 0.00      | 0.34        |
| N      | 7249 | O H I COMPANY                            | 0.00      | 0.01      | 0.05        |
| N      | 7329 | PACIFIC GAS & ELECTRIC                   | 0.00      | 0.00      | 0.00        |
| N      | 7365 | PACIFIC ETHANOL STOCKTON LLC             | 3.38      | 9.26      | 5.04        |
| N      | 7489 | M&L COMMODITIES, INC                     | 0.00      | 0.00      | 0.00        |
| N      | 7592 | ADVANCED GEOENVIRONMENTAL INC            | 0.00      | 0.00      | 0.00        |
| N      | 7612 | PENNY-NEWMAN GRAIN CO                    | 0.00      | 0.00      | 0.38        |
| N      | 7643 | VERIZON WIRELESS - PORT OF STOCKTON      | 0.00      | 0.00      | 0.00        |
| N      | 7777 | PACIFIC BELL ENVIRONMENTAL MANAGEMENT    | 0.00      | 0.00      | 0.00        |
| N      | 7811 | LKQ                                      | 0.00      | 0.00      | 0.00        |
| N      | 7900 | MCI                                      | 0.03      | 0.00      | 0.00        |
| N      | 7933 | SAN JOAQUIN COUNTY                       | 0.07      | 0.00      | 0.00        |
| N      | 7986 | COVE CONTRACTORS, INC.                   | 0.05      | 0.01      | 0.00        |
| N      | 8081 | BNSF RAILWAY COMPANY - MORMAN YARD       | 0.02      | 0.00      | 0.00        |
| N      | 8141 | WILLIAMS TANK LINES                      | 0.00      | 0.00      | 0.00        |
| N      | 8179 | ARANDAS TORTILLA CO INC                  | 0.35      | 0.02      | 0.03        |
| N      | 8237 | HERNANDEZ AUTO BODY AND PAINT            | 0.00      | 0.02      | 0.01        |
| N      | 8273 | CARRY TRANSIT                            | 0.00      | 0.00      | 0.00        |
| N      | 8332 | DENTONI'S WELDING WORKS INC              | 0.00      | 0.37      | 0.00        |
| N      | 8529 | DEPARTMENT OF TRANSPORTATION             | 0.01      | 0.00      | 0.00        |
| N      | 8540 | ABDO THABIT NASHIR                       | 0.00      | 0.49      | 0.00        |
| N      | 8622 | WILMAR OILS & FATS STOCKTON LLC          | 0.06      | 0.05      | 0.07        |
| N      | 8634 | CASTLE METALS                            | 0.00      | 0.00      | 0.00        |
| N      | 8662 | PSC INDUSTRIAL OUTSOURCING LP            | 0.00      | 0.00      | 0.00        |
| N      | 8703 | GPT PROP TRUST/REIT MNGMT & RESEARCH LLC | 0.00      | 0.00      | 0.00        |
| N      | 8727 | TRAIL COFFEE                             | 0.01      | 0.00      | 0.00        |
| N      | 8790 | BIMBO BAKERIES USA C/O STANTEC           | 0.00      | 0.00      | 0.00        |
| N      | 8830 | ELEANOR SADE                             | 0.01      | 0.00      | 0.00        |
| N      | 8925 | AC PAINTING                              | 0.00      | 0.00      | 0.00        |
| N      | 8932 | RAMIREZ AUTO BODY & REPAIR               | 0.00      | 0.00      | 0.00        |

| Region | ID   | Facility Name                         | NOX (tpy) | VOC (tpy) | PM2.5 (tpy) |
|--------|------|---------------------------------------|-----------|-----------|-------------|
| N      | 9031 | CITY OF STOCKTON - SMG STOCKTON       | 0.00      | 0.00      | 0.00        |
| N      | 9129 | JUDICIAL COUNCIL OF CALIFORNIA        | 0.10      | 0.01      | 0.00        |
| N      | 9153 | VERIZON WIRELESS                      | 0.00      | 0.00      | 0.00        |
| N      | 9186 | ABC RADIATORS                         | 0.00      | 0.00      | 0.00        |
| N      | 9209 | SAN JOAQUIN COUNTY                    | 0.06      | 0.00      | 0.00        |
| N      | 9211 | SAN JOAQUIN COUNTY                    | 0.09      | 0.01      | 0.01        |
| N      | 9212 | SAN JOAQUIN COUNTY                    | 0.00      | 0.00      | 0.00        |
| N      | 9238 | GMA GARNET USA CORPORATION            | 0.00      | 0.00      | 0.00        |
| N      | 9331 | TIGER-SUL PRODUCTS LLC                | 0.00      | 0.00      | 0.64        |
| N      | 9404 | TRANSLOAD SOLUTIONS LLC               | 0.00      | 0.00      | 0.00        |
| N      | 9424 | ARANDAS TORTILLA COMPANY              | 0.00      | 0.00      | 0.00        |
| N      | 9487 | AURORA COLLISION CENTER               | 0.00      | 0.01      | 0.00        |
| N      | 9510 | CALIFORNIA WATER SERVICE COMPANY      | 0.00      | 0.00      | 0.00        |
| N      | 9529 | FAM AUTOBODY                          | 0.00      | 0.00      | 0.00        |
| N      | 9532 | SAN JOAQUIN REGIONAL TRANSIT DISTRICT | 0.00      | 0.00      | 0.00        |
| N      | 9550 | OHI COMPANY, INC.                     | 0.00      | 0.00      | 0.00        |
| N      | 9572 | SUNSHINE HAWAIIAN BBQ                 | 0.00      | 0.00      | 0.00        |
| N      | 9582 | MISAKI SUSHI & BAR                    | 0.00      | 0.00      | 0.00        |
| N      | 9633 | DIAMOND AUTO BODY & SERVICES INC      | 0.00      | 0.00      | 0.00        |
| N      | 9634 | DURAFLAME INC.                        | 0.00      | 0.00      | 0.00        |
| N      | 9759 | 7-ELEVEN #38877                       | 0.00      | 0.00      | 0.00        |
| N      | 9767 | JUVA STOCKTON, INC                    | 0.00      | 0.00      | 0.00        |
| P      | 7720 | CITY OF STOCKTON                      | 0.00      | 0.00      | 0.00        |

