

APPENDIX B

Air Quality Modeling Data



2010 FRAQMD Area Designations for State and National Ambient Air Quality Standard

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| Pollutants | State Designations | National Designations |
|--------------------------------------|---|---|
| | S. Sutter: Serious Nonattainment | |
| 1-Hour Ozone | The Balance of FRAQMD: Nonattainment-Transitional* | S. Sutter: Severe Nonattainment |
| 8-Hour Ozone | Nonattainment-Transitional * | Sutter Buttes (>2000ft): Nonattainment |
| PM₁₀ | Nonattainment | The Balance of FRAQMD: Unclassified/Attainment |
| PM_{2.5} | Attainment** | Unclassified |
| Carbon Monoxide | Sutter County: Attainment | Nonattainment (As of Dec 14, 2010) |
| | Yuba County: Unclassified | |
| Nitrogen Dioxide | Attainment | Unclassified/Attainment |
| Sulfur Dioxide | Attainment | Unclassified/Attainment |
| Sulfates | Attainment | |
| Lead | Attainment | |
| Hydrogen Sulfide | Unclassified | |
| Visibility Reducing Particles | Unclassified | |

*The District has been redesignated from Nonattainment to Nonattainment-Transitional for the State designation for ozone occurs by operation of law. The change was confirmed by the CARB Board of Directors on March 25, 2010. HSC Section 40925.5.

**The District has been redesignated to attainment for the annual PM_{2.5} State AAQS. The change was adopted on the March 25, 2010, by the CARB Board of Directors. For more information please see [here](#)

| Existing, On-the-Ground | | | | | | | | | | | | | | | | |
|-------------------------|----------|-------------|-----------------|--------------|-------------|--------|---------------|-----------------|-----------------|------------|-------------|------------|------------|------------|------------|------|
| SF Units | MF Units | Neigh Comm. | Community Comm. | S Reg. Comm. | Sqft Office | Sqft | Light Indust. | S Heavy Indust. | Sr Public/Quasi | Park Acrea | Element. St | Middle Stu | HS Student | Other Schc | Population | Jobs |
| 23,833 | 4,713 | 1,526,121 | 1,087,344 | - | 615,444 | 47,748 | 811 | 3,133 | 97 | 4,515 | 2,072 | 2,006 | 7,133 | 69,151 | 18,679 | |
| k | | 1,526.12 | 1,087.34 | - | 615.44 | 47.75 | 0.81 | 3.13 | | | | | | | | |

| New Land Use under Previous (1996) GP (the No Project) | | | | | | | | | | | | | | | | |
|--|----------|-------------|-----------------|--------------|-------------|---------|---------------|-----------------|-----------------|------------|-------------|------------|------------|------------|------------|--------|
| SF Units | MF Units | Neigh Comm. | Community Comm. | S Reg. Comm. | Sqft Office | Sqft | Light Indust. | S Heavy Indust. | Sr Public/Quasi | Park Acrea | Element. St | Middle Stu | HS Student | Other Schc | Population | Jobs |
| 31,859 | 2,720 | 5,362,047 | 3,241,214 | 3,619,623 | 2,360,920 | 705,094 | 2,464,098 | 215,859 | 370 | 5,788 | 2,656 | 2,572 | 12,867 | 88,649 | 43,558 | |
| k | | 5,362.05 | 3,241.21 | 3,619.62 | 2,360.92 | 705.09 | 2,464.10 | 215.86 | | | | | | | | |
| 1,592.95 | 135.99 | 268.10 | 162.06 | 180.98 | 118.05 | 35.25 | 123.20 | 10.79 | 18.52 | 289.40 | 132.81 | 128.58 | 643.35 | | | 887.65 |

| New Land Use under the General Plan Update (the Project Alt 2) in 2030 | | | | | | | | | | | | | | | | |
|--|----------|-------------|-----------------|--------------|-------------|---------|---------------|-----------------|-----------------|------------|-------------|------------|------------|------------|------------|--------|
| SF Units | MF Units | Neigh Comm. | Community Comm. | S Reg. Comm. | Sqft Office | Sqft | Light Indust. | S Heavy Indust. | Sr Public/Quasi | Park Acrea | Element. St | Middle Stu | HS Student | Other Schc | Population | Jobs |
| 12,064 | 2,428 | 1,696,255 | 2,291,381 | 699,190 | 448,542 | 582,184 | 568,283 | 306,897 | 83 | 2,302 | 1,056 | 1,023 | 4,554 | 35,256 | 15,994 | |
| k | | 1,696.25 | 2,291.38 | 699.19 | 448.54 | 582.18 | 568.28 | 306.90 | | | | | | | | |
| 603.20 | 121.42 | 84.81 | 114.57 | 34.96 | 22.43 | 29.11 | 28.41 | 15.34 | 4.16 | 115.09 | 52.82 | 51.14 | 227.72 | | | 314.29 |

| New Land Use under the General Plan Update (the Project Alt 4) in 2030 | | | | | | | | | | | | | | | | |
|--|----------|-------------|-----------------|--------------|-------------|-----------|---------------|-----------------|-----------------|------------|-------------|------------|------------|------------|------------|--------|
| SF Units | MF Units | Neigh Comm. | Community Comm. | S Reg. Comm. | Sqft Office | Sqft | Light Indust. | S Heavy Indust. | Sr Public/Quasi | Park Acrea | Element. St | Middle Stu | HS Student | Other Schc | Population | Jobs |
| 13,694 | 2,949 | 1,750,409 | 2,459,568 | 1,398,380 | 963,521 | 2,140,510 | 1,198,976 | 306,897 | 103 | 2,719 | 1,473 | 1,923 | 4,554 | 40,513 | 22,873 | |
| k | | 1,750.41 | 2,459.57 | 1,398.38 | 963.52 | 2,140.51 | 1,198.98 | 306.90 | | | | | | | | |
| 684.70 | 147.45 | 87.52 | 122.98 | 69.92 | 48.18 | 107.03 | 59.95 | 15.34 | 5.15 | 135.95 | 73.65 | 96.15 | 227.70 | | | 495.57 |

| New Land Use under the General Plan Update (the Project) at Full Buildout | | | | | | | | | | | | | | | | |
|---|----------|-------------|-----------------|--------------|-------------|-----------|---------------|-----------------|-----------------|------------|-------------|------------|------------|------------|------------|----------|
| SF Units | MF Units | Neigh Comm. | Community Comm. | S Reg. Comm. | Sqft Office | Sqft | Light Indust. | S Heavy Indust. | Sr Public/Quasi | Park Acrea | Element. St | Middle Stu | HS Student | Other Schc | Population | Jobs |
| 33,815 | 6,252 | 2,560,273 | 6,740,185 | 3,830,583 | 5,305,722 | 4,944,086 | 2,652,353 | 638,502 | 474 | 6,503 | 2,984 | 2,889 | 12,867 | 99,604 | 64,845 | |
| k | | 2,560.27 | 6,740.19 | 3,830.58 | 5,305.72 | 4,944.09 | 2,652.35 | 638.50 | | | | | | | | |
| 1,690.75 | 312.58 | 128.01 | 337.01 | 191.53 | 265.29 | 247.20 | 132.62 | 31.93 | 23.71 | 325.17 | 149.22 | 144.47 | 643.35 | | | 1,301.66 |

| Percent increase Exiting to 2030 Full Buildout | | | | | | | | | | | | | | |
|--|----------|------------|-------------|---------------|-----------------|-----------------|------------|-------------|------------|------------|------------|------------|-------|--|
| SF Units | MF Units | Comm. Sqft | Office Sqft | Light Indust. | S Heavy Indust. | Sr Public/Quasi | Park Acrea | Element. St | Middle Stu | HS Student | Other Schc | Population | Jobs | |
| 2.419 | 2.326 | 6.024 | 9.621 | 104.545 | 3,273.070 | 204.815 | 5.879 | 2.440 | 2.440 | 2.440 | 2.804 | 2.440 | 4.472 | |
| | 2.373 | | 7.823 | | 848.315 | | | | | | | | | |
| | | | | | 1,688.807 | | | | | | | | | |

| Percent increase Exiting to 2030 Alt 2 | | | | | | | | | | | | | | |
|--|----------|------------|-------------|---------------|-----------------|-----------------|------------|-------------|------------|------------|------------|------------|-------|--|
| SF Units | MF Units | Comm. Sqft | Office Sqft | Light Indust. | S Heavy Indust. | Sr Public/Quasi | Park Acrea | Element. St | Middle Stu | HS Student | Other Schc | Population | Jobs | |
| 1.506 | 1.515 | 2.111 | 1.729 | 13.193 | 702.061 | 98.964 | 1.855 | 1.510 | 1.510 | 1.510 | 1.638 | 1.510 | 1.856 | |
| | 1.511 | | 1.920 | | 179.773 | | | | | | | | | |
| | | | | | 357.627 | | | | | | | | | |

| Percent increase Exiting to 2030 Alt 4 | | | | | | | | | | | | | | |
|--|----------|------------|-------------|---------------|-----------------|-----------------|------------|-------------|------------|------------|------------|------------|-------|--|
| SF Units | MF Units | Comm. Sqft | Office Sqft | Light Indust. | S Heavy Indust. | Sr Public/Quasi | Park Acrea | Element. St | Middle Stu | HS Student | Other Schc | Population | Jobs | |
| 1.575 | 1.626 | 2.147 | 2.566 | 45.829 | 1,480.114 | 98.964 | 2.060 | 1.602 | 1.711 | 1.959 | 1.638 | 1.586 | 2.225 | |
| | 1.600 | | 2.356 | | 382.664 | | | | | | | | | |
| | | | | | 762.972 | | | | | | | | | |

Maximum Acreage affected by 2030 GPU at Full Buildout
69,919 total
20 per day
3495.95 per year
524.39

| | Construction Phase Ratio | Percent | Construction Durations Months | | |
|----|--------------------------|---------|-------------------------------|----------|-----------|
| | | | 1996 GP | 2030 GPU | 2030 Full |
| FG | 2 | 19% | 120 | 240 | 240 |
| P | 0.5 | 5% | 22.9 | 45.7 | 45.7 |
| B | 7 | 67% | 5.7 | 11.4 | 11.4 |
| AC | 1 | 10% | 80.0 | 160.0 | 160.0 |
| | 10.5 | | 11.4 | 22.9 | 22.9 |

Maximum Acreage affected by 2030 Alt 2
16,882 total
5 per day
844.11 per year
126.62

Maximum Acreage affected by 2030 GPU by 2030 Alt 4
26,620 total
8 per day
1330.98 per year
199.65

Maximum Acreage affected by 1996 GP at Buildout
70,954 total
20 per day
3547.71 per year
532.16

| Table 4.3-xxx Summary of Modeled Operational Emissions of Criteria Air Pollutants and Precursors— New Development Accommodated under 2030 General Plan Full Buildout | | | | | Table 4.3-xxx Summary of Modeled Operational Emissions of Criteria Air Pollutants and Precursors— New Development Accommodated under 2030 General Plan Alternative 2 | | | | | Table 4.3-xxx Summary of Modeled Operational Emissions of Criteria Air Pollutants and Precursors— New Development Accommodated under 2030 General Plan Alternative 4 | | | | |
|--|---------------------------------|-----------------|------------------|-------------------|--|---------------------------------|-----------------|------------------|-------------------|--|---------------------------------|-----------------|------------------|-------------------|
| Source | Emissions (lb/day) ¹ | | | | Source | Emissions (lb/day) ¹ | | | | Source | Emissions (lb/day) ¹ | | | |
| | ROG | NO _x | PM ₁₀ | PM _{2.5} | | ROG | NO _x | PM ₁₀ | PM _{2.5} | | ROG | NO _x | PM ₁₀ | PM _{2.5} |
| New Development under 2030 General Plan | | | | | New Development under 2030 General Plan | | | | | New Development under 2030 General Plan | | | | |
| Area Sources ^{2,4} | 2,699.14 | 620.57 | 1.17 | 1.16 | Area Sources ^{2,4} | 956.33 | 214.78 | 0.41 | 0.40 | Area Sources ^{2,4} | 1,113.01 | 250.13 | 0.47 | 0.47 |
| Mobile Sources ³ | 3,913.76 | 4,209.56 | 15,251.69 | 2,877.69 | Mobile Sources ³ | 1,280.52 | 1,376.35 | 4,985.14 | 940.56 | Mobile Sources ³ | 1,577.88 | 1,696.75 | 6,146.57 | 1,159.70 |
| Total GPU Daily Emissions | 6,612.90 | 4,830.13 | 15,252.86 | 2,878.85 | Total GPU Daily Emissions | 2,236.85 | 1,591.13 | 4,985.55 | 940.96 | Total GPU Daily Emissions | 2,690.89 | 1,946.88 | 6,147.04 | 1,160.17 |
| FRAQMD Significance Threshold | 25 lb/day | 25 lb/day | 80 lb/day | - | FRAQMD Significance Threshold | 25 lb/day | 25 lb/day | 80 lb/day | - | FRAQMD Significance Threshold | 25 lb/day | 25 lb/day | 80 lb/day | - |
| Notes: FRAQMD = Feather River Air Quality Management District; GP = General Plan; GPU = General Plan Update; lb/day = pounds per day; NO _x = oxides of nitrogen; PM ₁₀ = particulate matter ¹ Emissions modeled using the URBEMIS 2007 (Version 9.2.4) computer model, for analysis year 2030 based on trip generation rates obtained from the analysis prepared for this project and proposed land uses identified in Chapter xxx "Project Description" and Section 4 xxx "Transportation and Circulation" ² For this estimate, it was assumed that all proposed new residences would be equipped with natural gas fireplaces, and no wood-burning appliances would be installed. ³ Trip generation rates were obtained from the traffic analysis for the respective land uses (see Section 4.xxx, "Transportation and Circulation"). Refer to Appendix xxxx for detailed assumptions and modeling output files. Source: Data modeled by AECOM in 2010. | | | | | Notes: FRAQMD = Feather River Air Quality Management District; GP = General Plan; GPU = General Plan Update; lb/day = pounds per day; NO _x = oxides of nitrogen; PM ₁₀ = particulate matter ¹ Emissions modeled using the URBEMIS 2007 (Version 9.2.4) computer model, for analysis year 2030 based on trip generation rates obtained from the analysis prepared for this project and proposed land uses identified in Chapter xxx "Project Description" and Section 4 xxx "Transportation and Circulation" ² For this estimate, it was assumed that all proposed new residences would be equipped with natural gas fireplaces, and no wood-burning appliances would be installed. ³ Trip generation rates were obtained from the traffic analysis for the respective land uses (see Section 4.xxx, "Transportation and Circulation"). Refer to Appendix xxxx for detailed assumptions and modeling output files. Source: Data modeled by AECOM in 2010. | | | | | Notes: FRAQMD = Feather River Air Quality Management District; GP = General Plan; GPU = General Plan Update; lb/day = pounds per day; NO _x = oxides of nitrogen; PM ₁₀ = particulate matter ¹ Emissions modeled using the URBEMIS 2007 (Version 9.2.4) computer model, for analysis year 2030 based on trip generation rates obtained from the analysis prepared for this project and proposed land uses identified in Chapter xxx "Project Description" and Section 4 xxx "Transportation and Circulation" ² For this estimate, it was assumed that all proposed new residences would be equipped with natural gas fireplaces, and no wood-burning appliances would be installed. ³ Trip generation rates were obtained from the traffic analysis for the respective land uses (see Section 4.xxx, "Transportation and Circulation"). Refer to Appendix xxxx for detailed assumptions and modeling output files. Source: Data modeled by AECOM in 2010. | | | | |
| Table 4.3-3 Summary of Modeled Construction-Related Emissions of Criteria Air Pollutants and Precursors—Buildout of the 2030 General Plan in the Worst-Case Year (2010 - 2011) | | | | | Table 4.3-3 Summary of Modeled Construction-Related Emissions of Criteria Air Pollutants and Precursors—2030 General Plan AQ Alt 2 in the Worst-Case Year (2010 - 2011) | | | | | Table 4.3-3 Summary of Modeled Construction-Related Emissions of Criteria Air Pollutants and Precursors—2030 General Plan Alt 4 in the Worst-Case Year (2010 - 2011) | | | | |
| | Emissions (lb/day) | | | | | Emissions (lb/day) | | | | | Emissions (lb/day) | | | |
| | ROG | NO _x | PM ₁₀ | PM _{2.5} | | ROG | NO _x | PM ₁₀ | PM _{2.5} | | ROG | NO _x | PM ₁₀ | PM _{2.5} |
| Construction Activities Associated with GPU^{1,2} | | | | | Construction Activities Associated with GPU^{1,2} | | | | | Construction Activities Associated with GPU^{1,2} | | | | |
| Grading | 5.33 | 40.99 | 402.38 | 85.72 | Grading | 3.98 | 31.71 | 121.69 | 26.62 | Grading | 3.98 | 31.71 | 161.69 | 34.97 |
| Building Construction | 31.63 | 124.62 | 7.85 | 5.62 | Building Construction | 12.28 | 51.43 | 3.43 | 2.66 | Building Construction | 14.68 | 63.73 | 4.09 | 3.14 |
| Asphalt Paving | 27.83 | 78.07 | 4.12 | 3.59 | Asphalt Paving | 11.53 | 38.74 | 2.48 | 2.21 | Asphalt Paving | 12.95 | 42.15 | 2.62 | 2.33 |
| Architectural Coatings | 2111.02 | 2.08 | 0.20 | 0.10 | Architectural Coatings | 704.43 | 0.70 | 0.07 | 0.03 | Architectural Coatings | 853.71 | 0.84 | 0.08 | 0.04 |
| Trenching | 4.01 | 33.01 | 1.66 | 1.52 | Trenching | 2.00 | 16.51 | 0.83 | 0.76 | Trenching | 2.00 | 16.51 | 0.83 | 0.76 |
| Total Unmitigated Worst-case | 2179.82 | 278.77 | 416.21 | 96.55 | Total Unmitigated Worst-case | 734.22 | 139.09 | 128.50 | 32.28 | Total Unmitigated Worst-case | 887.32 | 154.94 | 169.31 | 41.24 |
| FRAQMD Significance Threshold | 25 | 25 | 80 | - | FRAQMD Significance Threshold | 25 | 25 | 80 | - | FRAQMD Significance Threshold | 25 | 25 | 80 | - |
| Total Mitigated Daily Emissions (GPU)³ | 1634.87 | 209.08 | 83.24 | X | Total Mitigated Daily Emissions (GPU)³ | 550.67 | 104.32 | 25.70 | X | Total Mitigated Daily Emissions (GPU)³ | 665.49 | 116.21 | 33.86 | X |
| Notes: GPU = 2030 General Plan; lb/day = pounds per day; NO _x = oxides of nitrogen; PM ₁₀ = particulate matter less than or equal to 10 microns in diameter; PM _{2.5} = particulate matter less than or equal to 2.5 microns in diameter ROG = reactive organic gases; FRAQMD = Feather River Air Quality Emissions totals may not sum exactly due to rounding. ¹ No emissions were modeled for demolition activities. Existing land uses to be demolished are ² It was assumed that, on average, xx acres would be developed annually and a maximum of xx acres/day would be actively disturbed associated with construction of the 2030 General Plan. ⁴ Implementation of FRAQMD-recommended construction mitigation measures was assumed to result in a 5%, 20% and 75% reduction in ROG, NO _x , and PM ₁₀ , respectively. Refer to Appendix xx for detailed input parameters and modeling results. Source: Modeling performed by AECOM in 2010. | | | | | Notes: GPU = 2030 General Plan; lb/day = pounds per day; NO _x = oxides of nitrogen; PM ₁₀ = particulate matter less than or equal to 10 microns in diameter; PM _{2.5} = particulate matter less than or equal to 2.5 microns in diameter ROG = reactive organic gases; FRAQMD = Feather River Air Emissions totals may not sum exactly due to rounding. ¹ No emissions were modeled for demolition activities. Existing land uses to be demolished are ² It was assumed that, on average, xx acres would be developed annually and a maximum of xx acres/day would be actively disturbed associated with construction of the 2030 General Plan. ⁴ Implementation of FRAQMD-recommended construction mitigation measures was assumed to result in a 5%, 20% and 75% reduction in ROG, NO _x , and PM ₁₀ , respectively. Refer to Appendix xx for detailed input parameters and modeling results. Source: Modeling performed by AECOM in 2010. | | | | | Notes: GPU = 2030 General Plan; lb/day = pounds per day; NO _x = oxides of nitrogen; PM ₁₀ = particulate matter less than or equal to 10 microns in diameter; PM _{2.5} = particulate matter less than or equal to 2.5 microns in diameter ROG = reactive organic gases; FRAQMD = Feather River Air Quality Emissions totals may not sum exactly due to rounding. ¹ No emissions were modeled for demolition activities. Existing land uses to be demolished are ² It was assumed that, on average, xx acres would be developed annually and a maximum of xx acres/day would be actively disturbed associated with construction of the 2030 General Plan. ⁴ Implementation of FRAQMD-recommended construction mitigation measures was assumed to result in a 5%, 20% and 75% reduction in ROG, NO _x , and PM ₁₀ , respectively. Refer to Appendix xx for detailed input parameters and modeling results. Source: Modeling performed by AECOM in 2010. | | | | |

