**11/3/2009 2:42:12 PM**

Urbemis 2007 Version 9.2.4

Summary Report for Summer Emissions (Pounds/Day)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 | PM2.5 Dust | PM2.5 Exhaust | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 TOTALS (lbs/day unmitigated) | 12.99 | 148.29 | 62.09 | 0.12 | 115.26 | 6.46 | 121.72 | 24.13 | 5.94 | 30.07 | 18,311.78 |
| 2010 TOTALS (lbs/day mitigated) | 12.99 | 148.29 | 62.09 | 0.12 | 30.77 | 6.46 | 37.23 | 6.48 | 5.94 | 12.42 | 18,311.78 |
| 2011 TOTALS (lbs/day unmitigated) | 6.59 | 40.73 | 33.10 | 0.01 | 80.06 | 2.38 | 82.44 | 16.73 | 2.18 | 18.91 | 5,244.51 |
| 2011 TOTALS (lbs/day mitigated) | 6.59 | 39.20 | 33.10 | 0.01 | 21.19 | 2.07 | 23.26 | 4.43 | 1.90 | 6.34 | 5,244.51 |
| 2012 TOTALS (lbs/day unmitigated) | 9.05 | 53.07 | 41.58 | 0.02 | 80.08 | 3.39 | 83.48 | 16.74 | 3.12 | 19.85 | 6,815.08 |
| 2012 TOTALS (lbs/day mitigated) | 9.05 | 49.74 | 41.58 | 0.02 | 21.21 | 2.55 | 23.76 | 4.44 | 2.35 | 6.79 | 6,815.08 |

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AREA SOURCE EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 1.27 | 1.55 | 4.36 | 0.00 | 0.01 | 0.01 | 1,815.22 |
| TOTALS (lbs/day, mitigated) | 1.18 | 1.55 | 4.36 | 0.00 | 0.01 | 0.01 | 1,815.22 |
| Percent Reduction | 7.09 | 0.00 | 0.00 | NaN | 0.00 | 0.00 | 0.00 |

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 43.99 | 50.07 | 431.85 | 0.46 | 80.01 | 15.46 | 47,688.69 |
| TOTALS (lbs/day, mitigated) | 39.97 | 45.36 | 391.21 | 0.42 | 72.48 | 14.01 | 43,201.22 |
| Percent Reduction | 9.14 | 9.41 | 9.41 | 8.70 | 9.41 | 9.38 | 9.41 |

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 45.26 | 51.62 | 436.21 | 0.46 | 80.02 | 15.47 | 49,503.91 |
| TOTALS (lbs/day, mitigated) | 41.15 | 46.91 | 395.57 | 0.42 | 72.49 | 14.02 | 45,016.44 |
| Percent Reduction | 9.08 | 9.12 | 9.32 | 8.70 | 9.41 | 9.37 | 9.06 |

**11/3/2009 2:42:33 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 Total | PM2.5 Dust | PM2.5 Exhaust | PM2.5 Total | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 5/3/2010-7/30/2010 Active Days: 65 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:42:33 PM**

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/2/2010-8/19/2010 Active Days: 14 | 4.21 | 32.77 | 19.02 | 0.00 | 80.01 | 1.84 | 81.85 | 16.71 | 1.69 | 18.40 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:42:33 PM**