**Table 3: Year 2030 Projected Emissions Inventory for District Permitted Facilities**

| Region | ID  | Facility Name                           | NOX (tpy) | VOC (tpy) | PM2.5 (tpy) |
|--------|-----|---|-----------|-----------|-------------|
| N      | 4   | ACE ARMATURE & MOTOR SHOP (JOSHUA IRIS) | 0.10      | 0.01      | 0.01        |
| N      | 86  | MCM14 CORP                              | 0.00      | 1.44      | 0.00        |
| N      | 103 | ABDO THABIT NASHIR                      | 0.00      | 0.10      | 0.00        |
| N      | 150 | DURAFLAME WEST                          | 0.03      | 0.03      | 1.41        |
| N      | 151 | CALIFORNIA WATER SERVICE                | 0.01      | 0.02      | 0.00        |
| N      | 153 | LEHIGH SOUTHWEST CEMENT COMPANY         | 0.00      | 0.00      | 0.68        |
| N      | 157 | CALIFORNIA AMMONIA CO                   | 0.04      | 0.02      | 0.03        |
| N      | 172 | CANNON DRY CLEANING COMPANY             | 0.00      | 0.00      | 0.00        |
| N      | 175 | MOBIL STOCKTON #1/ABDO NASHIR           | 0.00      | 0.12      | 0.00        |
| N      | 227 | PENNY NEWMAN GRAIN COMPANY              | 0.00      | 0.00      | 0.91        |
| N      | 228 | CONTRACT COATINGS                       | 0.00      | 4.07      | 2.71        |
| N      | 258 | SRH FOOD & GAS MARKET                   | 0.00      | 0.47      | 0.00        |
| N      | 270 | METROPOLITAN STEVEDORE COMPANY          | 0.00      | 0.00      | 0.00        |
| N      | 285 | DIAMOND FOODS, LLC                      | 0.27      | 0.12      | 0.63        |
| N      | 298 | BEST EXPRESS FOODS INC                  | 0.00      | 0.00      | 0.00        |
| N      | 389 | HOGAN MFG INC                           | 0.01      | 1.06      | 0.22        |
| N      | 400 | HI-GRADE CLEANERS                       | 0.00      | 0.06      | 0.00        |
| N      | 454 | GSG GAS AND MART                        | 0.00      | 0.11      | 0.00        |
| N      | 524 | N.J. MCCUTCHEN, INC.                    | 0.00      | 0.36      | 0.21        |
| N      | 549 | MIRACLE MILE MARKET                     | 0.00      | 0.15      | 0.00        |
| N      | 553 | CONCRETE, INC.                          | 0.00      | 0.00      | 2.54        |
| N      | 577 | NEWARK SIERRA PAPERBOARD CORP.          | 0.01      | 0.00      | 0.00        |
| N      | 629 | SCHUFF STEEL COMPANY                    | 0.00      | 0.00      | 0.05        |
| N      | 645 | DTE STOCKTON, LLC                       | 97.56     | 2.02      | 14.05       |
| N      | 655 | WESTWAY FEED PRODUCTS LLC               | 0.00      | 0.00      | 0.00        |
| N      | 690 | RITE WAY CLEANERS                       | 0.00      | 0.04      | 0.00        |
| N      | 691 | CALPORTLAND COMPANY (STOCKTON WEST)     | 0.00      | 0.00      | 0.47        |
| N      | 722 | SAN JOAQUIN COUNTY                      | 0.05      | 0.06      | 0.00        |
| N      | 742 | SEPULVEDA'S TRUCK PAINTING              | 0.00      | 0.10      | 0.05        |
| N      | 788 | STATE OF CA. 2ND DIST. AG ASSO          | 0.00      | 0.00      | 0.00        |
| N      | 800 | CITY OF STOCKTON                        | 0.01      | 0.07      | 0.00        |
| N      | 805 | STOCKTON, CITY OF                       | 0.00      | 0.08      | 0.00        |
| N      | 810 | STOCKTON TRI-INDUSTRIES, INC            | 0.00      | 4.63      | 1.39        |
| N      | 811 | STOCKTON RWCF                           | 3.87      | 1.07      | 0.32        |
| N      | 818 | CAL STATE UNIV C/O GRUPE COMMERCIAL CO  | 0.00      | 0.00      | 0.00        |

| Region | ID   | Facility Name                            | NOX (tpy) | VOC (tpy) | PM2.5 (tpy) |
|--------|------|--|-----------|-----------|-------------|
| N      | 819  | LMG STOCKTON, INC DBA THE RECORD         | 0.00      | 0.10      | 0.00        |
| N      | 823  | STOCKTON EAST WATER DISTRICT             | 0.14      | 0.02      | 0.00        |
| N      | 828  | CITY OF STOCKTON - VAN BUSKIRK GOLF      | 0.00      | 0.00      | 0.00        |
| N      | 829  | NUSTAR TERMINALS OPS PARTNERSHIP LP      | 3.06      | 7.53      | 0.23        |
| N      | 845  | TESORO LOGISTICS OPERATIONS LLC          | 0.00      | 7.98      | 0.00        |
| N      | 898  | HDM AMERICA LLC                          | 0.00      | 0.00      | 0.08        |
| N      | 921  | VANCO TRUCK & AUTO PLAZA                 | 0.00      | 0.56      | 0.00        |
| N      | 954  | MCCOY TRUCK TIRE SVC CNTR                | 0.00      | 0.16      | 0.08        |
| N      | 983  | RANDHAWA PETROLEUM LLC DBA EL DORADO GAS | 0.00      | 0.20      | 0.00        |
| N      | 993  | 620 WEST CHARTER WAY LLC                 | 0.00      | 0.69      | 0.00        |
| N      | 997  | EAST BAY MUNICIPAL UTILITY DISTRICT      | 0.02      | 0.01      | 0.00        |
| N      | 1000 | SFPP, L.P.                               | 0.00      | 0.54      | 0.00        |
| N      | 1004 | CORT COMPANIES                           | 0.00      | 0.00      | 0.00        |
| N      | 1006 | KLEIN BROS LTD                           | 0.00      | 0.00      | 0.00        |
| N      | 1013 | PORT OF STOCKTON                         | 0.01      | 0.06      | 0.03        |
| N      | 1084 | AMERICAN BUILDING SUPPLY                 | 0.00      | 2.78      | 0.62        |
| N      | 1096 | CENTRAL VALLEY HARDWARE                  | 0.00      | 0.01      | 0.00        |
| N      | 1130 | CITY OF STOCKTON MUN. UTILITY            | 0.05      | 0.05      | 0.00        |
| N      | 1153 | MARTIN OPERATING PARTNERSHIP L P         | 0.22      | 0.01      | 0.07        |
| N      | 2369 | ARROW INFRASTRUCTURE HOLDING IA LLC      | 1.72      | 6.55      | 0.09        |
| N      | 2371 | BAGLIETTO SEEDS                          | 0.00      | 0.00      | 0.01        |
| N      | 2382 | STEVEN STEIN ENTERPRISES, INC            | 0.00      | 0.51      | 0.11        |
| N      | 2392 | DAMERON HOSPITAL                         | 0.66      | 0.05      | 0.07        |
| N      | 2403 | HAMAMOTO'S BODY SHOP                     | 0.00      | 0.00      | 0.00        |
| N      | 2412 | PACIFIC BELL TELEPHONE CO (DBA AT&T CA)  | 0.84      | 0.04      | 0.05        |
| N      | 2413 | WESTWAY FEED PRODUCTS LLC                | 0.06      | 0.05      | 0.15        |
| N      | 2456 | CITY OF STOCKTON/CB RICHARD ELLIS INC    | 0.00      | 0.00      | 0.00        |
| N      | 2500 | CALIFORNIA STOP                          | 0.00      | 0.14      | 0.00        |
| N      | 2518 | CHEMICAL TRANSFER CO., INC.              | 0.06      | 0.07      | 0.02        |
| N      | 2523 | CHARTER WAY PETRO INC.                   | 0.00      | 1.58      | 0.00        |
| N      | 2561 | STOCKTON MUNICIPAL UTILITY               | 1.85      | 0.23      | 0.01        |
| N      | 2642 | INDEPENDENT TRUCKING INC                 | 0.00      | 0.04      | 0.00        |
| N      | 2906 | SAN JOAQUIN COUNTY MOTOR POOL            | 0.00      | 0.03      | 0.00        |
| N      | 2943 | MAIN BODY SHOP                           | 0.00      | 0.00      | 0.00        |
| N      | 2986 | 209 EXPRESS AUTO BODY                    | 0.00      | 0.02      | 0.01        |
| N      | 3021 | ANH AUTO BODY & PAINT                    | 0.00      | 0.03      | 0.01        |
| N      | 3071 | MASONITE INTERNATIONAL INC               | 0.00      | 1.37      | 6.83        |
| N      | 3076 | SNOW CLEANERS INC                        | 0.00      | 3.94      | 0.00        |