| Year 2030 Conditions: Model Trip Rates by Area | | | | | |
|--|-------------------------|--------|--------|--------|--------|
| Land Use Type | Daily Vehicle Trip Rate | | | | |
| | Area 1 | Area 2 | Area 3 | Area 4 | Area 5 |
| SINGLE FAMILY | 9.57 | 6.50 | 9.57 | 9.57 | 3.50 |
| MULTIFAMILY | 6.59 | 4.50 | 6.59 | 6.59 | 1.50 |
| NEIGHBOR_COM | 44.32 | 44.32 | 44.32 | 44.32 | 44.32 |
| COMMUNIT_COM | 44.32 | 44.32 | 44.32 | 44.32 | 44.32 |
| REGIONAL_COM | 44.32 | 44.32 | 44.32 | 44.32 | 44.32 |
| OFFICE | 15.01 | 15.01 | 15.01 | 15.01 | 15.01 |
| LIGHT_INDUSTRIAL | 6.97 | 6.97 | 6.97 | 6.97 | 6.97 |
| MANUFACTURING | 7.50 | 7.50 | 7.50 | 7.50 | 7.50 |
| PQP | 16.01 | 16.01 | 16.01 | 16.01 | 16.01 |
| ELEM_SCHOOL | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| MID_SCHOOL | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 |
| HIGH_SCHOOL | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 |
| OTHER_SCHOOL | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

| Year 2030 Conditions: Total Vehicle Trips by Type | | | | | | | | | |
|---|--------|---------|---------|--------|-------|--------|-----------|---------|---------|
| | HBW | HBO | NHB | ELEM | MID | HIGH | OTHER_SCH | IX | XI |
| Productions+Attractions | 96,988 | 317,732 | 133,178 | 15,584 | 6,228 | 18,720 | 35,655 | 299,264 | 164,432 |
| Notes: | | | | | | | | | |
| HBW: Home-Based Work Trip | | | | | | | | | |
| HBO: Home-Based Other Trip | | | | | | | | | |
| NHB: Non-Home-Based Trip | | | | | | | | | |
| IX/XI: Internal/External, External/Internal Trip | | | | | | | | | |

| General Plan Buildout Conditions: Model Trip Rates by Area | | | | | |
|--|-------------------------|--------|--------|--------|--------|
| Land Use Type | Daily Vehicle Trip Rate | | | | |
| | Area 1 | Area 2 | Area 3 | Area 4 | Area 5 |
| SINGLE FAMILY | 9.57 | 6.50 | 9.57 | 9.57 | 3.50 |
| MULTIFAMILY | 6.59 | 4.50 | 6.59 | 6.59 | 1.50 |
| NEIGHBOR_COM | 44.32 | 44.32 | 44.32 | 44.32 | 44.32 |
| COMMUNIT_COM | 44.32 | 44.32 | 44.32 | 44.32 | 44.32 |
| REGIONAL_COM | 44.32 | 44.32 | 44.32 | 44.32 | 44.32 |
| OFFICE | 15.01 | 15.01 | 15.01 | 15.01 | 15.01 |
| LIGHT_INDUSTRIAL | 6.97 | 6.97 | 6.97 | 6.97 | 6.97 |
| MANUFACTURING | 7.50 | 7.50 | 7.50 | 7.50 | 7.50 |
| PQP | 16.01 | 16.01 | 16.01 | 16.01 | 16.01 |
| ELEM_SCHOOL | 1.18 | 1.18 | 1.18 | 1.18 | 1.18 |
| MID_SCHOOL | 1.36 | 1.36 | 1.36 | 1.36 | 1.36 |
| HIGH_SCHOOL | 1.78 | 1.78 | 1.78 | 1.78 | 1.78 |
| OTHER_SCHOOL | 1.16 | 1.16 | 1.16 | 1.16 | 1.16 |

| General Plan Buildout Conditions: Total Vehicle Trips by Type | | | | | | | | | |
|---|---------|---------|---------|--------|--------|--------|-----------|---------|---------|
| | HBW | HBO | NHB | ELEM | MID | HIGH | OTHER_SCI | IX | XI |
| Productions+Attractions | 246,728 | 680,198 | 318,594 | 34,688 | 13,888 | 45,736 | 41,360 | 338,150 | 352,020 |
| Notes: | | | | | | | | | |
| HBW: Home-Based Work Trip | | | | | | | | | |
| HBO: Home-Based Other Trip | | | | | | | | | |
| NHB: Non-Home-Based Trip | | | | | | | | | |
| IX/XI: Internal/External, External/Internal Trip | | | | | | | | | |

| General Plan Buildout Conditions: Model Trip Rates by Area | | | | | |
|--|-------------------------|--------|--------|--------|--------|
| Land Use Type | Daily Vehicle Trip Rate | | | | |
| | Area 1 | Area 2 | Area 3 | Area 4 | Area 5 |
| SINGLE FAMILY | 9.57 | 6.50 | 9.57 | 9.57 | 3.50 |
| MULTIFAMILY | 6.59 | 4.50 | 6.59 | 6.59 | 1.50 |
| NEIGHBOR_COM | 44.32 | 44.32 | 44.32 | 44.32 | 44.32 |
| COMMUNIT_COM | 44.32 | 44.32 | 44.32 | 44.32 | 44.32 |
| REGIONAL_COM | 44.32 | 44.32 | 44.32 | 44.32 | 44.32 |
| OFFICE | 15.01 | 15.01 | 15.01 | 15.01 | 15.01 |
| LIGHT_INDUSTRIAL | 6.97 | 6.97 | 6.97 | 6.97 | 6.97 |
| MANUFACTURING | 7.50 | 7.50 | 7.50 | 7.50 | 7.50 |
| PQP | 16.01 | 16.01 | 16.01 | 16.01 | 16.01 |
| ELEM_SCHOOL | 1.28 | 1.28 | 1.28 | 1.28 | 1.28 |
| MID_SCHOOL | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 |
| HIGH_SCHOOL | 1.79 | 1.79 | 1.79 | 1.79 | 1.79 |
| OTHER_SCHOOL | 1.16 | 1.16 | 1.16 | 1.16 | 1.16 |

| General Plan Buildout Conditions: Total Vehicle Trips by Type | | | | | | | | | |
|---|---------|---------|---------|--------|--------|--------|-----------|---------|---------|
| | HBW | HBO | NHB | ELEM | MID | HIGH | OTHER_SCI | IX | XI |
| Productions+Attractions | 185,712 | 667,170 | 263,628 | 31,434 | 11,306 | 34,816 | 41,360 | 301,514 | 273,112 |
| Notes: | | | | | | | | | |
| HBW: Home-Based Work Trip | | | | | | | | | |
| HBO: Home-Based Other Trip | | | | | | | | | |
| NHB: Non-Home-Based Trip | | | | | | | | | |
| IX/XI: Internal/External, External/Internal Trip | | | | | | | | | |

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 1

JOB: AQ 8hr
 RUN: (MULTI-RUN)
 POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

VD= .0 CM/S Z0= 100. CM ALT= 62. (M)
 VS= .0 CM/S

II. METEOROLOGICAL CONDITIONS

| RUN | * U * (M/S) | BRG (DEG) | CLASS | AMB (PPM) | MIXH (M) | SIGTH (DEG) | TEMP (C) |
|-----------|----------------|--------------|-------|--------------|-------------|----------------|-------------|
| 1. Hour 1 | * 1.0 | 0. | 7 (G) | 2.3 | 1000. | 17.50 | 7.5 |
| 2. Hour 2 | * 1.0 | 0. | 7 (G) | 2.3 | 1000. | 17.50 | 7.5 |
| 3. Hour 3 | * 1.0 | 0. | 7 (G) | 2.3 | 1000. | 17.50 | 7.5 |
| 4. Hour 4 | * 1.0 | 0. | 7 (G) | 2.3 | 1000. | 17.50 | 7.5 |
| 5. Hour 5 | * 1.0 | 0. | 7 (G) | 2.3 | 1000. | 17.50 | 7.5 |
| 6. Hour 6 | * 1.0 | 0. | 7 (G) | 2.3 | 1000. | 17.50 | 7.5 |
| 7. Hour 7 | * 1.0 | 0. | 7 (G) | 2.3 | 1000. | 17.50 | 7.5 |
| 8. Hour 8 | * 1.0 | 0. | 7 (G) | 2.3 | 1000. | 17.50 | 7.5 |

III. LINK GEOMETRY

| LINK DESCRIPTION | * LINK * X1 | COORDINATES Y1 | (M) X2 | * Y2 | * TYPE | H (M) | W (M) |
|---------------------|----------------|-------------------|-----------|------|--------|----------|----------|
| A. Link A | * 4 | 0 | 4 | 321 | * AG | .0 | 13.2 |
| B. Link B | * 7 | -316 | 7 | 0 | * AG | .0 | 13.2 |
| C. Link C | * 7 | -316 | 2 | 0 | * AG | .0 | 9.9 |
| D. Link D | * -4 | 0 | -4 | -317 | * AG | .0 | 13.2 |
| E. Link E | * -11 | 314 | -11 | 0 | * AG | .0 | 13.2 |
| F. Link F | * -11 | 314 | -4 | 0 | * AG | .0 | 13.2 |
| G. Link G | * 0 | -5 | 314 | -5 | * AG | .0 | 16.8 |
| H. Link H | * -310 | -9 | 0 | -9 | * AG | .0 | 16.8 |
| I. Link I | * -310 | -9 | 0 | -2 | * AG | .0 | 9.9 |
| J. Link J | * 0 | 5 | -317 | 5 | * AG | .0 | 16.8 |
| K. Link K | * 310 | 11 | 0 | 11 | * AG | .0 | 20.4 |
| L. Link L | * 310 | 11 | 0 | 2 | * AG | .0 | 9.9 |

□□

JOB: AQ 8hr
 RUN: (MULTI-RUN)
 POLLUTANT: Carbon Monoxide

IV. EMISSIONS AND VEHICLE VOLUMES

| RUN | * | LINK | | | | | | | | | |
|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|-----|
| | | A | B | C | D | E | F | G | H | I | J |
| 1 | VPH | 1200 | 640 | 270 | 1090 | 590 | 950 | 1730 | 800 | 300 | 840 |
| | EF | 10. | 11. | 11. | 10. | 11. | 11. | 10. | 11. | 11. | 10. |
| 2 | VPH | 1200 | 640 | 270 | 1090 | 590 | 950 | 1730 | 800 | 300 | 840 |
| | EF | 10. | 11. | 11. | 10. | 11. | 11. | 10. | 11. | 11. | 10. |
| 3 | VPH | 1200 | 640 | 270 | 1090 | 590 | 950 | 1730 | 800 | 300 | 840 |
| | EF | 10. | 11. | 11. | 10. | 11. | 11. | 10. | 11. | 11. | 10. |
| 4 | VPH | 1200 | 640 | 270 | 1090 | 590 | 950 | 1730 | 800 | 300 | 840 |
| | EF | 10. | 11. | 11. | 10. | 11. | 11. | 10. | 11. | 11. | 10. |
| 5 | VPH | 1200 | 640 | 270 | 1090 | 590 | 950 | 1730 | 800 | 300 | 840 |
| | EF | 10. | 11. | 11. | 10. | 11. | 11. | 10. | 11. | 11. | 10. |
| 6 | VPH | 1200 | 640 | 270 | 1090 | 590 | 950 | 1730 | 800 | 300 | 840 |
| | EF | 10. | 11. | 11. | 10. | 11. | 11. | 10. | 11. | 11. | 10. |
| 7 | VPH | 1200 | 640 | 270 | 1090 | 590 | 950 | 1730 | 800 | 300 | 840 |
| | EF | 10. | 11. | 11. | 10. | 11. | 11. | 10. | 11. | 11. | 10. |
| 8 | VPH | 1200 | 640 | 270 | 1090 | 590 | 950 | 1730 | 800 | 300 | 840 |
| | EF | 10. | 11. | 11. | 10. | 11. | 11. | 10. | 11. | 11. | 10. |

□□

JOB: AQ 8hr
 RUN: (MULTI-RUN)
 POLLUTANT: Carbon Monoxide

IV. EMISSIONS AND VEHICLE VOLUMES (CONT.)

| RUN | * | LINK | |
|-----|---|------|---|
| | | K | L |
| | * | | |

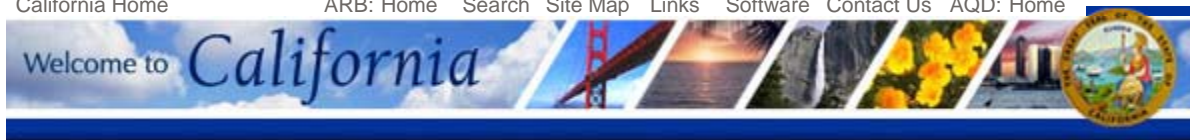
C4\$8.OUT.txt

| | | | | |
|---|-----|---|-----|-----|
| 1 | VPH | * | 880 | 430 |
| | EF | * | 11. | 11. |
| | | * | | |
| 2 | VPH | * | 880 | 430 |
| | EF | * | 11. | 11. |
| | | * | | |
| 3 | VPH | * | 880 | 430 |
| | EF | * | 11. | 11. |
| | | * | | |
| 4 | VPH | * | 880 | 430 |
| | EF | * | 11. | 11. |
| | | * | | |
| 5 | VPH | * | 880 | 430 |
| | EF | * | 11. | 11. |
| | | * | | |
| 6 | VPH | * | 880 | 430 |
| | EF | * | 11. | 11. |
| | | * | | |
| 7 | VPH | * | 880 | 430 |
| | EF | * | 11. | 11. |
| | | * | | |
| 8 | VPH | * | 880 | 430 |
| | EF | * | 11. | 11. |

V. RECEPTOR LOCATIONS AND MULTI-RUN AVERAGE CONCENTRATIONS

| RECEPTOR | * | COORDINATES (M) | | | * | AVG |
|------------|---|-----------------|-----|-----|---|-------|
| | * | X | Y | Z | * | (PPM) |
| -----* | | | | | | |
| 1. Recpt 1 | * | 11 | 22 | 1.8 | * | 3.3 |
| 2. Recpt 2 | * | 15 | -15 | 1.8 | * | 4.0 |
| 3. Recpt 3 | * | -18 | 15 | 1.8 | * | 3.2 |
| 4. Recpt 4 | * | -11 | -18 | 1.8 | * | 4.1 |

□□



Air Resources Board



Highest 4 Daily Maximum 8-Hour Carbon Monoxide Averages

Yuba City-Almond Street

[FAQs](#)

| Year: | 2006 | | 2007 | | 2008 | |
|--------------------------------------|--------|-----------------------------------|------|-------------------------------------|------|--------------|
| | Date | 8-Hr Average | Date | 8-Hr Average | Date | 8-Hr Average |
| National: | | | | | | |
| First High: | Feb 11 | 2.29 | | * | | * |
| Second High: | Feb 8 | 1.96 | | * | | * |
| Third High: | Feb 12 | 1.79 | | * | | * |
| Fourth High: | Jan 16 | 1.59 | | * | | * |
| California: | | | | | | |
| First High: | Feb 10 | 2.29 | | * | | * |
| Second High: | Feb 7 | 1.96 | | * | | * |
| Third High: | Feb 11 | 1.79 | | * | | * |
| Fourth High: | Jan 15 | 1.59 | | * | | * |
| # Days Above Nat'l Standard: | | 0 | | 0 | | 0 |
| # Days Above State Standard: | | 0 | | 0 | | 0 |
| Year Coverage: | | 31 | | * | | * |
| Go Backward One Year | | New Top 4 Summary | | Go Forward One Year | | |

Notes: All averages are expressed in parts per million.