| Region | ID   | Facility Name                            | NOX (tpy) | VOC (tpy) | PM2.5 (tpy) |
|--------|------|--|-----------|-----------|-------------|
| N      | 3183 | 501 W WEBER, LLC                         | 0.00      | 0.00      | 0.00        |
| N      | 3204 | DENTONI'S WELDING WORKS, INC.            | 0.00      | 0.73      | 0.56        |
| N      | 3317 | SAN FRANCISCO AUTOBODY FRAME             | 0.00      | 0.07      | 0.01        |
| N      | 3353 | CITY OF STOCKTON; FIRE STAT.#2           | 0.00      | 0.01      | 0.00        |
| N      | 3367 | WRENCHER'S                               | 0.00      | 2.38      | 0.00        |
| N      | 3451 | EL DORADO GAS AND MART                   | 0.00      | 0.11      | 0.00        |
| N      | 3765 | DURAFLAME, INC.                          | 0.04      | 0.00      | 0.00        |
| N      | 3791 | MARBLE PALACE INC                        | 0.00      | 0.81      | 0.41        |
| N      | 3841 | AZTLAN ORNAMENTAL IRON FAB               | 0.00      | 0.03      | 0.03        |
| N      | 3845 | COUNTRY MARKETPLACE                      | 0.00      | 0.86      | 0.00        |
| N      | 3870 | BIG W SALES                              | 0.00      | 1.31      | 0.29        |
| N      | 3905 | MARINE SERVICES                          | 0.00      | 1.23      | 0.02        |
| N      | 3932 | PLYMOUTH SQUARE                          | 0.03      | 0.00      | 0.00        |
| N      | 4017 | COMCAST CABLE COMMUNICATIONS INC         | 0.01      | 0.00      | 0.00        |
| N      | 4022 | LEHIGH SOUTHWEST CEMENT COMPANY          | 0.00      | 0.00      | 0.00        |
| N      | 4064 | H.J.BAKER & BRO. LLC                     | 0.00      | 0.00      | 0.37        |
| N      | 4158 | VALLEY PACIFIC PETROLEUM SERVICES INC    | 0.00      | 0.16      | 0.00        |
| N      | 4212 | UNIFIRST CORP                            | 0.13      | 0.06      | 0.12        |
| N      | 4283 | DELTA CHARTER INC                        | 0.00      | 0.17      | 0.00        |
| N      | 4347 | QWEST COMMUNICATIONS CORPORATION         | 0.02      | 0.00      | 0.00        |
| N      | 4375 | DPI2 CA 18 ARMY COURT, LLC               | 0.33      | 0.01      | 0.01        |
| N      | 4399 | ALL FOREIGN & DOMESTIC BODY SHOP         | 0.00      | 0.84      | 0.26        |
| N      | 4419 | APRO LLC                                 | 0.00      | 0.54      | 0.00        |
| N      | 4425 | CALIFORNIA PORTLAND CEMENT COMPANY       | 0.00      | 0.00      | 0.19        |
| N      | 4453 | CALTRANS STOCKTON MAINTENANCE STATION    | 0.02      | 0.04      | 0.00        |
| N      | 4489 | HEADWATERS RESOURCES INC                 | 0.00      | 0.00      | 0.17        |
| N      | 4560 | VERIZON WIRELESS - STOCKTON MSC          | 0.02      | 0.00      | 0.00        |
| N      | 4571 | BANK OF AGRICULTURE & COMMERCE           | 0.02      | 0.00      | 0.00        |
| N      | 4677 | SAN JOAQUIN COUNTY PUBLIC HEALTH SERVICE | 0.04      | 0.00      | 0.00        |
| N      | 4774 | QUIKSERVE ENT INC DBA BURGER KING #2268  | 0.05      | 0.04      | 0.16        |
| N      | 4899 | CITY OF STOCKTON                         | 0.00      | 0.00      | 0.00        |
| N      | 4986 | STATE OF CALIFORNIA, DEPT OF TRANS       | 0.00      | 0.03      | 0.00        |
| N      | 4997 | CLEAN PLANET, INC.                       | 0.00      | 0.00      | 0.17        |
| N      | 5133 | STOCKDALE PREMIER FINISHES               | 0.00      | 0.00      | 0.00        |
| N      | 5278 | JOE DANGTRAN                             | 0.00      | 0.55      | 0.00        |
| N      | 6059 | HOLT OF CALIFORNIA                       | 0.00      | 0.00      | 0.00        |
| N      | 6591 | UNION PACIFIC RAILROAD                   | 0.00      | 0.00      | 0.00        |
| N      | 7082 | CALAMCO COGEN LLC                        | 0.18      | 0.06      | 0.48        |

| Region | ID   | Facility Name                            | NOX (tpy) | VOC (tpy) | PM2.5 (tpy) |
|--------|------|--|-----------|-----------|-------------|
| N      | 7177 | CITY OF STOCKTON                         | 0.18      | 0.01      | 0.00        |
| N      | 7186 | WEYERHAEUSER NR COMPANY                  | 0.00      | 0.00      | 0.00        |
| N      | 7232 | M & L MOULDING AND MACHINE INC           | 0.00      | 0.00      | 0.34        |
| N      | 7249 | O H I COMPANY                            | 0.00      | 0.01      | 0.05        |
| N      | 7329 | PACIFIC GAS & ELECTRIC                   | 0.00      | 0.00      | 0.00        |
| N      | 7365 | PACIFIC ETHANOL STOCKTON LLC             | 3.38      | 9.26      | 5.04        |
| N      | 7489 | M&L COMMODITIES, INC                     | 0.00      | 0.00      | 0.00        |
| N      | 7592 | ADVANCED GEOENVIRONMENTAL INC            | 0.00      | 0.00      | 0.00        |
| N      | 7612 | PENNY-NEWMAN GRAIN CO                    | 0.00      | 0.00      | 0.38        |
| N      | 7643 | VERIZON WIRELESS - PORT OF STOCKTON      | 0.00      | 0.00      | 0.00        |
| N      | 7777 | PACIFIC BELL ENVIRONMENTAL MANAGEMENT    | 0.00      | 0.00      | 0.00        |
| N      | 7811 | LKQ                                      | 0.00      | 0.00      | 0.00        |
| N      | 7900 | MCI                                      | 0.03      | 0.00      | 0.00        |
| N      | 7933 | SAN JOAQUIN COUNTY                       | 0.07      | 0.00      | 0.00        |
| N      | 7986 | COVE CONTRACTORS, INC.                   | 0.05      | 0.01      | 0.00        |
| N      | 8081 | BNSF RAILWAY COMPANY - MORMAN YARD       | 0.02      | 0.00      | 0.00        |
| N      | 8141 | WILLIAMS TANK LINES                      | 0.00      | 0.00      | 0.00        |
| N      | 8179 | ARANDAS TORTILLA CO INC                  | 0.35      | 0.02      | 0.03        |
| N      | 8237 | HERNANDEZ AUTO BODY AND PAINT            | 0.00      | 0.02      | 0.01        |
| N      | 8273 | CARRY TRANSIT                            | 0.00      | 0.00      | 0.00        |
| N      | 8332 | DENTONI'S WELDING WORKS INC              | 0.00      | 0.37      | 0.00        |
| N      | 8529 | DEPARTMENT OF TRANSPORTATION             | 0.01      | 0.00      | 0.00        |
| N      | 8540 | ABDO THABIT NASHIR                       | 0.00      | 0.49      | 0.00        |
| N      | 8622 | WILMAR OILS & FATS STOCKTON LLC          | 0.06      | 0.05      | 0.07        |
| N      | 8634 | CASTLE METALS                            | 0.00      | 0.00      | 0.00        |
| N      | 8662 | PSC INDUSTRIAL OUTSOURCING LP            | 0.00      | 0.00      | 0.00        |
| N      | 8703 | GPT PROP TRUST/REIT MNGMT & RESEARCH LLC | 0.00      | 0.00      | 0.00        |
| N      | 8727 | TRAIL COFFEE                             | 0.01      | 0.00      | 0.00        |
| N      | 8790 | BIMBO BAKERIES USA C/O STANTEC           | 0.00      | 0.00      | 0.00        |
| N      | 8830 | ELEANOR SADE                             | 0.01      | 0.00      | 0.00        |
| N      | 8925 | AC PAINTING                              | 0.00      | 0.00      | 0.00        |
| N      | 8932 | RAMIREZ AUTO BODY & REPAIR               | 0.00      | 0.00      | 0.00        |
| N      | 9031 | CITY OF STOCKTON - SMG STOCKTON          | 0.00      | 0.00      | 0.00        |
| N      | 9129 | JUDICIAL COUNCIL OF CALIFORNIA           | 0.10      | 0.01      | 0.00        |
| N      | 9153 | VERIZON WIRELESS                         | 0.00      | 0.00      | 0.00        |
| N      | 9186 | ABC RADIATORS                            | 0.00      | 0.00      | 0.00        |
| N      | 9209 | SAN JOAQUIN COUNTY                       | 0.06      | 0.00      | 0.00        |
| N      | 9211 | SAN JOAQUIN COUNTY                       | 0.09      | 0.01      | 0.01        |