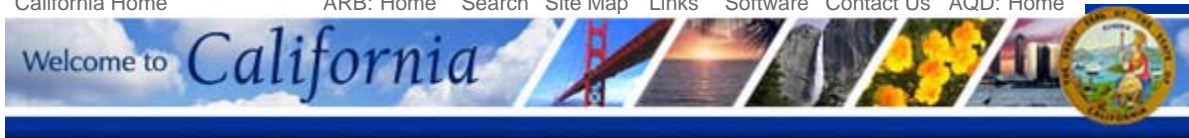
National exceedances are shown in **orange**. State exceedances are shown in **yellow**.

An exceedance is not necessarily a violation.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

* There was insufficient (or no) data available to determine the value.

| | | | | | | | |
|---------|---|------------------------------|-----------------------|--|----------------------------------|--------------------------------|----------------------------------|
| Switch: | Hourly Ozone | 8-Hour Ozone | PM2.5 | PM10 | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide |
| Go to: | Data Statistics Home Page | | | Top 4 Summaries Start Page | | | |



Air Resources Board



Highest 4 Daily Maximum 8-Hour Carbon Monoxide Averages

Yuba City-Almond Street

[FAQs](#)

| Year: | 2004 | | 2005 | | 2006 | |
|--------------------------------------|--------|-----------------------------------|--------|--------------|-------------------------------------|--------------|
| | Date | 8-Hr Average | Date | 8-Hr Average | Date | 8-Hr Average |
| National: | | | | | | |
| First High: | Oct 14 | 2.54 | Nov 24 | 3.39 | Feb 11 | 2.29 |
| Second High: | Dec 17 | 2.15 | Nov 23 | 2.79 | Feb 8 | 1.96 |
| Third High: | Nov 17 | 2.13 | Nov 22 | 2.69 | Feb 12 | 1.79 |
| Fourth High: | Feb 12 | 1.80 | Dec 6 | 2.58 | Jan 16 | 1.59 |
| California: | | | | | | |
| First High: | Oct 14 | 2.54 | Nov 23 | 3.39 | Feb 10 | 2.29 |
| Second High: | Dec 17 | 2.15 | Nov 22 | 2.79 | Feb 7 | 1.96 |
| Third High: | Nov 17 | 2.13 | Nov 21 | 2.69 | Feb 11 | 1.79 |
| Fourth High: | Nov 30 | 1.83 | Dec 5 | 2.58 | Jan 15 | 1.59 |
| # Days Above Nat'l Standard: | 0 | | 0 | | 0 | |
| # Days Above State Standard: | 0 | | 0 | | 0 | |
| Year Coverage: | 92 | | 97 | | 31 | |
| Go Backward One Year | | New Top 4 Summary | | | Go Forward One Year | |

Notes: All averages are expressed in parts per million.

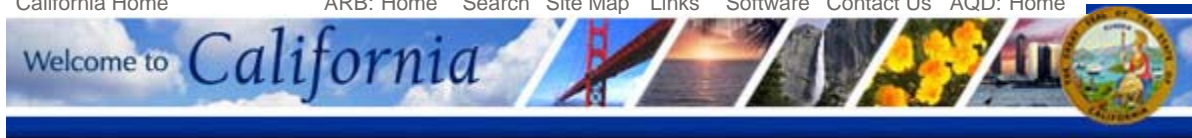
National exceedances are shown in **orange**. State exceedances are shown in **yellow**.

An exceedance is not necessarily a violation.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

* There was insufficient (or no) data available to determine the value.

| | | | | | | | |
|---------|---|------------------------------|-----------------------|--|----------------------------------|--------------------------------|----------------------------------|
| Switch: | Hourly Ozone | 8-Hour Ozone | PM2.5 | PM10 | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide |
| Go to: | Data Statistics Home Page | | | Top 4 Summaries Start Page | | | |



Highest 4 Daily Maximum Hourly Nitrogen Dioxide Measurements

Yuba City-Almond Street

[FAQs](#)

| Year: | 2007 | | 2008 | | 2009 | |
|--------------------------------------|--------|-----------------------------------|--------|-------------------------------------|--------|-------------|
| | Date | Measurement | Date | Measurement | Date | Measurement |
| First High: | Jun 6 | 0.054 | Oct 17 | 0.061 | Sep 24 | 0.057 |
| Second High: | Jun 7 | 0.054 | Oct 23 | 0.059 | Sep 23 | 0.056 |
| Third High: | Jun 9 | 0.054 | Oct 15 | 0.058 | Jan 16 | 0.050 |
| Fourth High: | Jan 23 | 0.053 | Oct 25 | 0.058 | May 8 | 0.050 |
| # Days Above State Standard: | 0 | | 0 | | 0 | |
| Annual Average: | 0.012 | | 0.012 | | 0.009 | |
| Year Coverage: | 97 | | 97 | | 92 | |
| Go Backward One Year | | New Top 4 Summary | | Go Forward One Year | | |

Notes: All averages are expressed in parts per million.
 National exceedances are shown in **orange**. State exceedances are shown in **yellow**.
 An exceedance is not necessarily a violation.
 Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.
 * There was insufficient (or no) data available to determine the value.

| | | | | | | | |
|----------------|---|------------------------------|-----------------------|--|---------------------------------|--------------------------------|----------------------------------|
| Switch: | Hourly Ozone | 8-Hour Ozone | PM2.5 | PM10 | Carbon Monoxide | Sulfur Dioxide | Hydrogen Sulfide |
| Go to: | Data Statistics Home Page | | | Top 4 Summaries Start Page | | | |



Air Resources Board



Highest 4 Daily Maximum Hourly Ozone Measurements

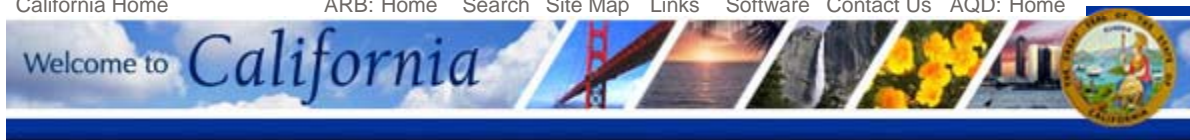
Yuba City-Almond Street

[FAQs](#)

| Year: | 2007 | | 2008 | | 2009 | |
|--------------------------------------|--------|-----------------------------------|--------|-------------------------------------|--------|-------------|
| | Date | Measurement | Date | Measurement | Date | Measurement |
| First High: | Jul 6 | 0.095 | Jul 7 | 0.092 | Aug 19 | 0.089 |
| Second High: | Jul 31 | 0.091 | Jun 24 | 0.084 | Jun 27 | 0.082 |
| Third High: | May 25 | 0.083 | Jul 23 | 0.083 | Sep 27 | 0.075 |
| Fourth High: | May 26 | 0.081 | Jul 25 | 0.079 | Aug 21 | 0.073 |
| # Days Above State Standard: | | 1 | | 0 | | 0 |
| California Designation Value: | | 0.09 | | 0.09 | | 0.09 |
| Expected Peak Day Conc.: | | 0.090 | | 0.091 | | 0.087 |
| # Days Above Nat'l Standard: | | 0 | | 0 | | 0 |
| National Design Value: | | 0.091 | | 0.091 | | 0.089 |
| Year Coverage: | | 96 | | 97 | | 97 |
| Go Backward One Year | | New Top 4 Summary | | Go Forward One Year | | |

Notes: All concentrations are expressed in parts per million.
 The national 1-hour ozone standard was revoked in June 2005 and is no longer in effect. Statistics related to the revoked standard are shown in *italics* or *italics* .
 State exceedances are shown in **yellow** . Exceedances of the revoked national 1-hour standard are shown in *orange* .
 An exceedance is not necessarily a violation.
 Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.
 * There was insufficient (or no) data available to determine the value.

| | | | | | | | |
|----------------|---|-----------------------|----------------------|--|----------------------------------|--------------------------------|----------------------------------|
| Switch: | 8-Hour Ozone | PM2.5 | PM10 | Carbon Monoxide | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide |
| Go to: | Data Statistics Home Page | | | Top 4 Summaries Start Page | | | |



Air Resources Board



Highest 4 Daily Maximum 8-Hour Ozone Averages

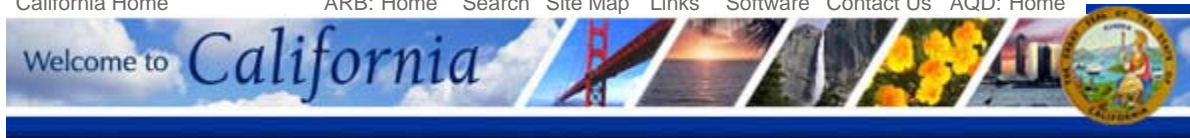
Yuba City-Almond Street

[FAQs](#)

| Year: | 2007 | | 2008 | | 2009 | |
|--------------------------------------|--------|-----------------------------------|--------|--------------|-------------------------------------|--------------|
| | Date | 8-Hr Average | Date | 8-Hr Average | Date | 8-Hr Average |
| National: | | | | | | |
| First High: | Jul 6 | 0.081 | Jul 7 | 0.080 | Aug 19 | 0.076 |
| Second High: | May 25 | 0.078 | Jul 23 | 0.075 | Jun 27 | 0.067 |
| Third High: | Jul 31 | 0.078 | Jul 25 | 0.070 | Sep 27 | 0.067 |
| Fourth High: | Aug 30 | 0.072 | Jun 24 | 0.068 | Aug 26 | 0.066 |
| California: | | | | | | |
| First High: | Jul 6 | 0.082 | Jul 7 | 0.080 | Aug 19 | 0.077 |
| Second High: | May 25 | 0.078 | Jul 23 | 0.075 | Jun 27 | 0.068 |
| Third High: | Jul 31 | 0.078 | Jul 25 | 0.070 | Sep 27 | 0.068 |
| Fourth High: | Aug 30 | 0.073 | Jun 24 | 0.069 | Aug 26 | 0.066 |
| National: | | | | | | |
| # Days Above '08 Nat'l Std.: | 3 | | 1 | | 1 | |
| '08 Nat'l Std. Design Value: | 0.074 | | 0.072 | | 0.068 | |
| National Year Coverage: | 96 | | 97 | | 96 | |
| California: | | | | | | |
| # Days Above State Standard: | 6 | | 2 | | 1 | |
| California Designation Value: | 0.082 | | 0.082 | | 0.080 | |
| Expected Peak Day Conc.: | 0.086 | | 0.086 | | 0.080 | |
| California Year Coverage: | 96 | | 96 | | 96 | |
| Go Backward One Year | | New Top 4 Summary | | | Go Forward One Year | |

Notes: All averages are expressed in parts per million.
 National exceedances are shown in **orange**. State exceedances are shown in **yellow**.
 An exceedance is not necessarily a violation.
 Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.
 * There was insufficient (or no) data available to determine the value.

| | | | | | | | |
|---------|---|-------|------|--|------------------|----------------|------------------|
| Switch: | Hourly Ozone | PM2.5 | PM10 | Carbon Monoxide | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide |
| Go to: | Data Statistics Home Page | | | Top 4 Summaries Start Page | | | |



Air Resources Board



Highest 4 Daily 24-Hour PM10 Averages

Yuba City-Almond Street

[FAQs](#)

| Year: | 2007 | | 2008 | | 2009 | |
|--------------------------------------|--------|-----------------------------------|--------|-------------------------------------|--------|---------------|
| | Date | 24-Hr Average | Date | 24-Hr Average | Date | 24-Hr Average |
| National: | | | | | | |
| First High: | Jan 24 | 51.0 | Jun 23 | 66.9 | Sep 28 | 50.7 |
| Second High: | Dec 14 | 42.4 | Oct 15 | 55.6 | Aug 11 | 49.8 |
| Third High: | Nov 20 | 42.0 | Jul 5 | 52.2 | Aug 17 | 44.2 |
| Fourth High: | Feb 5 | 37.0 | Jul 11 | 50.6 | Oct 10 | 42.3 |
| California: | | | | | | |
| First High: | Jan 24 | 54.0 | Jun 23 | 66.9 | Sep 28 | 50.1 |
| Second High: | Dec 14 | 45.6 | Oct 15 | 57.0 | Aug 11 | 49.1 |
| Third High: | Nov 20 | 44.0 | Jul 5 | 51.9 | Aug 17 | 43.6 |
| Fourth High: | Feb 5 | 39.0 | Oct 27 | 51.3 | Oct 10 | 42.9 |
| Measured: | | | | | | |
| # Days Above Nat'l Standard: | | 0 | | 0 | | 0 |
| # Days Above State Standard: | | 1 | | 4 | | 0 |
| Estimated: | | | | | | |
| 3-Yr Avg # Days Above Nat'l Std: | | * | | * | | 0.0 |
| # Days Above Nat'l Standard: | | 0.0 | | 0.0 | | 0.0 |
| # Days Above State Standard: | | * | | * | | 0.0 |
| State 3-Yr Maximum Average: | | 25 | | * | | 22 |
| State Annual Average: | | * | | * | | 22.4 |
| National 3-Year Average: | | 22 | | 22 | | * |
| National Annual Average: | | 19.7 | | 24.4 | | * |
| Year Coverage: | | 93 | | 86 | | 97 |
| Go Backward One Year | | New Top 4 Summary | | Go Forward One Year | | |

Notes: All concentrations are expressed in micrograms per cubic meter.
 The national annual average PM10 standard was revoked in December 2006 and is no longer in effect.
 Statistics related to the revoked standard are shown in *italics* or *italics* .
 National exceedances are shown in **orange** . State exceedances are shown in **yellow** .
 An exceedance is not necessarily a violation.
 Statistics may include data that are related to an [exceptional event](#).
 State and national statistics may differ for the following reasons:
 State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods.
 State and national statistics may therefore be based on different samplers.
 State statistics for 1998 and later are based on *local* conditions (except for sites in the South Coast Air Basin, where State statistics for 2002 and later are based on *local* conditions).
 National statistics are based on *standard* conditions.
 State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.
 Measurements are usually collected every six days. Measured days counts the days that a measurement was greater than the level of the standard; Estimated days mathematically estimates how many days concentrations would have been greater than the level of the standard had each day been monitored.
 3-Year statistics represent the listed year and the 2 years before the listed year.
 Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.
 * There was insufficient (or no) data available to determine the value.

| | | | | | | | |
|---------|---|--------------|-------|--|------------------|----------------|------------------|
| Switch: | Hourly Ozone | 8-Hour Ozone | PM2.5 | Carbon Monoxide | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide |
| Go to: | Data Statistics Home Page | | | Top 4 Summaries Start Page | | | |



Air Resources Board



Highest 4 Daily 24-Hour PM2.5 Averages

Yuba City-Almond Street

[FAQs](#)

| Year: | 2007 | | 2008 | | 2009 | |
|--------------------------------------|--------|-----------------------------------|--------|-------------------------------------|--------|---------------|
| | Date | 24-Hr Average | Date | 24-Hr Average | Date | 24-Hr Average |
| National: | | | | | | |
| First High: | Jan 27 | 45.0 | Jul 10 | 127.3 | Dec 25 | 41.8 |
| Second High: | Dec 15 | 42.0 | Jun 27 | 105.5 | Dec 26 | 36.3 |
| Third High: | Feb 2 | 40.0 | Jul 9 | 99.0 | Dec 4 | 35.2 |
| Fourth High: | Feb 3 | 38.0 | Jun 25 | 94.0 | Jan 14 | 30.8 |
| California: | | | | | | |
| First High: | Jan 19 | 55.8 | Jul 10 | 147.1 | Dec 25 | 45.3 |
| Second High: | Jan 2 | 52.7 | Jun 27 | 124.6 | Dec 4 | 44.0 |
| Third High: | Dec 15 | 50.8 | Jul 9 | 111.7 | Jan 14 | 41.9 |
| Fourth High: | Jan 27 | 45.0 | Jun 25 | 109.6 | Dec 26 | 39.2 |
| Estimated Days > Nat'l 24-Hr Std: | | 8.1 | | 9.7 | | 2.1 |
| Measured Days > Nat'l 24-Hr Std: | | 6 | | 9 | | 2 |
| Nat'l 24-Hr Std Design Value: | | 39 | | 47 | | 42 |
| Nat'l 24-Hr Std 98th Percentile: | | 34.0 | | 64.6 | | 27.5 |
| National Annual Std Design Value: | | 9.7 | | 10.1 | | 8.9 |
| National Annual Average: | | 8.1 | | 10.6 | | 7.9 |
| State Ann'l Std Designation Value: | | 11 | | 15 | | 15 |
| State Annual Average: | | * | | 14.7 | | 12.2 |
| Year Coverage: | | 88 | | 83 | | 94 |
| Go Backward One Year | | New Top 4 Summary | | Go Forward One Year | | |

Notes: All concentrations are expressed in micrograms per cubic meter. National exceedances are shown in **orange**. State exceedances are shown in **yellow**. An exceedance is not necessarily a violation. State and national statistics may differ for the following reasons:
 State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods. State and national statistics may therefore be based on different samplers. State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria. Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.
 * There was insufficient (or no) data available to determine the value.

| | | | | | | | |
|---------|---|--------------|------|--|------------------|----------------|------------------|
| Switch: | Hourly Ozone | 8-Hour Ozone | PM10 | Carbon Monoxide | Nitrogen Dioxide | Sulfur Dioxide | Hydrogen Sulfide |
| Go to: | Data Statistics Home Page | | | Top 4 Summaries Start Page | | | |



California Environmental Protection Agency
AIR RESOURCES BOARD

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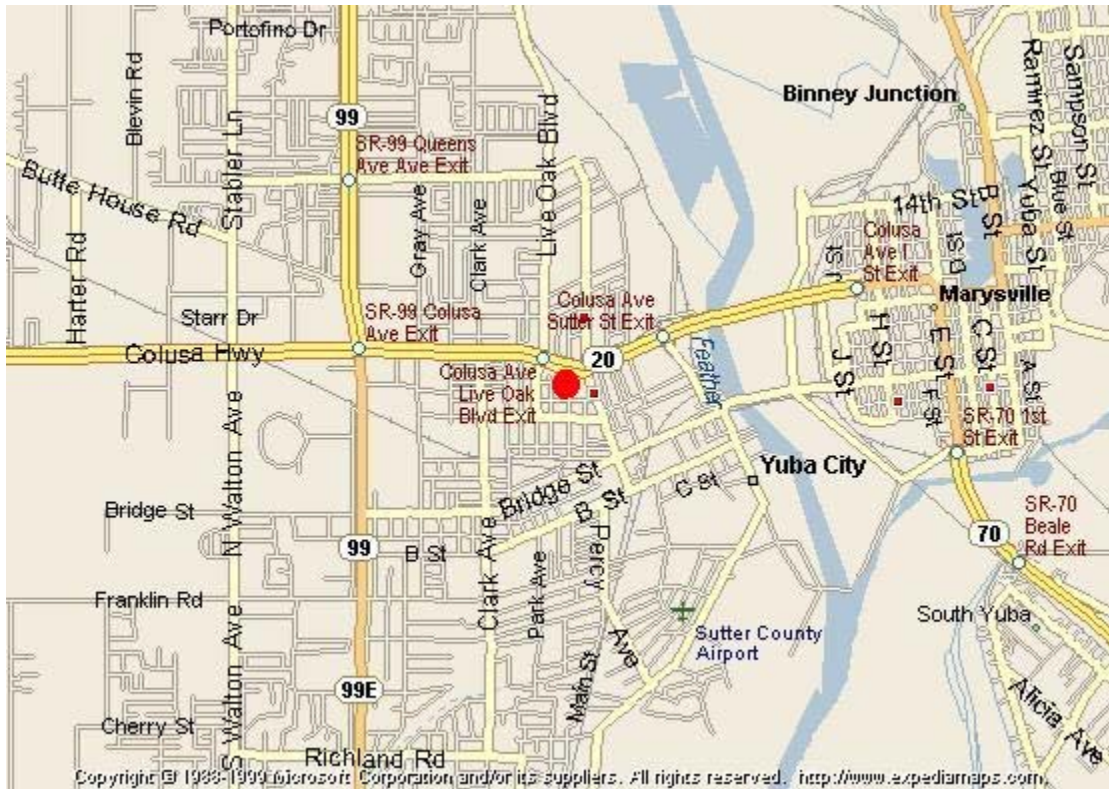
[A-Z Index](#)

[Software](#)

[Contact Us](#)

Quality Assurance Site Information for Yuba City

This page last reviewed on June 17, 2010



| AIRS Number | ARB Number | Site Start Date | Reporting Agency and Agency Code |
|-------------|------------|-----------------|--|
| 061010003 | 51898 | 10/1/89 | California Air Resources Board (001) |

| Site Address | County | Air Basin | Latitude (N) | Longitude (W) | Elevation |
|-----------------------------------|------------------------|-----------------------------------|--------------|---------------|-----------|
| 773 Almond St, Yuba City CA 95991 | Sutter | Sacramento Valley | 39° 8' 20" | 121° 37' 9" | 18 |

| Pollutants Monitored (click on parameter link for real-time data) |
|--|
| NO₂ , O₃ , PM₁₀ , BAM_{PM2.5} , PM_{2.5} , Outdoor Temperature , Wind Direction , Horizontal Wind Speed , Barometric Pressure |

| Site Photos | Photo Sequences | Site Surveys |
|---------------------|-------------------------------------|---------------------|
| --Select Photos-- ▾ | --Select Position And Direction-- ▾ | --Select Survey-- ▾ |

| Other ARB Database Information | Real-Time Met Data | Aerial Photos and Topo Maps Of Site |
|--------------------------------|------------------------|-------------------------------------|
| --Select Database-- | --Select Data Server-- | --Select External Map-- |

[Site Information Menu Top Page](#) [Quality Assurance Programs](#) [Search QA Site Information Database](#)

For real-time air quality data visit: [Air Quality and Meteorological Information System \(AQMIS\)](#)

For further information contact:

[Mrs. Merrin Wright](#), *Manager*
Quality Assurance Section

A department of the California Environmental Protection Agency

| | Train events 2011 | Emission factors ¹ | | | | | | | | Emissions by truck | | | | Percent of Respective | | | | |
|----------|----------------------|-------------------------------|-----------------------------|------|--------------|----------------------|----------------|----------------------|--------------------|--------------------------------------|---------------|----------------------------------|----------------------|-----------------------|--------------------------|-----------------|---------------|--------|
| | | Loco HP g/bhp-hr | Loco HP bhp ² | g/hr | speed mph | each Loco mile | Loco g/trip | Loco per train | total DPM g/day | Percent of HDT fleet ^a | type g/day | g/mile per truck ^a | g/event per truck | Trucks | total fleet ^a | fleet sizes | | |
| Commuter | 11 | | | | | | | | | | | | | | | | | |
| Tier 0 | 10 | 0.2 | 3000 | 600 | 25 | 38.8 | 930.00 | 1 | 9300 | 40423 | 05 - Light H | 0.490893 | 19843.2 | 0.11484 | 4.450 | 4459 | 0.021233 | 210013 |
| Tier 1 | | 0.2 | 3000 | 600 | 25 | 38.8 | 930.00 | 1 | 0 | 06 - Light H | 0.220515 | 8913.8 | 0.18144 | 7.031 | 1268 | 0.009538 | 132920 | |
| Tier 2 | 1 | 0.18 | 3000 | 540 | 25 | 38.8 | 837.00 | 1 | 837 | 07 - Mediu | 0.216634 | 8756.9 | 0.50871 | 19.713 | 444 | 0.00937 | 47408 | |
| Tier 3 | | 0.08 | 3000 | 240 | 25 | 38.8 | 372.00 | 1 | 0 | 08 - Heavy | 0.071959 | 2908.8 | 0.67200 | 26.040 | 112 | 0.003113 | 35888 | |
| Tier 4 | | 0.015 | 3000 | 45 | 25 | 38.8 | 69.75 | 1 | 0 | Totals | | | | | 6283 | 0.039054 | 160880 | |
| Freight | 22 | | | | | | | | | | | | | | | | | |
| Tier 0 | 15 | 0.2 | 4128 | 826 | 45 | 38.8 | 710.93 | 2 | 21328 | | | | | | | | | |
| Tier 1 | | 0.2 | 4128 | 826 | 45 | 38.8 | 710.93 | 2 | 0 | | | | | | | | | |
| Tier 2 | 7 | 0.18 | 4128 | 743 | 45 | 38.8 | 639.84 | 2 | 8958 | | | | | | | | | |
| Tier 3 | | 0.08 | 4128 | 330 | 45 | 38.8 | 284.37 | 2 | 0 | | | | | | | | | |
| Tier 4 | | 0.015 | 4128 | 62 | 45 | 38.8 | 53.32 | 2 | 0 | | | | | | | | | |
| | 33 | | | | | | | | | | | | | | | | | |
| | 33 | | | | | | | | | | | | | | | | | |

1 From EPA emission factors for locomotives, April 2009 assumes fleetwide average for 2009

2 Based on fleet road power averages from BNSF (4256 hp C44-9) and UP (4000 hp SD-70)

Truck emissions from emfac

truck fleet percentages from emfac for Yuba County

a) from sheet 3

| | Train events 2030 | Emission factors ¹ | | | | | | | | Emissions by truck | | | | Percent of Respective | | | | |
|----------|----------------------|-------------------------------|-----------------------------|------|--------------|----------------------|----------------|----------------------|--------------------|--------------------------------------|---------------|----------------------------------|----------------------|-----------------------|--------------------------|-----------------|--------------|-------|
| | | Loco HP g/gal | Loco HP bhp ² | g/hr | speed mph | each Loco mile | Loco g/trip | Loco per train | total DPM g/day | Percent of HDT fleet ^a | type g/day | g/mile per truck ^a | g/event per truck | Trucks | total fleet ^a | fleet sizes | | |
| Commuter | 15 | | | | | | | | | | | | | | | | | |
| Tier 0 | | 0.2 | 3000 | 600 | 25 | 38.8 | 930 | 1 | 0 | 14075 | 05 - Light H | 0.502485 | 7072.4 | 0.11484 | 4.450 | 1589 | 0.021233 | 74851 |
| Tier 1 | | 0.2 | 3000 | 600 | 25 | 38.8 | 930 | 1 | 0 | 06 - Light H | 0.225543 | 3174.5 | 0.18144 | 7.031 | 452 | 0.009531 | 47374 | |
| Tier 2 | | 0.18 | 3000 | 540 | 25 | 38.8 | 837 | 1 | 0 | 07 - Mediu | 0.221538 | 3118.1 | 0.33914 | 13.142 | 237 | 0.009361 | 25345 | |
| Tier 3 | 7 | 0.08 | 3000 | 240 | 25 | 38.8 | 372 | 1 | 2604 | 08 - Heavy | 0.050434 | 709.9 | 0.17472 | 6.770 | 105 | 0.002131 | 49196 | |
| Tier 4 | 8 | 0.015 | 3000 | 45 | 25 | 38.8 | 69.75 | 1 | 558 | Totals | | | | | 2383 | 0.042257 | 56393 | |
| Freight | 33 | | | | | | | | | | | | | | | | | |
| Tier 0 | | 0.2 | 4128 | 826 | 45 | 38.8 | 710.933 | 2 | 0 | | | | | | | | | |
| Tier 1 | | 0.2 | 4128 | 826 | 45 | 38.8 | 710.933 | 2 | 0 | | | | | | | | | |
| Tier 2 | | 0.18 | 4128 | 743 | 45 | 38.8 | 639.84 | 2 | 0 | | | | | | | | | |
| Tier 3 | 16 | 0.08 | 4128 | 330 | 45 | 38.8 | 284.373 | 2 | 9100 | | | | | | | | | |
| Tier 4 | 17 | 0.015 | 4128 | 62 | 45 | 38.8 | 53.32 | 2 | 1813 | | | | | | | | | |
| | 48 | | | | | | | | | | | | | | | | | |
| | 48 | | | | | | | | | | | | | | | | | |

EPA Tier 4 requiremnt goes into affect 2015

Assumes 50% increase in daily train traffic

Assumes 75% of locomotive fleet will be converted in 15 years

Urbemis 2007 Version 9.2.4

Detail Report for Winter Area Source Unmitigated Emissions (Pounds/Day)

File Name: S:\Mike Wolf\Yuba GPU\AQ\URBEMIS\Yuba 2030 GPU\Yuba Cnty 2030 GPU Area.urb924

Project Name: Yuba County 2030 GPU

Project Location: Yuba County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

| <u>Source</u> | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|--------------------------------------|---------------|---------------|---------------|-------------|-------------|--------------|-------------------|
| Natural Gas | 16.38 | 214.78 | 110.17 | 0.00 | 0.41 | 0.40 | 270,711.45 |
| Hearth | | | | | | | |
| Landscaping - No Winter | | | | | | | |
| Consumer Products | 708.99 | | | | | | |
| Architectural Coatings | 230.96 | | | | | | |
| TOTALS (lbs/day, unmitigated) | 956.33 | 214.78 | 110.17 | 0.00 | 0.41 | 0.40 | 270,711.45 |

Area Source Changes to Defaults

Detail Report for Winter Construction Unmitigated Emissions (Pounds/Day)

File Name: S:\Mike Wolf\Yuba GPU\AQ\URBEMIS\Yuba 2030 GPU\Yuba Cnty 2030 GPU Construction.urb924

Project Name: Yuba County 2030 GPU

Project Location: Yuba County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10 Dust</u> | <u>PM10 Exhaust</u> | <u>PM10 Total</u> | <u>PM2.5 Dust</u> | <u>PM2.5 Exhaust</u> | <u>PM2.5 Total</u> | <u>CO2</u> |
|----------------------------------|---------------|---------------|---------------|-------------|------------------|---------------------|-------------------|-------------------|----------------------|--------------------|-------------------|
| Time Slice 11/30/2010-12/3/2010 | 4.24 | 33.79 | 19.43 | 0.00 | 120.01 | 1.80 | 121.80 | 25.06 | 1.65 | 26.72 | 3,134.97 |
| Mass Grading 11/30/2010- | 4.24 | 33.79 | 19.43 | 0.00 | 120.01 | 1.80 | 121.80 | 25.06 | 1.65 | 26.72 | 3,134.97 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 120.00 | 0.00 | 120.00 | 25.06 | 0.00 | 25.06 | 0.00 |
| Mass Grading Off Road Diesel | 4.16 | 33.67 | 17.48 | 0.00 | 0.00 | 1.79 | 1.79 | 0.00 | 1.65 | 1.65 | 3,007.48 |
| Mass Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mass Grading Worker Trips | 0.08 | 0.12 | 1.94 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.50 |
| Time Slice 12/6/2010-12/27/2010 | 8.48 | 69.35 | 38.97 | 0.00 | 120.02 | 3.56 | 123.57 | 25.07 | 3.27 | 28.34 | 6,768.25 |
| Mass Grading 11/30/2010- | 4.24 | 33.79 | 19.43 | 0.00 | 120.01 | 1.80 | 121.80 | 25.06 | 1.65 | 26.72 | 3,134.97 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 120.00 | 0.00 | 120.00 | 25.06 | 0.00 | 25.06 | 0.00 |
| Mass Grading Off Road Diesel | 4.16 | 33.67 | 17.48 | 0.00 | 0.00 | 1.79 | 1.79 | 0.00 | 1.65 | 1.65 | 3,007.48 |
| Mass Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mass Grading Worker Trips | 0.08 | 0.12 | 1.94 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.50 |
| Trenching 12/06/2010-10/06/2011 | 4.24 | 35.57 | 19.54 | 0.00 | 0.01 | 1.76 | 1.77 | 0.00 | 1.62 | 1.62 | 3,633.27 |
| Trenching Off Road Diesel | 4.12 | 35.38 | 16.43 | 0.00 | 0.00 | 1.75 | 1.75 | 0.00 | 1.61 | 1.61 | 3,429.28 |
| Trenching Worker Trips | 0.12 | 0.19 | 3.11 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.00 |
| Time Slice 12/28/2010-12/31/2010 | <u>338.14</u> | <u>957.06</u> | <u>323.96</u> | <u>1.16</u> | <u>124.39</u> | <u>36.81</u> | <u>161.19</u> | <u>26.50</u> | <u>33.86</u> | <u>60.36</u> | <u>132,926.80</u> |
| Asphalt 12/28/2010-01/11/2011 | 329.66 | 887.71 | 284.99 | 1.16 | 4.37 | 33.25 | 37.62 | 1.43 | 30.59 | 32.02 | 126,158.55 |
| Paving Off-Gas | 273.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 3.20 | 19.17 | 10.47 | 0.00 | 0.00 | 1.68 | 1.68 | 0.00 | 1.55 | 1.55 | 1,418.81 |
| Paving On Road Diesel | 52.84 | 868.42 | 272.57 | 1.16 | 4.36 | 31.57 | 35.93 | 1.43 | 29.04 | 30.47 | 124,612.24 |
| Paving Worker Trips | 0.08 | 0.12 | 1.94 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.50 |
| Mass Grading 11/30/2010- | 4.24 | 33.79 | 19.43 | 0.00 | 120.01 | 1.80 | 121.80 | 25.06 | 1.65 | 26.72 | 3,134.97 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 120.00 | 0.00 | 120.00 | 25.06 | 0.00 | 25.06 | 0.00 |
| Mass Grading Off Road Diesel | 4.16 | 33.67 | 17.48 | 0.00 | 0.00 | 1.79 | 1.79 | 0.00 | 1.65 | 1.65 | 3,007.48 |
| Mass Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mass Grading Worker Trips | 0.08 | 0.12 | 1.94 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.50 |
| Trenching 12/06/2010-10/06/2011 | 4.24 | 35.57 | 19.54 | 0.00 | 0.01 | 1.76 | 1.77 | 0.00 | 1.62 | 1.62 | 3,633.27 |
| Trenching Off Road Diesel | 4.12 | 35.38 | 16.43 | 0.00 | 0.00 | 1.75 | 1.75 | 0.00 | 1.61 | 1.61 | 3,429.28 |