| Region | ID   | Facility Name                         | NOX (tpy) | VOC (tpy) | PM2.5 (tpy) |
|--------|------|---------------------------------------|-----------|-----------|-------------|
| N      | 9212 | SAN JOAQUIN COUNTY                    | 0.00      | 0.00      | 0.00        |
| N      | 9238 | GMA GARNET USA CORPORATION            | 0.00      | 0.00      | 0.00        |
| N      | 9331 | TIGER-SUL PRODUCTS LLC                | 0.00      | 0.00      | 0.64        |
| N      | 9404 | TRANSLOAD SOLUTIONS LLC               | 0.00      | 0.00      | 0.00        |
| N      | 9424 | ARANDAS TORTILLA COMPANY              | 0.00      | 0.00      | 0.00        |
| N      | 9487 | AURORA COLLISION CENTER               | 0.00      | 0.01      | 0.00        |
| N      | 9510 | CALIFORNIA WATER SERVICE COMPANY      | 0.00      | 0.00      | 0.00        |
| N      | 9529 | FAM AUTOBODY                          | 0.00      | 0.00      | 0.00        |
| N      | 9532 | SAN JOAQUIN REGIONAL TRANSIT DISTRICT | 0.00      | 0.00      | 0.00        |
| N      | 9550 | OHI COMPANY, INC.                     | 0.00      | 0.00      | 0.00        |
| N      | 9572 | SUNSHINE HAWAIIAN BBQ                 | 0.00      | 0.00      | 0.00        |
| N      | 9582 | MISAKI SUSHI & BAR                    | 0.00      | 0.00      | 0.00        |
| N      | 9633 | DIAMOND AUTO BODY & SERVICES INC      | 0.00      | 0.00      | 0.00        |
| N      | 9634 | DURAFLAME INC.                        | 0.00      | 0.00      | 0.00        |
| N      | 9759 | 7-ELEVEN #38877                       | 0.00      | 0.00      | 0.00        |
| N      | 9767 | JUVA STOCKTON, INC                    | 0.00      | 0.00      | 0.00        |
| P      | 7720 | CITY OF STOCKTON                      | 0.00      | 0.00      | 0.00        |

## Mobile Source Emissions Inventory

### *On-Road Mobile Sources*

California Air Resources Board staff have developed a methodology to spatially allocate on-road vehicle emissions on each road (also called the VEER approach). The VEER approach spatially allocates vehicle activity data used in the latest adopted Regional Transportation Plans from the local metropolitan planning organization (MPO)<sup>1</sup> onto roadways from the U.S. Census Bureau's Topologically Integrated Geographic Encoding and Referencing (TIGER)<sup>2</sup> road network. The TIGER network represents the complete roadway network, whereas the MPO road network only captures a rough approximation of the actual roadway network. Functional road types from the MPO and TIGER network are broken into four categories (major roads, major arterials, minor arterials, and local/residential roads). The vehicle activity in terms of vehicle miles traveled (VMT) is spatially allocated from the MPO network onto the TIGER network for each road type using ArcGIS. Separating the road types into four categories allows similar VMT roads to be processed together; thus eliminating a possible bias in VMT allocation from high VMT roads onto low VMT roads and vice versa. Criteria air pollutant emissions are estimated by applying existing county-level aggregated emission factors and vehicle distribution from CARB's latest on-road mobile source emission factor model version 2017 (EMFAC2017)<sup>3</sup> to the spatially allocated VMT on each road link. Toxic air contaminant emissions are estimated by applying CARB's chemical speciation profiles<sup>4</sup> to the total organic gas (TOG) and particulate matter (PM) emissions estimated for each road link.

<sup>1</sup> San Joaquin Council of Government 2018 Regional Transportation Plan loaded network (2008 base year projected to 2017)

<sup>2</sup>Census Bureau's Topologically Integrated Geographic Encoding and Referencing (TIGER) road network (<https://tigerweb.geo.census.gov/tigerweb/>)

<sup>3</sup>EMFAC2017 includes information on California's car and truck fleet (e.g., vehicle population, age) and also reflects the emissions benefits of CARB's previously adopted on-road mobile source regulations (e.g., Pavley Standards, Advanced Clean Cars, Truck and Bus, other on-road diesel fleet rules). For more information on EMFAC2017, see <https://ww3.arb.ca.gov/msei/downloads/emfac2017-volume-iii-technical-documentation.pdf>

<sup>4</sup>California Air Resources Board, Speciation Profiles, <https://ww3.arb.ca.gov/ei/speciate/speciate.htm>

### *Off-Road Mobile Sources*

Emissions from off-road sources were estimated using a suite of category-specific models or, where a new model was not available, the OFFROAD2007 model. Many of the newer models were developed to support recent regulations, including in-use off-road equipment, ocean-going vessels and others. A summary of specific off-road categories is below:

#### **Locomotives**

In 2016, ARB updated California's Class I and Class II line-haul locomotive model. The new model provides the following updates: age and model year distribution based on 2011 and 2014 rail company data, activity based on Freight Analysis Framework (FAF) data, fuel growth based on Board of Equalization historical rail data, and new locomotive populations, survival rates, and Tier distributions. To estimate emissions, ARB used duty cycle, fuel consumption and activity data reported by the rail lines in 2011. These results were combined with the Class III locomotive emissions inventory from previous SIPS, which were incorporated in the 2006 locomotive inventory, to create an overall California line-haul locomotive emissions inventory for the SIP.

Additional information is available at:

[https://www.arb.ca.gov/msei/categories.htm#offroad\\_motor\\_vehicles](https://www.arb.ca.gov/msei/categories.htm#offroad_motor_vehicles).