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| | | | | | | | | | | | |
|--------------------------------------|--------|-----------------|----------|-------------|---------------|--------------|---------------|--------------|--------------|--------------|-------------------|
| Trenching Worker Trips | 0.12 | 0.19 | 3.11 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.00 |
| Time Slice 1/3/2011-1/10/2011 Active | 333.44 | 861.24 | 297.41 | 1.16 | 124.39 | 32.98 | 157.37 | 26.50 | 30.34 | 56.84 | 132,927.15 |
| Asphalt 12/28/2010-01/11/2011 | 325.45 | 796.51 | 259.81 | 1.16 | 4.37 | 29.65 | 34.02 | 1.43 | 27.27 | 28.71 | 126,158.65 |
| Paving Off-Gas | 273.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 3.02 | 18.25 | 10.34 | 0.00 | 0.00 | 1.62 | 1.62 | 0.00 | 1.49 | 1.49 | 1,418.81 |
| Paving On Road Diesel | 48.81 | 778.16 | 247.68 | 1.16 | 4.36 | 28.02 | 32.38 | 1.43 | 25.78 | 27.21 | 124,612.24 |
| Paving Worker Trips | 0.07 | 0.11 | 1.78 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.59 |
| Mass Grading 11/30/2010- | 3.98 | 31.71 | 18.61 | 0.00 | 120.01 | 1.69 | 121.69 | 25.06 | 1.55 | 26.62 | 3,135.07 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 120.00 | 0.00 | 120.00 | 25.06 | 0.00 | 25.06 | 0.00 |
| Mass Grading Off Road Diesel | 3.91 | 31.61 | 16.82 | 0.00 | 0.00 | 1.68 | 1.68 | 0.00 | 1.55 | 1.55 | 3,007.48 |
| Mass Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mass Grading Worker Trips | 0.07 | 0.11 | 1.78 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.59 |
| Trenching 12/06/2010-10/06/2011 | 4.01 | 33.01 | 19.00 | 0.00 | 0.01 | 1.65 | 1.66 | 0.00 | 1.52 | 1.52 | 3,633.43 |
| Trenching Off Road Diesel | 3.90 | 32.84 | 16.15 | 0.00 | 0.00 | 1.64 | 1.64 | 0.00 | 1.51 | 1.51 | 3,429.28 |
| Trenching Worker Trips | 0.11 | 0.17 | 2.85 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.15 |
| Time Slice 1/11/2011-1/11/2011 | 507.46 | 1,474.80 | 4,297.28 | 4.45 | 140.08 | 55.89 | 195.96 | 32.10 | 50.48 | 82.58 | 475,690.91 |
| Asphalt 12/28/2010-01/11/2011 | 325.45 | 796.51 | 259.81 | 1.16 | 4.37 | 29.65 | 34.02 | 1.43 | 27.27 | 28.71 | 126,158.65 |
| Paving Off-Gas | 273.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 3.02 | 18.25 | 10.34 | 0.00 | 0.00 | 1.62 | 1.62 | 0.00 | 1.49 | 1.49 | 1,418.81 |
| Paving On Road Diesel | 48.81 | 778.16 | 247.68 | 1.16 | 4.36 | 28.02 | 32.38 | 1.43 | 25.78 | 27.21 | 124,612.24 |
| Paving Worker Trips | 0.07 | 0.11 | 1.78 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.59 |
| Building 01/11/2011-08/22/2011 | 174.02 | 613.57 | 3,999.87 | 3.28 | 15.69 | 22.90 | 38.60 | 5.60 | 20.13 | 25.73 | 342,763.76 |
| Building Off Road Diesel | 3.77 | 21.85 | 13.95 | 0.00 | 0.00 | 1.57 | 1.57 | 0.00 | 1.45 | 1.45 | 2,259.28 |
| Building Vendor Trips | 30.85 | 375.32 | 340.23 | 0.74 | 2.91 | 13.65 | 16.56 | 0.99 | 12.47 | 13.46 | 79,410.61 |
| Building Worker Trips | 139.40 | 216.40 | 3,645.69 | 2.55 | 12.78 | 7.68 | 20.46 | 4.61 | 6.21 | 10.82 | 261,093.87 |
| Mass Grading 11/30/2010- | 3.98 | 31.71 | 18.61 | 0.00 | 120.01 | 1.69 | 121.69 | 25.06 | 1.55 | 26.62 | 3,135.07 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 120.00 | 0.00 | 120.00 | 25.06 | 0.00 | 25.06 | 0.00 |
| Mass Grading Off Road Diesel | 3.91 | 31.61 | 16.82 | 0.00 | 0.00 | 1.68 | 1.68 | 0.00 | 1.55 | 1.55 | 3,007.48 |
| Mass Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mass Grading Worker Trips | 0.07 | 0.11 | 1.78 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.59 |
| Trenching 12/06/2010-10/06/2011 | 4.01 | 33.01 | 19.00 | 0.00 | 0.01 | 1.65 | 1.66 | 0.00 | 1.52 | 1.52 | 3,633.43 |
| Trenching Off Road Diesel | 3.90 | 32.84 | 16.15 | 0.00 | 0.00 | 1.64 | 1.64 | 0.00 | 1.51 | 1.51 | 3,429.28 |
| Trenching Worker Trips | 0.11 | 0.17 | 2.85 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.15 |
| Time Slice 1/12/2011-8/5/2011 Active | 178.03 | 646.58 | 4,018.87 | 3.29 | 15.70 | 24.55 | 40.25 | 5.60 | 21.65 | 27.25 | 346,397.19 |
| Building 01/11/2011-08/22/2011 | 174.02 | 613.57 | 3,999.87 | 3.28 | 15.69 | 22.90 | 38.60 | 5.60 | 20.13 | 25.73 | 342,763.76 |
| Building Off Road Diesel | 3.77 | 21.85 | 13.95 | 0.00 | 0.00 | 1.57 | 1.57 | 0.00 | 1.45 | 1.45 | 2,259.28 |
| Building Vendor Trips | 30.85 | 375.32 | 340.23 | 0.74 | 2.91 | 13.65 | 16.56 | 0.99 | 12.47 | 13.46 | 79,410.61 |
| Building Worker Trips | 139.40 | 216.40 | 3,645.69 | 2.55 | 12.78 | 7.68 | 20.46 | 4.61 | 6.21 | 10.82 | 261,093.87 |
| Trenching 12/06/2010-10/06/2011 | 4.01 | 33.01 | 19.00 | 0.00 | 0.01 | 1.65 | 1.66 | 0.00 | 1.52 | 1.52 | 3,633.43 |
| Trenching Off Road Diesel | 3.90 | 32.84 | 16.15 | 0.00 | 0.00 | 1.64 | 1.64 | 0.00 | 1.51 | 1.51 | 3,429.28 |
| Trenching Worker Trips | 0.11 | 0.17 | 2.85 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.15 |

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| | | | | | | | | | | | |
|--------------------------------------|------------------|--------|-----------------|------|-------|-------|-------|------|-------|-------|------------|
| Time Slice 8/8/2011-8/22/2011 Active | 40,456.26 | 686.32 | 4,688.43 | 3.75 | 18.05 | 25.96 | 44.01 | 6.45 | 22.79 | 29.24 | 394,348.84 |
| Building 01/11/2011-08/22/2011 | 174.02 | 613.57 | 3,999.87 | 3.28 | 15.69 | 22.90 | 38.60 | 5.60 | 20.13 | 25.73 | 342,763.76 |
| Building Off Road Diesel | 3.77 | 21.85 | 13.95 | 0.00 | 0.00 | 1.57 | 1.57 | 0.00 | 1.45 | 1.45 | 2,259.28 |
| Building Vendor Trips | 30.85 | 375.32 | 340.23 | 0.74 | 2.91 | 13.65 | 16.56 | 0.99 | 12.47 | 13.46 | 79,410.61 |
| Building Worker Trips | 139.40 | 216.40 | 3,645.69 | 2.55 | 12.78 | 7.68 | 20.46 | 4.61 | 6.21 | 10.82 | 261,093.87 |
| Coating 08/08/2011-09/05/2011 | 40,278.23 | 39.74 | 669.56 | 0.47 | 2.35 | 1.41 | 3.76 | 0.85 | 1.14 | 1.99 | 47,951.65 |
| Architectural Coating | 40,252.63 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Coating Worker Trips | 25.60 | 39.74 | 669.56 | 0.47 | 2.35 | 1.41 | 3.76 | 0.85 | 1.14 | 1.99 | 47,951.65 |
| Trenching 12/06/2010-10/06/2011 | 4.01 | 33.01 | 19.00 | 0.00 | 0.01 | 1.65 | 1.66 | 0.00 | 1.52 | 1.52 | 3,633.43 |
| Trenching Off Road Diesel | 3.90 | 32.84 | 16.15 | 0.00 | 0.00 | 1.64 | 1.64 | 0.00 | 1.51 | 1.51 | 3,429.28 |
| Trenching Worker Trips | 0.11 | 0.17 | 2.85 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.15 |
| Time Slice 8/23/2011-9/5/2011 Active | 40,282.24 | 72.76 | 688.56 | 0.47 | 2.36 | 3.06 | 5.42 | 0.85 | 2.66 | 3.51 | 51,585.08 |
| Coating 08/08/2011-09/05/2011 | 40,278.23 | 39.74 | 669.56 | 0.47 | 2.35 | 1.41 | 3.76 | 0.85 | 1.14 | 1.99 | 47,951.65 |
| Architectural Coating | 40,252.63 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Coating Worker Trips | 25.60 | 39.74 | 669.56 | 0.47 | 2.35 | 1.41 | 3.76 | 0.85 | 1.14 | 1.99 | 47,951.65 |
| Trenching 12/06/2010-10/06/2011 | 4.01 | 33.01 | 19.00 | 0.00 | 0.01 | 1.65 | 1.66 | 0.00 | 1.52 | 1.52 | 3,633.43 |
| Trenching Off Road Diesel | 3.90 | 32.84 | 16.15 | 0.00 | 0.00 | 1.64 | 1.64 | 0.00 | 1.51 | 1.51 | 3,429.28 |
| Trenching Worker Trips | 0.11 | 0.17 | 2.85 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.15 |
| Time Slice 9/6/2011-10/6/2011 Active | 4.01 | 33.01 | 19.00 | 0.00 | 0.01 | 1.65 | 1.66 | 0.00 | 1.52 | 1.52 | 3,633.43 |
| Trenching 12/06/2010-10/06/2011 | 4.01 | 33.01 | 19.00 | 0.00 | 0.01 | 1.65 | 1.66 | 0.00 | 1.52 | 1.52 | 3,633.43 |
| Trenching Off Road Diesel | 3.90 | 32.84 | 16.15 | 0.00 | 0.00 | 1.64 | 1.64 | 0.00 | 1.51 | 1.51 | 3,429.28 |
| Trenching Worker Trips | 0.11 | 0.17 | 2.85 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.15 |

Phase Assumptions

Phase: Mass Grading 11/30/2010 - 1/11/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 21790

Maximum Daily Acreage Disturbed: 6

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

- 1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day
- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day
- 2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 12/6/2010 - 10/6/2011 - Type Your Description Here

Off-Road Equipment:

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4 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
2 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 12/28/2010 - 1/11/2011 - Default Paving Description

Acres to be Paved: 1148.49

Off-Road Equipment:

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 1/11/2011 - 8/22/2011 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day
3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 8/8/2011 - 9/5/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Urbemis 2007 Version 9.2.4

Detail Report for Winter Operational Unmitigated Emissions (Pounds/Day)

File Name: S:\Mike Wolf\Yuba GPU\AQ\URBEMIS\Yuba 2030 GPU\Yuba Cnty 2030 GPU Ops.urb924

Project Name: Yuba County 2030 GPU

Project Location: Yuba County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

| <u>Source</u> | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|--------------------------------------|-----------------|-----------------|------------------|--------------|-----------------|---------------|---------------------|
| Single family housing | 434.46 | 465.12 | 4,379.32 | 8.51 | 1,691.40 | 319.49 | 850,227.85 |
| Apartments low rise | 63.04 | 67.49 | 635.48 | 1.24 | 245.44 | 46.36 | 123,375.76 |
| Elementary school | 8.64 | 9.32 | 86.13 | 0.17 | 33.75 | 6.37 | 16,831.64 |
| Junior high school | 4.32 | 4.67 | 43.10 | 0.08 | 16.89 | 3.19 | 8,423.13 |
| High school | 5.78 | 6.23 | 57.45 | 0.11 | 22.53 | 4.25 | 11,215.57 |
| Junior college (2 yrs) | 14.95 | 16.10 | 148.21 | 0.29 | 58.16 | 10.97 | 28,918.26 |
| City park | 0.43 | 0.47 | 4.30 | 0.01 | 1.69 | 0.32 | 838.02 |
| Office park | 24.59 | 26.62 | 247.49 | 0.49 | 96.69 | 18.26 | 48,483.83 |
| General light industry | 14.89 | 16.12 | 149.96 | 0.29 | 58.57 | 11.06 | 29,382.34 |
| General heavy industry | 17.05 | 18.53 | 172.81 | 0.34 | 67.81 | 12.81 | 34,130.26 |
| Neighborhood Commercial | 244.79 | 263.64 | 2,424.65 | 4.72 | 951.85 | 179.42 | 472,919.97 |
| Community Commercial | 330.68 | 356.14 | 3,275.33 | 6.38 | 1,285.80 | 242.37 | 638,844.10 |
| Regional Commercial | 100.90 | 108.67 | 999.43 | 1.95 | 392.35 | 73.96 | 194,936.43 |
| PQP | 16.00 | 17.23 | 158.47 | 0.31 | 62.21 | 11.73 | 30,909.09 |
| TOTALS (lbs/day, unmitigated) | 1,280.52 | 1,376.35 | 12,782.13 | 24.89 | 4,985.14 | 940.56 | 2,489,436.25 |

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2030 Temperature (F): 40 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

| Land Use Type | Acreage | Trip Rate | Unit Type | No. Units | Total Trips | Total VMT |
|-------------------------|----------|-----------|------------------|-----------|-------------|--------------|
| Single family housing | 4,021.33 | 9.57 | dwelling | 12,064.00 | 115,452.48 | 987,084.05 |
| Apartments low rise | 151.75 | 6.90 | dwelling unit | 2,428.00 | 16,753.20 | 143,234.84 |
| Elementary school | | 1.10 | students unit | 2,302.00 | 2,532.20 | 19,700.52 |
| Junior high school | | 1.20 | students | 1,056.00 | 1,267.20 | 9,858.82 |
| High school | | 1.70 | students | 1,023.00 | 1,739.10 | 13,156.29 |
| Junior college (2 yrs) | | 1.00 | students | 4,554.00 | 4,554.00 | 33,961.45 |
| City park | | 1.59 | acres | 83.00 | 131.97 | 984.17 |
| Office park | | 15.01 | 1000 sq ft | 448.54 | 6,732.59 | 56,432.53 |
| General light industry | | 6.97 | 1000 sq ft | 582.18 | 4,057.79 | 34,186.92 |
| General heavy industry | | 7.50 | 1000 sq ft | 568.28 | 4,262.10 | 39,573.60 |
| Neighborhood Commercial | | 44.32 | 1000 sq ft | 1,696.25 | 75,177.80 | 555,789.46 |
| Community Commercial | | 44.32 | 1000 sq ft | 2,291.38 | 101,553.96 | 750,788.39 |
| Regional Commercial | | 44.32 | 1000 sq ft | 699.19 | 30,988.10 | 229,095.03 |
| PQP | | 16.01 | 1000 sq ft | 306.90 | 4,913.47 | 36,325.28 |
| | | | | | 370,115.96 | 2,910,171.35 |

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|--------------|--------------|--------------|----------|--------|
| Light Auto | 39.1 | 0.0 | 100.0 | 0.0 |

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| | | | | |
|-------------------------------------|------|------|-------|-------|
| Light Truck < 3750 lbs | 20.7 | 0.0 | 99.0 | 1.0 |
| Light Truck 3751-5750 lbs | 20.6 | 0.0 | 100.0 | 0.0 |
| Med Truck 5751-8500 lbs | 9.1 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.2 | 0.0 | 77.3 | 22.7 |
| Lite-Heavy Truck 10,001-14,000 lbs | 1.0 | 0.0 | 60.0 | 40.0 |
| Med-Heavy Truck 14,001-33,000 lbs | 1.0 | 0.0 | 20.0 | 80.0 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 0.2 | 0.0 | 0.0 | 100.0 |
| Other Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Urban Bus | 0.0 | 0.0 | 0.0 | 0.0 |
| Motorcycle | 4.5 | 33.3 | 66.7 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.4 | 0.0 | 92.9 | 7.1 |

Travel Conditions

| | Residential | | | Commercial | | |
|---------------------------------------|-------------|-----------|------------|------------|----------|----------|
| | Home-Work | Home-Shop | Home-Other | Commute | Non-Work | Customer |
| Urban Trip Length (miles) | 10.8 | 7.3 | 7.5 | 9.5 | 7.4 | 7.4 |
| Rural Trip Length (miles) | 16.8 | 7.1 | 7.9 | 14.7 | 6.6 | 6.6 |
| Trip speeds (mph) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 |
| % of Trips - Residential | 32.9 | 18.0 | 49.1 | | | |
| | | | | | | |
| % of Trips - Commercial (by land use) | | | | | | |
| Elementary school | | | | 20.0 | 10.0 | 70.0 |
| Junior high school | | | | 20.0 | 10.0 | 70.0 |
| High school | | | | 10.0 | 5.0 | 85.0 |
| Junior college (2 yrs) | | | | 5.0 | 2.5 | 92.5 |