#### **Pleasure Craft and Recreational Vehicles**

A new model was developed in 2011 to estimate emissions from pleasure craft and recreational vehicles. In both cases, population, activity, and emission factors were re-assessed using new surveys, registration information, and emissions testing.

Additional information is available at:

[https://www.arb.ca.gov/msei/categories.htm#offroad\\_motor\\_vehicles](https://www.arb.ca.gov/msei/categories.htm#offroad_motor_vehicles)

#### **In-Use Off-Road Equipment**

ARB developed this model in 2010 to support the analysis for amendments to the In-Use Off-Road Diesel Fueled Fleets Regulation. Staff updated the underlying activity forecast to reflect more recent economic forecast data, which suggests a slower rate of recovery through 2024 than previously anticipated.

Additional information is available at:

[https://www.arb.ca.gov/msei/categories.htm#offroad\\_motor\\_vehicles](https://www.arb.ca.gov/msei/categories.htm#offroad_motor_vehicles)

#### **Transport Refrigeration Units (TRU)**

This model reflects updates to activity, population, growth and turn-over data, and emission factors developed to support the 2011 amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units.

Additional information is available at:  
[https://www.arb.ca.gov/msei/categories.htm#offroad\\_motor\\_vehicles](https://www.arb.ca.gov/msei/categories.htm#offroad_motor_vehicles)

### **Fuel Storage and Handling**

Emissions for fuel storage and handling were estimated using the OFFROAD2007 model.

### *Inventory Base Year*

ARB worked with the local air districts to determine the base year that should be used across the State. CARB selected 2017 as the base year to maintain consistency in the State. Mobile source emissions have been forecasted for years 2018, 2025, and 2030 for the purposes of the CERP.

### *Methodology*

The EMFAC model was used to assess emissions from on-road vehicles. Off-road mobile source emissions are estimated using a new modular approach for different source categories. On-road and off-road models account for the effects of various adopted regulations, technology types, and seasonal conditions on emissions.

Additional information on all ARB's Mobile source Methodologies and categories is available at: <https://ww3.arb.ca.gov/msei/msei.htm>

### *Summary of On-Road Mobile Source Emissions*

Table 4 below summarizes the total estimated on-road mobile source emissions for each general on-road mobile source category in the Stockton Community for 2018:

**Table 4: Year 2018 On-Road Mobile Source Emissions**

| <b>On-Road Mobile Source Category</b> | <b>NOx (tpy)</b> | <b>VOC (tpy)</b> | <b>PM2.5 (tpy)</b> |
|---------------------------------------|------------------|------------------|--------------------|
| Heavy Duty Vehicles                   | 195.54           | 8.97             | 4.69               |
| Medium Duty Vehicles                  | 72.21            | 6.32             | 2.97               |
| Light Duty Vehicles                   | 165.71           | 148.89           | 14.06              |
| <b>Total</b>                          | <b>433.46</b>    | <b>164.18</b>    | <b>21.72</b>       |

### *Summary of Off-Road Mobile Source Emissions*

Table 5 below summarizes the total estimated off-road mobile source emissions for each general off-road mobile source category in the Stockton Community for 2018:

**Table 5: Year 2018 Off-Road Mobile Source Emissions**

| Off-Road Mobile Source Category | NOx (tpy)     | VOC (tpy)     | PM2.5 (tpy)  |
|---------------------------------|---------------|---------------|--------------|
| Ocean Going Vessels             | 113.81        | 5.40          | 2.96         |
| Trains                          | 147.62        | 1.82          | 2.65         |
| Recreational Boats              | 25.44         | 84.45         | 4.94         |
| Off-Road Recreational Vehicles  |               | 2.44          |              |
| Off-Road Equipment              | 139.50        | 57.81         | 7.02         |
| Commercial Harbor Craft         | 15.52         | 1.67          | 0.50         |
| Fuel Storage and Handling       |               | 10.84         |              |
| <b>Total</b>                    | <b>441.88</b> | <b>164.44</b> | <b>18.07</b> |

*Summary of Mobile Source Emissions*

Table 6 below summarizes total 2018 off-road and on-road mobile source emissions

**Table 6: Year 2018 Mobile Source Emissions Summary**

| Mobile Source Categories | NOx (tpy)     | VOC (tpy)     | PM2.5 (tpy)  |
|--------------------------|---------------|---------------|--------------|
| On-Road Mobile Sources   | 433.46        | 164.18        | 21.72        |
| Off-Road Mobile Sources  | 312.55        | 157.38        | 14.61        |
| <b>Total</b>             | <b>746.01</b> | <b>321.56</b> | <b>36.33</b> |

*Forecasting Emissions - Mobile Sources*

The on-road mobile source inventory was forecasted using vehicle activity data in terms of VMT and criteria pollutant emission factor data for future years from CARB's on-road emission factor model, EMFAC2017. EMFAC2017 contains forecasted VMT and criteria pollutant emission factors for each year through 2050. The future year emission factors reflect fleet turnover and emission benefits from on-road mobile source regulations that have been adopted prior to the release of EMFAC2017. However, CARB has since adopted four additional on-road vehicle emission regulations that provide additional emission reductions in future years. The emission reductions from these four regulations were also applied to the relevant vehicle categories and emission processes (e.g., exhaust, evaporative, breakwear, and tirewear) to obtain the forecasted inventories in 2025 and 2030.

EMFAC2017 VMT for the county in which the community resides was used to estimate vehicle activity in the community for future years. This was done by calculating the growth rate of the county VMT from the 2017 base year to the target forecast years (2025 and 2030), and applying that growth rate to the base year VMT in the community. Once the on-road VMT for the future years was established in the community, criteria pollutant emissions for 2025 and 2030 were calculated by applying

the year-specific emission factors from EMFAC2017, as well as the additional emission reductions from the four new adopted regulations. Toxic air contaminant emissions for on-road mobile sources were obtained by applying CARB's chemical speciation profiles to the forecasted on-road mobile source TOG and PM emissions. The forecasted on-road criteria pollutant inventory and the forecasted on-road toxic inventory together comprise the final forecasted on-road mobile source inventory for the community.

The Tables below, summarizes the data used to forecast future-year mobile source emissions by broad source category groupings.

Tables 7 and 8 below summarize the total forecasted on-road emissions in the Stockton Community for the years 2025 and 2030:

**Table 7: Year 2025 Projected On-Road Mobile Source Emissions**

| On-Road Mobile Source Categories | NOx (tpy)     | VOC (tpy)     | PM2.5 (tpy)  |
|----------------------------------|---------------|---------------|--------------|
| Heavy Duty Vehicles              | 123.93        | 2.63          | 2.18         |
| Medium Duty Vehicles             | 29.03         | 0.54          | 0.96         |
| Light Duty Vehicles              | 78.91         | 102.91        | 15.04        |
| <b>Total</b>                     | <b>231.86</b> | <b>106.08</b> | <b>18.18</b> |

**Table 8: Year 2030 Projected On-Road Mobile Source Emissions**

| On-Road Mobile Source Categories | NOx (tpy)     | VOC (tpy)    | PM2.5 (tpy)  |
|----------------------------------|---------------|--------------|--------------|
| Heavy Duty Vehicles              | 128.26        | 2.87         | 2.35         |
| Medium Duty Vehicles             | 29.21         | 0.47         | 0.96         |
| Light Duty Vehicles              | 56.00         | 90.30        | 16.14        |
| <b>Total</b>                     | <b>213.47</b> | <b>93.64</b> | <b>19.45</b> |

Tables 9 and 10 below summarize the total forecasted off-road emissions in the Stockton Community for the years 2025 and 2030:

**Table 9: Year 2025 Projected Off-Road Mobile Source Emissions**

| Off-Road Mobile Source Categories | NOx (tpy) | VOC (tpy) | PM2.5 (tpy) |
|-----------------------------------|-----------|-----------|-------------|
| Ocean Going Vessels               | 136.86    | 1.04      | 2.47        |
| Trains                            | 136.86    | 1.04      | 2.47        |
| Recreational Boats                | 22.21     | 61.93     | 3.68        |
| Off-Road Recreational Vehicles    |           | 1.96      |             |
| Off-Road Equipment                | 104.53    | 55.60     | 4.85        |
| Commercial Harbor Craft           | 129.22    | 6.41      | 3.37        |



| Off-Road Mobile Source Categories | NOx (tpy)     | VOC (tpy)     | PM2.5 (tpy)  |
|-----------------------------------|---------------|---------------|--------------|
| Fuel Storage and Handling         | 0             | 9.68          | 0            |
| <b>Total</b>                      | <b>529.67</b> | <b>137.65</b> | <b>16.84</b> |

***Table 10: Year 2030 Projected Off-Road Mobile Source Emissions***

| Off-Road Mobile Source Categories | NOx (tpy)     | VOC (tpy)     | PM2.5 (tpy)  |
|-----------------------------------|---------------|---------------|--------------|
| Ocean Going Vessels               | 117.40        | 0.69          | 2.18         |
| Trains                            | 117.40        | 0.69          | 2.18         |
| Recreational Boats                | 20.61         | 50.30         | 3.01         |
| Off-Road Recreational Vehicles    |               | 1.66          |              |
| Off-Road Equipment                | 89.93         | 55.77         | 4.10         |
| Commercial Harbor Craft           | 146.67        | 7.47          | 3.84         |
| Fuel Storage and Handling         | 0             | 9.68          | 0            |
| <b>Total</b>                      | <b>492.02</b> | <b>126.26</b> | <b>15.30</b> |

## Area-Wide Sources Emissions Inventory

Area-wide sources are categories such as consumer products, unpaved road dust, fireplaces, and prescribed burning for which emissions occur over a wide geographic area. Emissions for these categories are estimated by both ARB and the local air districts using various models and methodologies. A summary of the area-wide sources is presented below:

### **Consumer Products**

The consumer products category reflects the four most recent surveys conducted by ARB staff for the years 2003, 2006, 2008, and 2010. Together these surveys collected updated product information and ingredient information for approximately 350 product categories. Based on the survey data, ARB staff determined the total product sales and total VOC emissions for the various product categories. The growth trend for most consumer product subcategories is based on the latest DOF population growth projections, except for aerosol coatings. Staff determined that a no-growth profile would be more appropriate for aerosol coatings based on survey data that show relatively flat sales of these products over the last decade.

Additional information on ARB's consumer products surveys is available at: <https://www.arb.ca.gov/consprod/survey/survey.htm>.

### **Architectural Coatings**

The architectural coatings category reflects emission estimates based on a comprehensive ARB survey for the 2004 calendar year. The emission estimates include benefits of the 2000 and 2007 ARB Suggested Control Measures as adopted in District Rule 4601. These emissions are grown based on DOF population projections.

Additional information about ARB's architectural coatings program is available at: <https://www.arb.ca.gov/coatings/arch/arch.htm>.

### **Asphalt Paving/Roofing**

Asphalt paving emissions were grown from 2008 estimates and asphalt roofing emissions were grown from a 2007 estimate. Emissions for both categories were developed using District methodologies. Emissions are estimated based on tons of asphalt applied and a default emission factor for each type of asphalt operation. The growth profile for both categories is based on ARB's REMI county economic forecasting model. The inventory reflects the reductions from District Rule 4641.

Additional information on the asphalt paving methodology is available at: <https://www.arb.ca.gov/ei/areasrc/districtmeth/sjvalley/sjvasphpav.pdf>  
[http://www.valleyair.org/Air Quality Plans/EmissionsMethods/MethodForms/Current/AsphaltPaving2008.pdf](http://www.valleyair.org/Air_Quality_Plans/EmissionsMethods/MethodForms/Current/AsphaltPaving2008.pdf).

### **Residential Wood Combustion**

Emissions were estimated for 2012 using a 2016 District methodology. The

methodology is based on ARB's 2011 methodology, with several refinements based on a 2014 District survey. The inventory reflects the regional distribution and use of wood burning devices, refined fuel usage rates for several types of devices, and emissions reductions from the District's Burn Cleaner Program. The emissions estimates reflect emission factors from U.S. EPA's National Emission Inventory. No growth is assumed for future years because of limits in new construction and the stringency of the requirements of District Rule 4901. The reduction benefits of Rule 4901 are reflected in the inventory.

Additional information on the Residential Wood Combustion methodology is available at: <https://www.arb.ca.gov/ei/areasrc/arbmiscproccresfuelcom.htm>.

### **Residential Natural Gas Combustion**

The inventory for residential natural gas combustion is based on 2006 data provided by the District. Emissions are estimated based on the percentages of total natural gas consumed by various residential uses (space heating, water heating, cooking, other) obtained from the CEC and U.S. EPA AP-42 emission factors. Emissions were grown from 2006 using CEC projections of natural gas consumption. The water heating inventory reflects the emission reductions from District Rule 4902.

Additional information on the Residential Natural Gas Combustion methodology is available at:

[http://www.valleyair.org/Air\\_Quality\\_Plans/EmissionsMethods/MethodForms/Current/ResidentialNG2006.pdf](http://www.valleyair.org/Air_Quality_Plans/EmissionsMethods/MethodForms/Current/ResidentialNG2006.pdf).

### **Construction and Demolition**

Emission estimates for building construction and road construction operations are based on ARB methodologies. Emissions are estimated by applying emission factors developed by Midwest Research Institute (MRI) to the acreage disturbed by construction. The emission estimates were grown from ARB estimates developed in 2002 and 1997, respectively. The growth profile for building construction is based on the REMI county economic forecast model. Road construction emissions are grown based on road construction forecasts by SJV transportation planning agencies (TPAs). The inventory reflects emission reductions from District Regulation VIII.

Additional information on Construction and Demolition methodology is available at:

<https://www.arb.ca.gov/ei/areasrc/arbmiscproccconstdem.htm>.

### **Paved Road Dust**

Paved road dust emissions for 2012 were estimated using an ARB methodology consistent with the current U.S. EPA AP-42 methodology (January 2011) for quantifying dust emissions. Revisions include California-specific reductions in silt loading values, updated 2012 vehicle miles traveled (VMT) provided by SJV MPOs, updated VMT distributions (travel fractions) from Caltrans for the year 2008, and incorporation of precipitation correction factors. Emissions were grown using VMT projections from the SJV MPOs. The inventory also reflects emission reductions from

## District Regulation VIII.

Additional information on Paved Road Dust methodology is available at:  
<https://www.arb.ca.gov/ei/areasrc/arbmiscprocpaverddst.htm>.