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|-------------------------|------|------|------|
| City park | 5.0 | 2.5 | 92.5 |
| Office park | 48.0 | 24.0 | 28.0 |
| General light industry | 50.0 | 25.0 | 25.0 |
| General heavy industry | 90.0 | 5.0 | 5.0 |
| Neighborhood Commercial | 2.0 | 1.0 | 97.0 |
| Community Commercial | 2.0 | 1.0 | 97.0 |
| Regional Commercial | 2.0 | 1.0 | 97.0 |
| PQP | 2.0 | 1.0 | 97.0 |

Operational Changes to Defaults

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: L:\-Practice Group Related\AQ\1 Projects\Yuba County GP\AQ\URBEMIS\Yuba 2030 Alt 4\Yuba Cnty 2030 GPU Area.urb924

Project Name: Yuba County 2030 GPU

Project Location: Yuba County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (lbs/day, unmitigated) | 1,052.46 | 206.13 | 92.82 | 0.00 | 0.39 | 0.39 | 262,208.16 |

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (lbs/day, unmitigated) | 1,052.46 | 206.13 | 92.82 | 0.00 | 0.39 | 0.39 | 262,208.16 |

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

| <u>Source</u> | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-----------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| Natural Gas | 15.86 | 206.13 | 92.82 | 0.00 | 0.39 | 0.39 | 262,208.16 |
| Hearth | | | | | | | |
| Landscaping - No Winter Emissions | | | | | | | |
| Consumer Products | 814.23 | | | | | | |
| Architectural Coatings | 222.37 | | | | | | |
| TOTALS (lbs/day, unmitigated) | 1,052.46 | 206.13 | 92.82 | 0.00 | 0.39 | 0.39 | 262,208.16 |

Area Source Changes to Defaults

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: L:\-Practice Group Related\AQ\1 Projects\Yuba County GP\AQ\URBEMIS\Yuba 2030 Alt 4\Yuba Cnty 2030 GPU Construction.urb924

Project Name: Yuba County 2030 GPU

Project Location: Yuba County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10 Dust</u> | <u>PM10 Exhaust</u> | <u>PM10</u> | <u>PM2.5 Dust</u> | <u>PM2.5</u> | <u>PM2.5</u> | <u>CO2</u> |
|-----------------------------------|------------|------------|-----------|------------|------------------|---------------------|-------------|-------------------|--------------|--------------|------------|
| 2010 TOTALS (lbs/day unmitigated) | 360.82 | 1,017.40 | 342.89 | 1.24 | 124.69 | 39.00 | 163.69 | 26.60 | 35.88 | 62.48 | 141,585.17 |
| 2011 TOTALS (lbs/day unmitigated) | 38,947.30 | 1,453.45 | 4,467.78 | 4.30 | 139.39 | 55.10 | 194.49 | 31.85 | 49.80 | 81.65 | 460,484.07 |

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10 Dust</u> | <u>PM10 Exhaust</u> | <u>PM10</u> | <u>PM2.5 Dust</u> | <u>PM2.5 Exhaust</u> | <u>PM2.5</u> | <u>CO2</u> |
|------------------------------------|------------|------------|-----------|------------|------------------|---------------------|-------------|-------------------|----------------------|--------------|------------|
| Time Slice 11/30/2010-12/3/2010 | 4.24 | 33.79 | 19.43 | 0.00 | 120.01 | 1.80 | 121.80 | 25.06 | 1.65 | 26.72 | 3,134.97 |
| Active Davs: 4 | | | | | | | | | | | |
| Mass Grading 11/30/2010-01/11/2011 | 4.24 | 33.79 | 19.43 | 0.00 | 120.01 | 1.80 | 121.80 | 25.06 | 1.65 | 26.72 | 3,134.97 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 120.00 | 0.00 | 120.00 | 25.06 | 0.00 | 25.06 | 0.00 |
| Mass Grading Off Road Diesel | 4.16 | 33.67 | 17.48 | 0.00 | 0.00 | 1.79 | 1.79 | 0.00 | 1.65 | 1.65 | 3,007.48 |
| Mass Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mass Grading Worker Trips | 0.08 | 0.12 | 1.94 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.50 |
| Time Slice 12/6/2010-12/27/2010 | 8.48 | 69.35 | 38.97 | 0.00 | 120.02 | 3.56 | 123.57 | 25.07 | 3.27 | 28.34 | 6,768.25 |
| Active Davs: 16 | | | | | | | | | | | |
| Mass Grading 11/30/2010-01/11/2011 | 4.24 | 33.79 | 19.43 | 0.00 | 120.01 | 1.80 | 121.80 | 25.06 | 1.65 | 26.72 | 3,134.97 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 120.00 | 0.00 | 120.00 | 25.06 | 0.00 | 25.06 | 0.00 |

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| | | | | | | | | | | | |
|--------------------------------------|---------------|-----------------|---------------|-------------|---------------|--------------|---------------|--------------|--------------|--------------|-------------------|
| Mass Grading Off Road Diesel | 4.16 | 33.67 | 17.48 | 0.00 | 0.00 | 1.79 | 1.79 | 0.00 | 1.65 | 1.65 | 3,007.48 |
| Mass Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mass Grading Worker Trips | 0.08 | 0.12 | 1.94 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.50 |
| Trenching 12/06/2010-10/06/2011 | 4.24 | 35.57 | 19.54 | 0.00 | 0.01 | 1.76 | 1.77 | 0.00 | 1.62 | 1.62 | 3,633.27 |
| Trenching Off Road Diesel | 4.12 | 35.38 | 16.43 | 0.00 | 0.00 | 1.75 | 1.75 | 0.00 | 1.61 | 1.61 | 3,429.28 |
| Trenching Worker Trips | 0.12 | 0.19 | 3.11 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.00 |
| Time Slice 12/28/2010-12/31/2010 | <u>360.82</u> | <u>1,017.40</u> | <u>342.89</u> | <u>1.24</u> | <u>124.69</u> | <u>39.00</u> | <u>163.69</u> | <u>26.60</u> | <u>35.88</u> | <u>62.48</u> | <u>141,585.17</u> |
| Active Davs: 4 | | | | | | | | | | | |
| Asphalt 12/28/2010-01/11/2011 | 352.34 | 948.05 | 303.92 | 1.24 | 4.67 | 35.44 | 40.12 | 1.53 | 32.61 | 34.14 | 134,816.93 |
| Paving Off-Gas | 292.56 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 3.20 | 19.17 | 10.47 | 0.00 | 0.00 | 1.68 | 1.68 | 0.00 | 1.55 | 1.55 | 1,418.81 |
| Paving On Road Diesel | 56.51 | 928.76 | 291.51 | 1.24 | 4.67 | 33.76 | 38.43 | 1.53 | 31.06 | 32.59 | 133,270.61 |
| Paving Worker Trips | 0.08 | 0.12 | 1.94 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.50 |
| Mass Grading 11/30/2010-01/11/2011 | 4.24 | 33.79 | 19.43 | 0.00 | 120.01 | 1.80 | 121.80 | 25.06 | 1.65 | 26.72 | 3,134.97 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 120.00 | 0.00 | 120.00 | 25.06 | 0.00 | 25.06 | 0.00 |
| Mass Grading Off Road Diesel | 4.16 | 33.67 | 17.48 | 0.00 | 0.00 | 1.79 | 1.79 | 0.00 | 1.65 | 1.65 | 3,007.48 |
| Mass Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mass Grading Worker Trips | 0.08 | 0.12 | 1.94 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.50 |
| Trenching 12/06/2010-10/06/2011 | 4.24 | 35.57 | 19.54 | 0.00 | 0.01 | 1.76 | 1.77 | 0.00 | 1.62 | 1.62 | 3,633.27 |
| Trenching Off Road Diesel | 4.12 | 35.38 | 16.43 | 0.00 | 0.00 | 1.75 | 1.75 | 0.00 | 1.61 | 1.61 | 3,429.28 |
| Trenching Worker Trips | 0.12 | 0.19 | 3.11 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.00 |
| Time Slice 1/3/2011-1/10/2011 Active | 355.84 | 915.31 | 314.62 | 1.24 | 124.69 | 34.93 | 159.62 | 26.60 | 32.13 | 58.73 | 141,585.52 |
| Davs: 6 | | | | | | | | | | | |
| Asphalt 12/28/2010-01/11/2011 | 347.85 | 850.58 | 277.01 | 1.24 | 4.67 | 31.59 | 36.27 | 1.53 | 29.07 | 30.60 | 134,817.02 |
| Paving Off-Gas | 292.56 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 3.02 | 18.25 | 10.34 | 0.00 | 0.00 | 1.62 | 1.62 | 0.00 | 1.49 | 1.49 | 1,418.81 |
| Paving On Road Diesel | 52.21 | 832.23 | 264.89 | 1.24 | 4.67 | 29.97 | 34.63 | 1.53 | 27.57 | 29.10 | 133,270.61 |

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| | | | | | | | | | | | |
|------------------------------------|--------|------------------------|----------|--------------------|----------------------|---------------------|----------------------|---------------------|---------------------|---------------------|--------------------------|
| Paving Worker Trips | 0.07 | 0.11 | 1.78 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.59 |
| Mass Grading 11/30/2010-01/11/2011 | 3.98 | 31.71 | 18.61 | 0.00 | 120.01 | 1.69 | 121.69 | 25.06 | 1.55 | 26.62 | 3,135.07 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 120.00 | 0.00 | 120.00 | 25.06 | 0.00 | 25.06 | 0.00 |
| Mass Grading Off Road Diesel | 3.91 | 31.61 | 16.82 | 0.00 | 0.00 | 1.68 | 1.68 | 0.00 | 1.55 | 1.55 | 3,007.48 |
| Mass Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mass Grading Worker Trips | 0.07 | 0.11 | 1.78 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.59 |
| Trenching 12/06/2010-10/06/2011 | 4.01 | 33.01 | 19.00 | 0.00 | 0.01 | 1.65 | 1.66 | 0.00 | 1.52 | 1.52 | 3,633.43 |
| Trenching Off Road Diesel | 3.90 | 32.84 | 16.15 | 0.00 | 0.00 | 1.64 | 1.64 | 0.00 | 1.51 | 1.51 | 3,429.28 |
| Trenching Worker Trips | 0.11 | 0.17 | 2.85 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.15 |
| Time Slice 1/11/2011-1/11/2011 | 519.16 | <u>1,453.45</u> | 4,118.75 | <u>4.30</u> | <u>139.39</u> | <u>55.10</u> | <u>194.49</u> | <u>31.85</u> | <u>49.80</u> | <u>81.65</u> | <u>460,484.07</u> |
| Active Davs: 1 | | | | | | | | | | | |
| Asphalt 12/28/2010-01/11/2011 | 347.85 | 850.58 | 277.01 | 1.24 | 4.67 | 31.59 | 36.27 | 1.53 | 29.07 | 30.60 | 134,817.02 |
| Paving Off-Gas | 292.56 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 3.02 | 18.25 | 10.34 | 0.00 | 0.00 | 1.62 | 1.62 | 0.00 | 1.49 | 1.49 | 1,418.81 |
| Paving On Road Diesel | 52.21 | 832.23 | 264.89 | 1.24 | 4.67 | 29.97 | 34.63 | 1.53 | 27.57 | 29.10 | 133,270.61 |
| Paving Worker Trips | 0.07 | 0.11 | 1.78 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.59 |
| Building 01/11/2011-08/22/2011 | 163.32 | 538.14 | 3,804.13 | 3.06 | 14.70 | 20.17 | 34.87 | 5.25 | 17.67 | 22.92 | 318,898.55 |
| Building Off Road Diesel | 3.77 | 21.85 | 13.95 | 0.00 | 0.00 | 1.57 | 1.57 | 0.00 | 1.45 | 1.45 | 2,259.28 |
| Building Vendor Trips | 25.44 | 308.11 | 282.89 | 0.61 | 2.40 | 11.21 | 13.61 | 0.82 | 10.24 | 11.06 | 65,456.79 |
| Building Worker Trips | 134.11 | 208.18 | 3,507.30 | 2.45 | 12.29 | 7.39 | 19.68 | 4.44 | 5.98 | 10.41 | 251,182.48 |
| Mass Grading 11/30/2010-01/11/2011 | 3.98 | 31.71 | 18.61 | 0.00 | 120.01 | 1.69 | 121.69 | 25.06 | 1.55 | 26.62 | 3,135.07 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 120.00 | 0.00 | 120.00 | 25.06 | 0.00 | 25.06 | 0.00 |
| Mass Grading Off Road Diesel | 3.91 | 31.61 | 16.82 | 0.00 | 0.00 | 1.68 | 1.68 | 0.00 | 1.55 | 1.55 | 3,007.48 |
| Mass Grading On Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mass Grading Worker Trips | 0.07 | 0.11 | 1.78 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.59 |
| Trenching 12/06/2010-10/06/2011 | 4.01 | 33.01 | 19.00 | 0.00 | 0.01 | 1.65 | 1.66 | 0.00 | 1.52 | 1.52 | 3,633.43 |

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|---|------------------|--------|-----------------|------|-------|-------|-------|------|-------|-------|------------|
| Trenching Off Road Diesel | 3.90 | 32.84 | 16.15 | 0.00 | 0.00 | 1.64 | 1.64 | 0.00 | 1.51 | 1.51 | 3,429.28 |
| Trenching Worker Trips | 0.11 | 0.17 | 2.85 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.15 |
| Time Slice 1/12/2011-8/5/2011 Active | 167.33 | 571.15 | 3,823.13 | 3.06 | 14.71 | 21.82 | 36.53 | 5.25 | 19.18 | 24.44 | 322,531.98 |
| Davs: 148 Building 01/11/2011-08/22/2011 | 163.32 | 538.14 | 3,804.13 | 3.06 | 14.70 | 20.17 | 34.87 | 5.25 | 17.67 | 22.92 | 318,898.55 |
| Building Off Road Diesel | 3.77 | 21.85 | 13.95 | 0.00 | 0.00 | 1.57 | 1.57 | 0.00 | 1.45 | 1.45 | 2,259.28 |
| Building Vendor Trips | 25.44 | 308.11 | 282.89 | 0.61 | 2.40 | 11.21 | 13.61 | 0.82 | 10.24 | 11.06 | 65,456.79 |
| Building Worker Trips | 134.11 | 208.18 | 3,507.30 | 2.45 | 12.29 | 7.39 | 19.68 | 4.44 | 5.98 | 10.41 | 251,182.48 |
| Trenching 12/06/2010-10/06/2011 | 4.01 | 33.01 | 19.00 | 0.00 | 0.01 | 1.65 | 1.66 | 0.00 | 1.52 | 1.52 | 3,633.43 |
| Trenching Off Road Diesel | 3.90 | 32.84 | 16.15 | 0.00 | 0.00 | 1.64 | 1.64 | 0.00 | 1.51 | 1.51 | 3,429.28 |
| Trenching Worker Trips | 0.11 | 0.17 | 2.85 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.15 |
| Time Slice 8/8/2011-8/22/2011 Active | 38,947.30 | 609.42 | 4,467.78 | 3.51 | 16.97 | 23.18 | 40.14 | 6.07 | 20.28 | 26.35 | 368,699.94 |
| Davs: 11 Building 01/11/2011-08/22/2011 | 163.32 | 538.14 | 3,804.13 | 3.06 | 14.70 | 20.17 | 34.87 | 5.25 | 17.67 | 22.92 | 318,898.55 |
| Building Off Road Diesel | 3.77 | 21.85 | 13.95 | 0.00 | 0.00 | 1.57 | 1.57 | 0.00 | 1.45 | 1.45 | 2,259.28 |
| Building Vendor Trips | 25.44 | 308.11 | 282.89 | 0.61 | 2.40 | 11.21 | 13.61 | 0.82 | 10.24 | 11.06 | 65,456.79 |
| Building Worker Trips | 134.11 | 208.18 | 3,507.30 | 2.45 | 12.29 | 7.39 | 19.68 | 4.44 | 5.98 | 10.41 | 251,182.48 |
| Coating 08/08/2011-09/05/2011 | 38,779.97 | 38.26 | 644.65 | 0.45 | 2.26 | 1.36 | 3.62 | 0.82 | 1.10 | 1.91 | 46,167.96 |
| Architectural Coating | 38,755.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Coating Worker Trips | 24.65 | 38.26 | 644.65 | 0.45 | 2.26 | 1.36 | 3.62 | 0.82 | 1.10 | 1.91 | 46,167.96 |
| Trenching 12/06/2010-10/06/2011 | 4.01 | 33.01 | 19.00 | 0.00 | 0.01 | 1.65 | 1.66 | 0.00 | 1.52 | 1.52 | 3,633.43 |
| Trenching Off Road Diesel | 3.90 | 32.84 | 16.15 | 0.00 | 0.00 | 1.64 | 1.64 | 0.00 | 1.51 | 1.51 | 3,429.28 |
| Trenching Worker Trips | 0.11 | 0.17 | 2.85 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.15 |
| Time Slice 8/23/2011-9/5/2011 Active | 38,783.98 | 71.28 | 663.65 | 0.45 | 2.27 | 3.01 | 5.28 | 0.82 | 2.61 | 3.43 | 49,801.38 |
| Davs: 10 Coating 08/08/2011-09/05/2011 | 38,779.97 | 38.26 | 644.65 | 0.45 | 2.26 | 1.36 | 3.62 | 0.82 | 1.10 | 1.91 | 46,167.96 |
| Architectural Coating | 38,755.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Coating Worker Trips | 24.65 | 38.26 | 644.65 | 0.45 | 2.26 | 1.36 | 3.62 | 0.82 | 1.10 | 1.91 | 46,167.96 |

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| | | | | | | | | | | | |
|--------------------------------------|------|-------|-------|------|------|------|------|------|------|------|----------|
| Trenching 12/06/2010-10/06/2011 | 4.01 | 33.01 | 19.00 | 0.00 | 0.01 | 1.65 | 1.66 | 0.00 | 1.52 | 1.52 | 3,633.43 |
| Trenching Off Road Diesel | 3.90 | 32.84 | 16.15 | 0.00 | 0.00 | 1.64 | 1.64 | 0.00 | 1.51 | 1.51 | 3,429.28 |
| Trenching Worker Trips | 0.11 | 0.17 | 2.85 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.15 |
| Time Slice 9/6/2011-10/6/2011 Active | 4.01 | 33.01 | 19.00 | 0.00 | 0.01 | 1.65 | 1.66 | 0.00 | 1.52 | 1.52 | 3,633.43 |
| Days: 23 | | | | | | | | | | | |
| Trenching 12/06/2010-10/06/2011 | 4.01 | 33.01 | 19.00 | 0.00 | 0.01 | 1.65 | 1.66 | 0.00 | 1.52 | 1.52 | 3,633.43 |
| Trenching Off Road Diesel | 3.90 | 32.84 | 16.15 | 0.00 | 0.00 | 1.64 | 1.64 | 0.00 | 1.51 | 1.51 | 3,429.28 |
| Trenching Worker Trips | 0.11 | 0.17 | 2.85 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 204.15 |

Phase Assumptions

Phase: Mass Grading 11/30/2010 - 1/11/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 21790

Maximum Daily Acreage Disturbed: 6

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

- 1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day
- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day
- 2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 12/6/2010 - 10/6/2011 - Type Your Description Here

Off-Road Equipment:

- 4 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 2 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day
- 2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 12/28/2010 - 1/11/2011 - Default Paving Description

Acres to be Paved: 1228.29

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Off-Road Equipment:

- 1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
- 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
- 2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 1/11/2011 - 8/22/2011 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day
- 3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
- 1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 8/8/2011 - 9/5/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: L:\~Practice Group Related\AQ\1 Projects\Yuba County GVAQ\URBEMIS\Yuba 2030 Alt 4\Yuba Cnty 2030 GPU Ops.urb924

Project Name: Yuba County 2030 GPU

Project Location: Yuba County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|--------------|
| TOTALS (lbs/day, unmitigated) | 646.91 | 693.19 | 6,509.69 | 12.67 | 2,519.01 | 475.72 | 1,264,751.32 |

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|--------------|
| TOTALS (lbs/day, unmitigated) | 646.91 | 693.19 | 6,509.69 | 12.67 | 2,519.01 | 475.72 | 1,264,751.32 |

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

| <u>Source</u> | <u>ROG</u> | <u>NOX</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM25</u> | <u>CO2</u> |
|-----------------------|------------|------------|-----------|------------|-------------|-------------|------------|
| Single family housing | 493.16 | 527.96 | 4,971.02 | 9.66 | 1,919.93 | 362.66 | 965,104.46 |
| Apartments low rise | 73.24 | 78.41 | 738.28 | 1.44 | 285.14 | 53.86 | 143,334.51 |
| Elementary school | 10.20 | 11.01 | 101.74 | 0.20 | 39.86 | 7.52 | 19,880.63 |

| | | | | | | | |
|--------------------------------------|---------------|---------------|-----------------|--------------|-----------------|---------------|---------------------|
| Junior high school | 6.03 | 6.51 | 60.13 | 0.12 | 23.56 | 4.44 | 11,749.31 |
| High school | 10.87 | 11.72 | 108.00 | 0.21 | 42.36 | 7.99 | 21,082.64 |
| Junior college (2 yrs) | 14.95 | 16.10 | 148.21 | 0.29 | 58.16 | 10.97 | 28,918.26 |
| City park | 0.54 | 0.58 | 5.33 | 0.01 | 2.09 | 0.39 | 1,039.95 |
| Office park | 3.48 | 3.77 | 35.05 | 0.07 | 13.69 | 2.59 | 6,866.04 |
| General light industry | 1.04 | 1.12 | 10.43 | 0.02 | 4.08 | 0.77 | 2,044.52 |
| General heavy industry | 2.97 | 3.23 | 30.10 | 0.06 | 11.81 | 2.23 | 5,944.63 |
| Neighborhood Commercial | 7.27 | 7.84 | 72.06 | 0.14 | 28.29 | 5.33 | 14,054.47 |
| Community Commercial | 8.60 | 9.26 | 85.15 | 0.17 | 33.43 | 6.30 | 16,608.31 |
| Regional Commercial | 14.20 | 15.29 | 140.63 | 0.27 | 55.21 | 10.41 | 27,428.66 |
| PQP | 0.36 | 0.39 | 3.56 | 0.01 | 1.40 | 0.26 | 694.93 |
| TOTALS (lbs/day, unmitigated) | 646.91 | 693.19 | 6,509.69 | 12.67 | 2,519.01 | 475.72 | 1,264,751.32 |

Operational Settings:

Does not include correction for passby trips
 Does not include double counting adjustment for internal trips
 Analysis Year: 2030 Temperature (F): 40 Season: Winter
 Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

| Land Use Type | Acreage | Trip Rate | Unit Type | No. Units | Total Trips | Total VMT |
|-----------------------|----------|-----------|----------------|-----------|-------------|--------------|
| Single family housing | 4,564.67 | 9.57 | dwelling units | 13,694.00 | 131,051.58 | 1,120,451.68 |
| Apartments low rise | 184.31 | 6.60 | dwelling units | 2,949.00 | 19,463.40 | 166,406.23 |
| Elementary school | | 1.10 | students | 2,719.00 | 2,990.90 | 23,269.20 |
| Junior high school | | 1.20 | students | 1,473.00 | 1,767.60 | 13,751.93 |

| | | | | | |
|-------------------------|-------|------------|----------|------------|--------------|
| High school | 1.70 | students | 1,923.00 | 3,269.10 | 24,730.74 |
| Junior college (2 yrs) | 1.00 | students | 4,554.00 | 4,554.00 | 33,961.45 |
| City park | 1.59 | acres | 103.00 | 163.77 | 1,221.31 |
| Office park | 15.01 | 1000 sq ft | 63.52 | 953.44 | 7,991.69 |
| General light industry | 6.97 | 1000 sq ft | 40.51 | 282.35 | 2,378.84 |
| General heavy industry | 7.50 | 1000 sq ft | 98.98 | 742.35 | 6,892.72 |
| Neighborhood Commercial | 44.32 | 1000 sq ft | 50.41 | 2,234.17 | 16,517.23 |
| Community Commercial | 44.32 | 1000 sq ft | 59.57 | 2,640.14 | 19,518.57 |
| Regional Commercial | 44.32 | 1000 sq ft | 98.38 | 4,360.20 | 32,234.97 |
| PQP | 16.01 | 1000 sq ft | 6.90 | 110.47 | 816.70 |
| | | | | 174,583.47 | 1,470,143.26 |

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|-------------------------------------|--------------|--------------|----------|--------|
| Light Auto | 39.1 | 0.0 | 100.0 | 0.0 |
| Light Truck < 3750 lbs | 20.7 | 0.0 | 99.0 | 1.0 |
| Light Truck 3751-5750 lbs | 20.6 | 0.0 | 100.0 | 0.0 |
| Med Truck 5751-8500 lbs | 9.1 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.2 | 0.0 | 77.3 | 22.7 |
| Lite-Heavy Truck 10,001-14,000 lbs | 1.0 | 0.0 | 60.0 | 40.0 |
| Med-Heavy Truck 14,001-33,000 lbs | 1.0 | 0.0 | 20.0 | 80.0 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 0.2 | 0.0 | 0.0 | 100.0 |
| Other Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Urban Bus | 0.0 | 0.0 | 0.0 | 0.0 |
| Motorcycle | 4.5 | 33.3 | 66.7 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |

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| | | | | | | | | | | | |
|---------------------------------------|---------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------|
| Paving Off Road Diesel | 3.02 | 18.25 | 10.34 | 0.00 | 0.00 | 1.62 | 1.62 | 0.00 | 1.49 | 1.49 | 1,418.81 |
| Paving On Road Diesel | 0.82 | 13.15 | 4.19 | 0.02 | 0.07 | 0.47 | 0.55 | 0.02 | 0.44 | 0.46 | 2,105.69 |
| Paving Worker Trips | 0.07 | 0.11 | 1.78 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 127.59 |
| Building 02/15/2011-10/28/2011 | 15.99 | 72.96 | 287.64 | 0.24 | 1.13 | 3.42 | 4.55 | 0.40 | 3.08 | 3.48 | 27,243.63 |
| Building Off Road Diesel | 3.77 | 21.85 | 13.95 | 0.00 | 0.00 | 1.57 | 1.57 | 0.00 | 1.45 | 1.45 | 2,259.28 |
| Building Vendor Trips | 2.97 | 36.74 | 31.64 | 0.07 | 0.28 | 1.33 | 1.61 | 0.09 | 1.22 | 1.32 | 7,649.24 |
| Building Worker Trips | 9.26 | 14.37 | 242.05 | 0.17 | 0.85 | 0.51 | 1.36 | 0.31 | 0.41 | 0.72 | 17,335.11 |
| Trenching 02/15/2011-01/13/2012 | 2.00 | 16.51 | 9.50 | 0.00 | 0.00 | 0.82 | 0.83 | 0.00 | 0.76 | 0.76 | 1,816.71 |
| Trenching Off Road Diesel | 1.95 | 16.42 | 8.07 | 0.00 | 0.00 | 0.82 | 0.82 | 0.00 | 0.76 | 0.76 | 1,714.64 |
| Trenching Worker Trips | 0.05 | 0.08 | 1.43 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.07 |
| Time Slice 3/16/2011-10/7/2011 Active | 17.99 | 89.46 | 297.14 | 0.24 | 1.13 | 4.24 | 5.38 | 0.40 | 3.84 | 4.24 | 29,060.35 |
| Building 02/15/2011-10/28/2011 | 15.99 | 72.96 | 287.64 | 0.24 | 1.13 | 3.42 | 4.55 | 0.40 | 3.08 | 3.48 | 27,243.63 |
| Building Off Road Diesel | 3.77 | 21.85 | 13.95 | 0.00 | 0.00 | 1.57 | 1.57 | 0.00 | 1.45 | 1.45 | 2,259.28 |
| Building Vendor Trips | 2.97 | 36.74 | 31.64 | 0.07 | 0.28 | 1.33 | 1.61 | 0.09 | 1.22 | 1.32 | 7,649.24 |
| Building Worker Trips | 9.26 | 14.37 | 242.05 | 0.17 | 0.85 | 0.51 | 1.36 | 0.31 | 0.41 | 0.72 | 17,335.11 |
| Trenching 02/15/2011-01/13/2012 | 2.00 | 16.51 | 9.50 | 0.00 | 0.00 | 0.82 | 0.83 | 0.00 | 0.76 | 0.76 | 1,816.71 |
| Trenching Off Road Diesel | 1.95 | 16.42 | 8.07 | 0.00 | 0.00 | 0.82 | 0.82 | 0.00 | 0.76 | 0.76 | 1,714.64 |
| Trenching Worker Trips | 0.05 | 0.08 | 1.43 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.07 |
| Time Slice 10/10/2011-10/28/2011 | 692.66 | 90.13 | 308.35 | 0.25 | 1.17 | 4.27 | 5.44 | 0.42 | 3.86 | 4.28 | 29,863.54 |
| Building 02/15/2011-10/28/2011 | 15.99 | 72.96 | 287.64 | 0.24 | 1.13 | 3.42 | 4.55 | 0.40 | 3.08 | 3.48 | 27,243.63 |
| Building Off Road Diesel | 3.77 | 21.85 | 13.95 | 0.00 | 0.00 | 1.57 | 1.57 | 0.00 | 1.45 | 1.45 | 2,259.28 |
| Building Vendor Trips | 2.97 | 36.74 | 31.64 | 0.07 | 0.28 | 1.33 | 1.61 | 0.09 | 1.22 | 1.32 | 7,649.24 |
| Building Worker Trips | 9.26 | 14.37 | 242.05 | 0.17 | 0.85 | 0.51 | 1.36 | 0.31 | 0.41 | 0.72 | 17,335.11 |
| Coating 10/08/2011-12/29/2011 | 674.67 | 0.67 | 11.22 | 0.01 | 0.04 | 0.02 | 0.06 | 0.01 | 0.02 | 0.03 | 803.20 |
| Architectural Coating | 674.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Coating Worker Trips | 0.43 | 0.67 | 11.22 | 0.01 | 0.04 | 0.02 | 0.06 | 0.01 | 0.02 | 0.03 | 803.20 |
| Trenching 02/15/2011-01/13/2012 | 2.00 | 16.51 | 9.50 | 0.00 | 0.00 | 0.82 | 0.83 | 0.00 | 0.76 | 0.76 | 1,816.71 |
| Trenching Off Road Diesel | 1.95 | 16.42 | 8.07 | 0.00 | 0.00 | 0.82 | 0.82 | 0.00 | 0.76 | 0.76 | 1,714.64 |
| Trenching Worker Trips | 0.05 | 0.08 | 1.43 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.07 |
| Time Slice 10/31/2011-12/29/2011 | 676.67 | 17.17 | 20.72 | 0.01 | 0.04 | 0.85 | 0.89 | 0.02 | 0.78 | 0.79 | 2,619.91 |
| Coating 10/08/2011-12/29/2011 | 674.67 | 0.67 | 11.22 | 0.01 | 0.04 | 0.02 | 0.06 | 0.01 | 0.02 | 0.03 | 803.20 |
| Architectural Coating | 674.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Coating Worker Trips | 0.43 | 0.67 | 11.22 | 0.01 | 0.04 | 0.02 | 0.06 | 0.01 | 0.02 | 0.03 | 803.20 |
| Trenching 02/15/2011-01/13/2012 | 2.00 | 16.51 | 9.50 | 0.00 | 0.00 | 0.82 | 0.83 | 0.00 | 0.76 | 0.76 | 1,816.71 |
| Trenching Off Road Diesel | 1.95 | 16.42 | 8.07 | 0.00 | 0.00 | 0.82 | 0.82 | 0.00 | 0.76 | 0.76 | 1,714.64 |
| Trenching Worker Trips | 0.05 | 0.08 | 1.43 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.07 |
| Time Slice 12/30/2011-12/30/2011 | 2.00 | 16.51 | 9.50 | 0.00 | 0.00 | 0.82 | 0.83 | 0.00 | 0.76 | 0.76 | 1,816.71 |
| Trenching 02/15/2011-01/13/2012 | 2.00 | 16.51 | 9.50 | 0.00 | 0.00 | 0.82 | 0.83 | 0.00 | 0.76 | 0.76 | 1,816.71 |
| Trenching Off Road Diesel | 1.95 | 16.42 | 8.07 | 0.00 | 0.00 | 0.82 | 0.82 | 0.00 | 0.76 | 0.76 | 1,714.64 |
| Trenching Worker Trips | 0.05 | 0.08 | 1.43 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.07 |
| Time Slice 1/2/2012-1/13/2012 Active | <u>1.85</u> | <u>15.32</u> | <u>9.31</u> | <u>0.00</u> | <u>0.00</u> | <u>0.74</u> | <u>0.74</u> | <u>0.00</u> | <u>0.68</u> | <u>0.68</u> | <u>1,816.79</u> |

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| | | | | | | | | | | | |
|---------------------------------|------|-------|------|------|------|------|------|------|------|------|----------|
| Trenching 02/15/2011-01/13/2012 | 1.85 | 15.32 | 9.31 | 0.00 | 0.00 | 0.74 | 0.74 | 0.00 | 0.68 | 0.68 | 1,816.79 |
| Trenching Off Road Diesel | 1.80 | 15.24 | 8.01 | 0.00 | 0.00 | 0.73 | 0.73 | 0.00 | 0.67 | 0.67 | 1,714.64 |
| Trenching Worker Trips | 0.05 | 0.08 | 1.30 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.15 |

Phase Assumptions

Phase: Mass Grading 1/3/2011 - 2/15/2011 - Default Fine Site Grading Description

Total Acres Disturbed: 3495.95

Maximum Daily Acreage Disturbed: 19

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

- 1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day
- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day
- 3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 2/15/2011 - 1/13/2012 - Type Your Description Here

Off-Road Equipment:

- 2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 2/15/2011 - 3/15/2011 - Default Paving Description

Acres to be Paved: 37.05

Off-Road Equipment:

- 1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
- 2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day
- 2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 2/15/2011 - 10/28/2011 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day
- 3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
- 1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

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1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 10/8/2011 - 12/29/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Detail Report for Winter Operational Unmitigated Emissions (Pounds/Day)

File Name: S:\Mike Wolf\Yuba GPU\AQ\URBEMIS\Yuba 2030 GPU Full Build\Yuba Cnty 2030 GPU Full Build Ops.urb924

Project Name: Yuba County 2030 GPU Full Buildout

Project Location: Yuba County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

| Source | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|--------------------------------------|-----------------|-----------------|------------------|--------------|------------------|-----------------|---------------------|
| Single family housing | 121.76 | 130.35 | 1,227.33 | 2.39 | 474.02 | 89.54 | 238,280.87 |
| Apartments low rise | 16.23 | 17.37 | 163.58 | 0.32 | 63.18 | 11.93 | 31,758.59 |
| Elementary school | 26.17 | 28.25 | 261.02 | 0.51 | 102.26 | 19.29 | 51,006.33 |
| Junior high school | 13.84 | 14.94 | 138.04 | 0.27 | 54.08 | 10.20 | 26,975.29 |
| High school | 17.10 | 18.43 | 169.89 | 0.33 | 66.63 | 12.56 | 33,163.81 |
| Junior college (2 yrs) | 48.99 | 52.78 | 485.77 | 0.95 | 190.63 | 35.94 | 94,779.50 |
| City park | 2.47 | 2.66 | 24.53 | 0.05 | 9.63 | 1.81 | 4,785.80 |
| Office park | 290.82 | 314.85 | 2,927.48 | 5.74 | 1,143.71 | 215.95 | 573,508.84 |
| General light industry | 126.43 | 136.91 | 1,273.49 | 2.50 | 497.44 | 93.93 | 249,525.83 |
| General heavy industry | 79.57 | 86.49 | 806.56 | 1.60 | 316.51 | 59.80 | 159,297.15 |
| Neighborhood Commercial | 369.48 | 397.93 | 3,659.69 | 7.13 | 1,436.69 | 270.81 | 713,811.54 |
| Community Commercial | 972.70 | 1,047.60 | 9,634.53 | 18.77 | 3,782.24 | 712.93 | 1,879,186.70 |
| Regional Commercial | 552.80 | 595.37 | 5,475.49 | 10.67 | 2,149.52 | 405.17 | 1,067,978.08 |
| PQP | 33.29 | 35.85 | 329.69 | 0.64 | 129.43 | 24.40 | 64,305.82 |
| TOTALS (lbs/day, unmitigated) | 2,671.65 | 2,879.78 | 26,577.09 | 51.87 | 10,415.97 | 1,964.26 | 5,188,364.15 |