### **Unpaved Road Dust - Farm Roads**

Emissions for unpaved farm roads were updated based on ARB's methodology and 2012 harvested crop acreage from NASS. Emissions reflect crop specific VMT factors and an updated emission factor of 2.0 lbs PM10/VMT, based on California test data conducted by the University of California, Davis (UC Davis), and the Desert Research Institute (DRI). An updated particle size profile (ARB PM profile #470) was used, which reduces the PM2.5 fraction by about 50%. Temporal profiles were updated based on crop specific activity profiles. Growth is based on projected FMMP farmland acreage for 2010-2020, which results in a slight annual decline. In addition, the inventory reflects the emission reductions from District Rule 4550 and District Regulation VIII.

Additional information on Unpaved Farm Road Dust methodology is available at:  
<https://www.arb.ca.gov/ei/areasrc/arbmiscprocunpaverddst.htm>.

### **Unpaved Non-Farm Road Dust**

Emissions from unpaved non-farm roads were estimated from 2008 unpaved road data collected from the California Statewide Local Streets and Roads Needs Assessment, Caltrans, and the District. Dust emissions were calculated using the same emission factor (2.00 lbs PM10/VMT) and particle size fraction (ARB PM profile #470) described above for unpaved farm roads, and the addition of a rainfall adjustment factor. Temporal profiles were revised. Staff assumed no growth for this category based on the assumption that existing unpaved roads tend to get paved as vehicle traffic on them increases, which counteracts any additional emissions from new unpaved roads. The inventory includes the emission reduction benefits of District Regulation VIII.

Additional information on Unpaved Non-Farm Road Dust methodology is available at:  
<https://www.arb.ca.gov/ei/areasrc/arbmiscprocunpaverddst.htm>.

### **Windblown Dust from Unpaved Roads and Associated Areas**

Emissions for this source category were estimated based on a 1997 ARB methodology reflecting unpaved road mileage and local parameters that affect wind erosion. The estimates assume no growth. The inventory includes the emission reduction benefits of District Regulation VIII.

Additional information on Windblown Dust from Unpaved Roads and Associated Areas methodology is available at:  
<https://www.arb.ca.gov/ei/areasrc/arbmiscprocfugwbdst.htm>.

### **Structural and Automobile Fires**

Emissions from structural and automobile fires were estimated using ARB's 1999

methodology. Structural fire emissions are based on rates of structural and content material loss per fire, average combustible content, and emission factors obtained from test data. Automobile fire emissions are based on the number of vehicle fires per year and composite emission factors derived from AP-42 emission factors. No growth is assumed for this category.

Additional information on Structural and Automobile Fires methodology is available at: <https://www.arb.ca.gov/ei/areasrc/arbmiscprocfires.htm>.

### **Commercial Cooking**

The commercial cooking inventory is based on emissions data reported by the District for 2008. The emissions estimates were developed from the number of restaurants, the number and types of cooking equipment, the food type, and default emission factors from U.S. EPA's 2002 National Emissions Inventory. The growth profile reflects the latest population projections provided by the California DOF. The inventory also reflects the emission reductions from District Rule 4692.

Additional information on Commercial Cooking methodology is available at: <https://www.arb.ca.gov/ei/areasrc/districtmeth/sjvalley/CommercialCooking2006.pdf>.

For additional information on all area source Methodologies and categories visit ARB and Districts Web pages:

<https://ww3.arb.ca.gov/ei/areasrc/areameth.htm>

[http://www.valleyair.org/Air\\_Quality\\_Plans/EmissionsMethods/EmissionsMethods.htm](http://www.valleyair.org/Air_Quality_Plans/EmissionsMethods/EmissionsMethods.htm)

Table 11 below summarizes the total projected Area Source emissions for each Category in the Stockton Community for 2018:

**Table 11: Year 2018 Area Source Emissions for Stockton Community**

| Source Categories                                   | NOx (tpy)     | VOC (tpy)     | PM2.5 (tpy)  |
|---|---------------|---------------|--------------|
| <b>FUEL COMBUSTION</b>                              | 161.57        | 7.02          | 4.50         |
| MANUFACTURING AND INDUSTRIAL                        | 121.00        | 0.75          | 1.41         |
| SERVICE AND COMMERCIAL                              | 40.52         | 6.06          | 3.09         |
| OTHER (FUEL COMBUSTION)                             | 0.05          | 0.20          | 0.00         |
| <b>WASTE DISPOSAL</b>                               | <b>0.00</b>   | <b>81.37</b>  | <b>0.01</b>  |
| SEWAGE TREATMENT                                    | 0.00          | 0.00          | 0.00         |
| OTHER (WASTE DISPOSAL)                              | 0.00          | 81.37         | 0.01         |
| <b>CLEANING AND SURFACE COATINGS</b>                | <b>0.00</b>   | <b>107.89</b> | <b>0.00</b>  |
| LAUNDERING  | 0.00          | 0.00          | 0.00         |
| DEGREASING  | 0.00          | 17.68         | 0.00         |
| COATINGS AND RELATED PROCESS SOLVENTS               | 0.00          | 59.86         | 0.00         |
| PRINTING  | 0.00          | 24.25         | 0.00         |
| ADHESIVES AND SEALANTS                              | 0.00          | 6.10          | 0.00         |
| <b>PETROLEUM PRODUCTION AND MARKETING</b>           | <b>0.00</b>   | <b>10.86</b>  | <b>0.00</b>  |
| PETROLEUM MARKETING                                 | 0.00          | 10.86         | 0.00         |
| <b>INDUSTRIAL PROCESSES</b>                         | <b>0.00</b>   | <b>2.94</b>   | <b>3.42</b>  |
| CHEMICAL  | 0.00          | 0.57          | 0.00         |
| FOOD AND AGRICULTURE                                | 0.00          | 2.37          | 0.00         |
| MINERAL PROCESSES                                   | 0.00          | 0.00          | 2.69         |
| WOOD AND PAPER                                      | 0.00          | 0.00          | 0.73         |
| <b>SOLVENT EVAPORATION</b>                          | <b>0.00</b>   | <b>229.04</b> | <b>0.00</b>  |
| CONSUMER PRODUCTS                                   | 0.00          | 141.91        | 0.00         |
| ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS | 0.00          | 75.36         | 0.00         |
| PESTICIDES/FERTILIZERS                              | 0.00          | 1.60          | 0.00         |
| ASPHALT PAVING / ROOFING                            | 0.00          | 10.17         | 0.00         |
| <b>MISCELLANEOUS PROCESSES</b>                      | <b>40.24</b>  | <b>18.55</b>  | <b>75.09</b> |
| RESIDENTIAL FUEL COMBUSTION                         | 40.18         | 12.28         | 12.54        |
| CONSTRUCTION AND DEMOLITION                         | 0.00          | 0.00          | 10.57        |
| PAVED ROAD DUST                                     | 0.00          | 0.00          | 13.55        |
| FUGITIVE WINDBLOWN DUST                             | 0.00          | 0.00          | 0.04         |
| FIRES   | 0.06          | 0.19          | 0.20         |
| COOKING   | 0.00          | 6.08          | 38.18        |
| OTHER (MISCELLANEOUS PROCESSES)                     | 0.00          | 0.00          | 0.00         |
| <b>Total</b>  | <b>201.81</b> | <b>457.67</b> | <b>83.02</b> |

*Forecasting Emissions – Area Sources*

Emission forecasts are based on growth profiles that in many cases incorporate historical trends up to the base year or beyond. The growth surrogates used to forecast the emissions from these categories are presented below.

Tables 12 and 13 below summarize the total projected area source emissions for each category in the Stockton Community for years 2025 and 2030:

***Table 12: Year 2025 Projected Area Source Emissions for Stockton Community***

| Source Categories                                   | NOx (tpy)    | VOC (tpy)     | PM2.5 (tpy)  |
|---|--------------|---------------|--------------|
| <b>FUEL COMBUSTION</b>                              | 163.37       | 7.26          | 4.64         |
| MANUFACTURING AND INDUSTRIAL                        | 123.72       | 0.77          | 1.44         |
| SERVICE AND COMMERCIAL                              | 39.60        | 6.29          | 3.20         |
| OTHER (FUEL COMBUSTION)                             | 0.04         | 0.20          | 0.00         |
| <b>WASTE DISPOSAL</b>                               | <b>0.00</b>  | <b>89.07</b>  | <b>0.02</b>  |
| SEWAGE TREATMENT                                    | 0.00         | 0.00          | 0.00         |
| OTHER (WASTE DISPOSAL)                              | 0.00         | 89.07         | 0.02         |
| <b>CLEANING AND SURFACE COATINGS</b>                | <b>0.00</b>  | <b>121.72</b> | <b>0.00</b>  |
| LAUNDERING  | 0.00         | 0.00          | 0.00         |
| DEGREASING  | 0.00         | 17.74         | 0.00         |
| COATINGS AND RELATED PROCESS SOLVENTS               | 0.00         | 68.68         | 0.00         |
| PRINTING  | 0.00         | 28.81         | 0.00         |
| ADHESIVES AND SEALANTS                              | 0.00         | 6.50          | 0.00         |
| <b>PETROLEUM PRODUCTION AND MARKETING</b>           | <b>0.00</b>  | <b>9.77</b>   | <b>0.00</b>  |
| PETROLEUM MARKETING                                 | 0.00         | 9.77          | 0.00         |
| <b>INDUSTRIAL PROCESSES</b>                         | <b>0.00</b>  | <b>3.13</b>   | <b>3.68</b>  |
| CHEMICAL  | 0.00         | 0.63          | 0.00         |
| FOOD AND AGRICULTURE                                | 0.00         | 2.51          | 0.00         |
| MINERAL PROCESSES                                   | 0.00         | 0.00          | 2.96         |
| WOOD AND PAPER                                      | 0.00         | 0.00          | 0.73         |
| <b>SOLVENT EVAPORATION</b>                          | <b>0.00</b>  | <b>254.42</b> | <b>0.00</b>  |
| CONSUMER PRODUCTS                                   | 0.00         | 159.93        | 0.00         |
| ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS | 0.00         | 82.41         | 0.00         |
| PESTICIDES/FERTILIZERS                              | 0.00         | 1.75          | 0.00         |
| ASPHALT PAVING / ROOFING                            | 0.00         | 10.33         | 0.00         |
| <b>MISCELLANEOUS PROCESSES</b>                      | <b>36.90</b> | <b>19.28</b>  | <b>87.89</b> |
| RESIDENTIAL FUEL COMBUSTION                         | 36.84        | 12.41         | 12.73        |
| CONSTRUCTION AND DEMOLITION                         | 0.00         | 0.00          | 18.33        |
| PAVED ROAD DUST                                     | 0.00         | 0.00          | 14.78        |

| Source Categories               | NOx (tpy)     | VOC (tpy)     | PM2.5 (tpy)  |
|---------------------------------|---------------|---------------|--------------|
| FUGITIVE WINDBLOWN DUST         | 0.00          | 0.00          | 0.04         |
| FIRES                           | 0.06          | 0.21          | 0.22         |
| COOKING                         | 0.00          | 6.66          | 41.79        |
| OTHER (MISCELLANEOUS PROCESSES) | 0.00          | 0.00          | 0.00         |
| <b>Total</b>                    | <b>200.27</b> | <b>504.66</b> | <b>96.24</b> |

***Table 13: Year 2030 Projected Area Source Emissions for Stockton Community***

| Source Categories                                   | NOx (tpy)    | VOC (tpy)     | PM2.5 (tpy)   |
|---|--------------|---------------|---------------|
| <b>FUEL COMBUSTION</b>                              | 169.02       | 7.51          | 4.82          |
| MANUFACTURING AND INDUSTRIAL                        | 129.87       | 0.81          | 1.51          |
| SERVICE AND COMMERCIAL                              | 39.10        | 6.50          | 3.31          |
| OTHER (FUEL COMBUSTION)                             | 0.04         | 0.20          | 0.00          |
| <b>WASTE DISPOSAL</b>                               | <b>0.00</b>  | <b>94.05</b>  | <b>0.02</b>   |
| SEWAGE TREATMENT                                    | 0.00         | 0.00          | 0.00          |
| OTHER (WASTE DISPOSAL)                              | 0.00         | 94.05         | 0.02          |
| <b>CLEANING AND SURFACE COATINGS</b>                | <b>0.00</b>  | <b>130.75</b> | <b>0.00</b>   |
| LAUNDERING  | 0.00         | 0.00          | 0.00          |
| DEGREASING  | 0.00         | 17.74         | 0.00          |
| COATINGS AND RELATED PROCESS SOLVENTS               | 0.00         | 74.19         | 0.00          |
| PRINTING  | 0.00         | 32.29         | 0.00          |
| ADHESIVES AND SEALANTS                              | 0.00         | 6.54          | 0.00          |
| <b>PETROLEUM PRODUCTION AND MARKETING</b>           | <b>0.00</b>  | <b>9.25</b>   | <b>0.00</b>   |
| PETROLEUM MARKETING                                 | 0.00         | 9.25          | 0.00          |
| <b>INDUSTRIAL PROCESSES</b>                         | <b>0.00</b>  | <b>3.34</b>   | <b>3.85</b>   |
| CHEMICAL  | 0.00         | 0.67          | 0.00          |
| FOOD AND AGRICULTURE                                | 0.00         | 2.67          | 0.00          |
| MINERAL PROCESSES                                   | 0.00         | 0.00          | 3.13          |
| WOOD AND PAPER                                      | 0.00         | 0.00          | 0.73          |
| <b>SOLVENT EVAPORATION</b>                          | <b>0.00</b>  | <b>270.76</b> | <b>0.00</b>   |
| CONSUMER PRODUCTS                                   | 0.00         | 171.87        | 0.00          |
| ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS | 0.00         | 86.99         | 0.00          |
| PESTICIDES/FERTILIZERS                              | 0.00         | 1.85          | 0.00          |
| ASPHALT PAVING / ROOFING                            | 0.00         | 10.06         | 0.00          |
| <b>MISCELLANEOUS PROCESSES</b>                      | <b>35.67</b> | <b>19.76</b>  | <b>109.08</b> |
| RESIDENTIAL FUEL COMBUSTION                         | 35.61        | 12.51         | 12.87         |
| CONSTRUCTION AND DEMOLITION                         | 0.00         | 0.00          | 36.33         |
| PAVED ROAD DUST                                     | 0.00         | 0.00          | 15.48         |
| FUGITIVE WINDBLOWN DUST                             | 0.00         | 0.00          | 0.04          |



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| <b>Source Categories</b>        | <b>NOx (tpy)</b> | <b>VOC (tpy)</b> | <b>PM2.5 (tpy)</b> |
|---------------------------------|------------------|------------------|--------------------|
| FIRES                           | 0.07             | 0.22             | 0.23               |
| COOKING                         | 0.00             | 7.03             | 44.13              |
| OTHER (MISCELLANEOUS PROCESSES) | 0.00             | 0.00             | 0.00               |
| <b>Total</b>                    | <b>204.69</b>    | <b>535.42</b>    | <b>117.77</b>      |