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2030 Temperature (F): 40 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

| Land Use Type | Acreage | Trip Rate | Unit Type | No. Units | Total Trips | Total VMT |
|-------------------------|----------|-----------|------------------|-----------|-------------|--------------|
| Single family housing | 1,127.00 | 9.57 | dwelling | 3,381.00 | 32,356.17 | 276,635.54 |
| Apartments low rise | 39.06 | 6.90 | dwelling unit | 625.00 | 4,312.50 | 36,870.58 |
| Elementary school | | 1.18 | students unit | 6,503.00 | 7,673.54 | 59,700.14 |
| Junior high school | | 1.36 | students | 2,984.00 | 4,058.24 | 31,573.11 |
| High school | | 1.78 | students | 2,889.00 | 5,142.42 | 38,902.41 |
| Junior college (2 yrs) | | 1.16 | students | 12,867.00 | 14,925.72 | 111,308.55 |
| City park | | 1.59 | acres | 474.00 | 753.66 | 5,620.42 |
| Office park | | 15.01 | 1000 sq ft | 5,305.72 | 79,638.86 | 667,532.93 |
| General light industry | | 6.97 | 1000 sq ft | 4,944.09 | 34,460.31 | 290,328.07 |
| General heavy industry | | 7.50 | 1000 sq ft | 2,652.35 | 19,892.63 | 184,703.03 |
| Neighborhood Commercial | | 44.32 | 1000 sq ft | 2,560.27 | 113,471.17 | 838,892.32 |
| Community Commercial | | 44.32 | 1000 sq ft | 6,740.19 | 298,725.22 | 2,208,475.50 |
| Regional Commercial | | 44.32 | 1000 sq ft | 3,830.58 | 169,771.31 | 1,255,119.26 |
| PQP | | 16.01 | 1000 sq ft | 638.50 | 10,222.39 | 75,574.09 |
| | | | | | 795,404.14 | 6,081,235.95 |

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|------------------------------------|--------------|--------------|----------|--------|
| Light Auto | 39.1 | 0.0 | 100.0 | 0.0 |
| Light Truck < 3750 lbs | 20.7 | 0.0 | 99.0 | 1.0 |
| Light Truck 3751-5750 lbs | 20.6 | 0.0 | 100.0 | 0.0 |
| Med Truck 5751-8500 lbs | 9.1 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.2 | 0.0 | 77.3 | 22.7 |
| Lite-Heavy Truck 10,001-14,000 lbs | 1.0 | 0.0 | 60.0 | 40.0 |

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| | | | | |
|-------------------------------------|-----|------|------|-------|
| Med-Heavy Truck 14,001-33,000 lbs | 1.0 | 0.0 | 20.0 | 80.0 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 0.2 | 0.0 | 0.0 | 100.0 |
| Other Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Urban Bus | 0.0 | 0.0 | 0.0 | 0.0 |
| Motorcycle | 4.5 | 33.3 | 66.7 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.4 | 0.0 | 92.9 | 7.1 |

Travel Conditions

| | Residential | | | Commercial | | |
|---------------------------|-------------|-----------|------------|------------|----------|----------|
| | Home-Work | Home-Shop | Home-Other | Commute | Non-Work | Customer |
| Urban Trip Length (miles) | 10.8 | 7.3 | 7.5 | 9.5 | 7.4 | 7.4 |
| Rural Trip Length (miles) | 16.8 | 7.1 | 7.9 | 14.7 | 6.6 | 6.6 |
| Trip speeds (mph) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 |
| % of Trips - Residential | 32.9 | 18.0 | 49.1 | | | |

% of Trips - Commercial (by land use)

| | | | |
|-------------------------|------|------|------|
| Elementary school | 20.0 | 10.0 | 70.0 |
| Junior high school | 20.0 | 10.0 | 70.0 |
| High school | 10.0 | 5.0 | 85.0 |
| Junior college (2 yrs) | 5.0 | 2.5 | 92.5 |
| City park | 5.0 | 2.5 | 92.5 |
| Office park | 48.0 | 24.0 | 28.0 |
| General light industry | 50.0 | 25.0 | 25.0 |
| General heavy industry | 90.0 | 5.0 | 5.0 |
| Neighborhood Commercial | 2.0 | 1.0 | 97.0 |

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Community Commercial

2.0

1.0

97.0

Regional Commercial

2.0

1.0

97.0

PQP

2.0

1.0

97.0

Operational Changes to Defaults

Urbemis 2007 Version 9.2.4

Detail Report for Winter Area Source Unmitigated Emissions (Pounds/Day)

File Name: S:\Mike Wolf\Yuba GPU\AQ\URBEMIS\Yuba Existing\Yuba Cnty Existing On Ground Area.urb924

Project Name: Yuba County Existing On ground Area

Project Location: Yuba County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

| <u>Source</u> | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|--------------------------------------|---------------|---------------|-----------------|-------------|---------------|---------------|-------------------|
| Natural Gas | 5.20 | 69.50 | 44.53 | 0.00 | 0.13 | 0.13 | 85,956.88 |
| Hearth | 574.12 | 68.60 | 3,024.29 | 9.42 | 485.59 | 467.40 | 95,113.93 |
| Landscaping - No Winter | | | | | | | |
| Consumer Products | 139.63 | | | | | | |
| Architectural Coatings | 64.08 | | | | | | |
| TOTALS (lbs/day, unmitigated) | 783.03 | 138.10 | 3,068.82 | 9.42 | 485.72 | 467.53 | 181,070.81 |

Area Source Changes to Defaults

Detail Report for Winter Operational Unmitigated Emissions (Pounds/Day)

File Name: S:\Mike Wolf\Yuba GPU\AQ\URBEMIS\Yuba Existing\Yuba Cnty Existing On Ground ops.urb924

Project Name: Yuba County Existing On ground Operations

Project Location: Yuba County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Winter Pounds Per Day, Unmitigated)

| <u>Source</u> | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|--------------------------------------|-----------------|-----------------|------------------|--------------|-----------------|---------------|---------------------|
| Single family housing | 329.41 | 487.11 | 3,900.00 | 1.71 | 336.40 | 65.13 | 168,879.61 |
| Apartments low rise | 46.94 | 69.42 | 555.77 | 0.24 | 47.94 | 9.28 | 24,066.41 |
| Elementary school | 75.94 | 112.48 | 889.29 | 0.39 | 77.55 | 15.00 | 38,638.87 |
| Junior high school | 43.02 | 63.72 | 503.76 | 0.22 | 43.93 | 8.49 | 21,887.87 |
| High school | 46.09 | 67.99 | 537.19 | 0.24 | 46.85 | 9.06 | 23,294.14 |
| Junior college (2 yrs) | 104.94 | 154.50 | 1,220.20 | 0.53 | 106.41 | 20.57 | 52,856.06 |
| City park | 1.96 | 2.88 | 22.74 | 0.01 | 1.98 | 0.38 | 985.22 |
| Office park | 129.27 | 193.45 | 1,532.02 | 0.68 | 133.58 | 25.85 | 66,898.43 |
| General light industry | 4.68 | 7.00 | 55.48 | 0.02 | 4.84 | 0.94 | 2,423.43 |
| General heavy industry | 0.09 | 0.14 | 1.11 | 0.00 | 0.10 | 0.02 | 48.91 |
| Neighborhood Commercial | 851.61 | 1,252.23 | 9,887.74 | 4.32 | 862.32 | 166.65 | 428,039.67 |
| Community Commercial | 606.76 | 892.19 | 7,044.88 | 3.08 | 614.39 | 118.73 | 304,972.51 |
| PQP | 0.63 | 0.93 | 7.33 | 0.00 | 0.64 | 0.12 | 317.13 |
| TOTALS (lbs/day, unmitigated) | 2,241.34 | 3,304.04 | 26,157.51 | 11.44 | 2,276.93 | 440.22 | 1,133,308.26 |

Does not include correction for passby trips

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Does not include double counting adjustment for internal trips

Analysis Year: 2010 Temperature (F): 40 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

| Land Use Type | Acreage | Trip Rate | Unit Type | No. Units | Total Trips | Total VMT |
|-------------------------|---------|-----------|------------------|-----------|-------------|--------------|
| Single family housing | 794.33 | 9.57 | dwelling | 2,383.00 | 22,805.31 | 194,978.56 |
| Apartments low rise | 29.44 | 6.90 | dwelling unit | 471.00 | 3,249.90 | 27,785.67 |
| Elementary school | | 1.28 | students unit | 4,515.00 | 5,779.20 | 44,962.17 |
| Junior high school | | 1.58 | students | 2,072.00 | 3,273.76 | 25,469.85 |
| High school | | 1.79 | students | 2,006.00 | 3,590.74 | 27,163.95 |
| Junior college (2 yrs) | | 1.16 | students | 7,133.00 | 8,274.28 | 61,705.44 |
| City park | | 1.59 | acres | 97.00 | 154.23 | 1,150.17 |
| Office park | | 15.01 | 1000 sq ft | 615.44 | 9,237.75 | 77,430.86 |
| General light industry | | 6.97 | 1000 sq ft | 47.75 | 332.82 | 2,803.99 |
| General heavy industry | | 7.50 | 1000 sq ft | 0.81 | 6.08 | 56.41 |
| Neighborhood Commercial | | 44.32 | 1000 sq ft | 1,526.12 | 67,637.64 | 500,045.05 |
| Community Commercial | | 44.32 | 1000 sq ft | 1,087.34 | 48,190.91 | 356,275.37 |
| PQP | | 16.01 | 1000 sq ft | 3.13 | 50.11 | 370.47 |
| | | | | | 172,582.73 | 1,320,197.96 |

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---------------------------|--------------|--------------|----------|--------|
| Light Auto | 39.0 | 2.1 | 97.6 | 0.3 |
| Light Truck < 3750 lbs | 20.9 | 4.3 | 86.1 | 9.6 |
| Light Truck 3751-5750 lbs | 20.4 | 2.0 | 97.5 | 0.5 |

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| | | | | |
|-------------------------------------|-----|------|------|-------|
| Med Truck 5751-8500 lbs | 9.1 | 1.1 | 97.8 | 1.1 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.2 | 0.0 | 63.6 | 36.4 |
| Lite-Heavy Truck 10,001-14,000 lbs | 1.0 | 0.0 | 40.0 | 60.0 |
| Med-Heavy Truck 14,001-33,000 lbs | 1.0 | 10.0 | 20.0 | 70.0 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 0.3 | 0.0 | 33.3 | 66.7 |
| Other Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Urban Bus | 0.0 | 0.0 | 0.0 | 0.0 |
| Motorcycle | 4.5 | 66.7 | 33.3 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.4 | 7.1 | 78.6 | 14.3 |

Travel Conditions

| | Residential | | | Commute | Commercial | |
|---------------------------------------|-------------|-----------|------------|---------|------------|----------|
| | Home-Work | Home-Shop | Home-Other | | Non-Work | Customer |
| Urban Trip Length (miles) | 10.8 | 7.3 | 7.5 | 9.5 | 7.4 | 7.4 |
| Rural Trip Length (miles) | 16.8 | 7.1 | 7.9 | 14.7 | 6.6 | 6.6 |
| Trip speeds (mph) | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 |
| % of Trips - Residential | 32.9 | 18.0 | 49.1 | | | |
| | | | | | | |
| % of Trips - Commercial (by land use) | | | | | | |
| Elementary school | | | | 20.0 | 10.0 | 70.0 |
| Junior high school | | | | 20.0 | 10.0 | 70.0 |
| High school | | | | 10.0 | 5.0 | 85.0 |
| Junior college (2 yrs) | | | | 5.0 | 2.5 | 92.5 |
| City park | | | | 5.0 | 2.5 | 92.5 |
| Office park | | | | 48.0 | 24.0 | 28.0 |

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| | | | |
|-------------------------|------|------|------|
| General light industry | 50.0 | 25.0 | 25.0 |
| General heavy industry | 90.0 | 5.0 | 5.0 |
| Neighborhood Commercial | 2.0 | 1.0 | 97.0 |
| Community Commercial | 2.0 | 1.0 | 97.0 |
| PQP | 2.0 | 1.0 | 97.0 |

Operational Changes to Defaults



FACILITY SEARCH RESULTS

Your Search Criteria:

Database year is 2008. District is FEATHER RIVER AQMD. County is YUBA.

Sorted by Facility Name (A to Z).

19 records returned.

[Download this data as a Comma Separated Value text file.](#)

| | Fac ID | District | Facility Name | City | TOG Tons/yr | ROG Tons/yr | CO Tons/yr | NOx Tons/yr | SOx Tons/yr | PM Tons/yr | PM10 Tons/yr |
|----|---------------|-----------------|----------------------------------|-------------|------------------------|------------------------|-----------------------|------------------------|------------------------|-----------------------|-------------------------|
| 1 | 37011 | Feather River | Akita Ent, Inc | Marysvil | 0 | 0 | 0 | 0 | 0 | 36.3 | 0 |
| 2 | 22002 | Feather River | Baldwin Contract | Marysvil | 1.1 | 1.1 | 0 | 0 | 0 | 1.5 | 1.5 |
| 3 | 3001 | Feather River | Baldwin Contract | Marysvil | 0 | 0 | 0 | 0 | 0 | 8.5 | 1.7 |
| 4 | 9999 | Feather River | Beale Afb W/aafe | Beale Af | 11.7 | 9 | 0 | 10.5 | 0 | 0.5 | 0.5 |
| 5 | 3003 | Feather River | Dan Garcia Co | Browns V | 0 | 0 | 0 | 0 | 0 | 21.6 | 0 |
| 6 | 6010 | Feather River | Dist 10 Dryer | Marysvil | 0.1 | 0 | 0 | 0 | 0 | 35 | 19.6 |
| 7 | 22005 | Feather River | Granite Construc | Marysvil | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | 20011 | Feather River | Livingston's Con | Olivehur | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 6011 | Feather River | Mathews Rice Dry | Marysvil | 0.1 | 0 | 0 | 0 | 0 | 38.4 | 23.9 |
| 10 | 3011 | Feather River | Nordic Ind | Smartvil | 0.1 | 0.1 | 0.2 | 1.7 | 0.1 | 0.6 | 0.3 |
| 11 | 23010 | Feather River | Pave Paws Cy2008 | Beale Af | 0.1 | 0.1 | 0 | 3.6 | 0 | 0.1 | 0.1 |
| 12 | 6013 | Feather River | Shintaffer Farms | Marysvil | | 0 | 0 | 0 | 0 | 10 | 5.2 |
| 13 | 3009 | Feather River | Silica Resources | Marysvil | 0.8 | 0.6 | 0 | 0 | 0 | 6.5 | 0 |
| 14 | 3007 | Feather River | Teichert Aggrega | Marysvil | 0 | 0 | 0 | 0 | 0 | 3.7 | 1.9 |
| 15 | 22003 | Feather River | Teichert Aggrega | Marysvil | 10.8 | 9.2 | 13.9 | 4.1 | 0 | 2.9 | 1.4 |
| 16 | 3019 | Feather River | Teichert Marysvi | Marysvil | 0 | 0 | 0 | 0 | 0 | 6.6 | 3.3 |
| 17 | 25001 | Feather River | Water Works Manu | Marysvil | 5.2 | 3 | 0.1 | 0.3 | 0 | 1.7 | 1.7 |
| 18 | 3005 | Feather River | Western Aggs, In | Marysvil | 0.1 | 0.1 | 0 | 0 | 0 | 6 | 2.4 |
| 19 | 37014 | Feather River | Yuba River Mould | Marysvil | 0 | 0 | 0 | 0 | 0 | 72.8 | 3.1 |

[\[Start a new search\]](#)

Please call us regarding errors at : (916) 322-2594

[ARB Homepage](#)

A department of the California Environmental Protection Agency

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: L:\-Practice Group Related\AQ\1 Projects\Yuba County GP\AQ\URBEMIS\Yuba 2030 GPU Full Build\Yuba Cnty 2030 GPU Full Build

Project Name: Yuba County 2030 GPU Full Buildout

Project Location: Yuba County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (lbs/day, unmitigated) | 2,699.14 | 620.57 | 326.12 | 0.01 | 1.17 | 1.16 | 780,744.39 |

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (lbs/day, unmitigated) | 2,699.14 | 620.57 | 326.12 | 0.01 | 1.17 | 1.16 | 780,744.39 |

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

| <u>Source</u> | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-----------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| Natural Gas | 47.24 | 620.57 | 326.12 | 0.01 | 1.17 | 1.16 | 780,744.39 |
| Hearth | | | | | | | |
| Landscaping - No Winter Emissions | | | | | | | |
| Consumer Products | 1,960.20 | | | | | | |
| Architectural Coatings | 691.70 | | | | | | |
| TOTALS (lbs/day, unmitigated) | 2,699.14 | 620.57 | 326.12 | 0.01 | 1.17 | 1.16 | 780,744.39 |

Area Source Changes to Defaults