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/20/2010-9/20/2010<br>Active Days: 22 | **12.99** | **148.29** | **62.09** | **0.12** | **115.26** | **6.46** | **121.72** | **24.13** | **5.94** | **30.07** | **18,311.78** |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/20/2010-09/20/2010 | 8.78 | 115.52 | 43.06 | 0.12 | 35.25 | 4.62 | 39.87 | 7.42 | 4.25 | 11.66 | 15,159.62 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 34.80 | 0.00 | 34.80 | 7.27 | 0.00 | 7.27 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| Mass Grading On Road Diesel | 5.75 | 90.48 | 29.67 | 0.12 | 0.45 | 3.36 | 3.81 | 0.15 | 3.09 | 3.24 | 12,810.03 |
| Mass Grading Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/21/2010-11/1/2010 Active Days: 30 | 4.21 | 32.77 | 19.02 | 0.00 | 80.01 | 1.84 | 81.85 | 16.71 | 1.69 | 18.40 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 11/2/2010-12/31/2010 Active Days: 44 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 1/3/2011-10/31/2011 Active Days: 216 | 2.85 | 23.48 | 12.82 | 0.00 | 80.00 | 1.17 | 81.18 | 16.71 | 1.08 | 17.79 | 2,349.64 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 23.48 | 12.82 | 0.00 | 80.00 | 1.17 | 81.18 | 16.71 | 1.08 | 17.79 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 23.44 | 11.96 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.08 | 1.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 11/1/2011-12/30/2011<br>Active Days: 44 | 6.59 | 40.73 | 33.10 | 0.01 | 80.06 | 2.38 | 82.44 | 16.73 | 2.18 | 18.91 | 5,244.51 |
| Building 11/01/2011-11/01/2012 | 3.74 | 17.25 | 20.29 | 0.01 | 0.06 | 1.20 | 1.26 | 0.02 | 1.10 | 1.13 | 2,894.88 |
| Building Off Road Diesel | 3.39 | 15.67 | 10.85 | 0.00 | 0.00 | 1.14 | 1.14 | 0.00 | 1.05 | 1.05 | 1,621.20 |
| Building Vendor Trips | 0.09 | 1.13 | 0.86 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.04 | 0.04 | 252.11 |
| Building Worker Trips | 0.27 | 0.45 | 8.58 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.57 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 23.48 | 12.82 | 0.00 | 80.00 | 1.17 | 81.18 | 16.71 | 1.08 | 17.79 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 23.44 | 11.96 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.08 | 1.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |
| Time Slice 1/2/2012-6/29/2012<br>Active Days: 130 | 6.17 | 38.20 | 31.47 | 0.01 | 80.06 | 2.17 | 82.24 | 16.73 | 2.00 | 18.73 | 5,244.93 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 21.99 | 12.30 | 0.00 | 80.00 | 1.07 | 81.08 | 16.71 | 0.99 | 17.70 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 21.95 | 11.51 | 0.00 | 0.00 | 1.07 | 1.07 | 0.00 | 0.99 | 0.99 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |

**11/3/2009 2:42:33 PM**

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 7/2/2012-8/1/2012 Active Days: 23 | 9.05 | 53.07 | 41.58 | 0.02 | 80.08 | 3.39 | 83.48 | 16.74 | 3.12 | 19.85 | 6,815.08 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 14.87 | 10.11 | 0.00 | 0.02 | 1.22 | 1.24 | 0.01 | 1.12 | 1.13 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 13.48 | 8.10 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.07 | 1.07 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 21.99 | 12.30 | 0.00 | 80.00 | 1.07 | 81.08 | 16.71 | 0.99 | 17.70 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 21.95 | 11.51 | 0.00 | 0.00 | 1.07 | 1.07 | 0.00 | 0.99 | 0.99 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |
| Time Slice 8/2/2012-8/31/2012 Active Days: 22 | 6.33 | 31.09 | 29.28 | 0.02 | 0.08 | 2.32 | 2.40 | 0.03 | 2.13 | 2.16 | 4,465.40 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 14.87 | 10.11 | 0.00 | 0.02 | 1.22 | 1.24 | 0.01 | 1.12 | 1.13 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 13.48 | 8.10 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.07 | 1.07 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

**11/3/2009 2:42:33 PM**

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/3/2012-11/1/2012<br>Active Days: 44 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

## Phase Assumptions

Phase: Demolition 5/1/2010 - 11/1/2010 - Default Fine Site Grading Description

Building Volume Total (cubic feet): 0

Building Volume Daily (cubic feet): 0

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description

Total Acres Disturbed: 6.89

Maximum Daily Acreage Disturbed: 4

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 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 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: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export

Total Acres Disturbed: 1.6

Maximum Daily Acreage Disturbed: 1.74

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

**11/3/2009 2:42:33 PM**

On Road Truck Travel (VMT): 3181.82

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 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: Paving 7/1/2012 - 9/1/2012 - Default Paving Description

Acres to be Paved: 9

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

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

**11/3/2009 2:42:45 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 Total | PM2.5 Dust | PM2.5 Exhaust | PM2.5 Total | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 5/3/2010-7/30/2010 Active Days: 65 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:42:45 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/2/2010-8/19/2010 Active Days: 14 | 4.21 | 32.77 | 19.02 | 0.00 | 21.13 | 1.84 | 22.97 | 4.41 | 1.69 | 6.11 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 21.13 | 1.25 | 22.38 | 4.41 | 1.15 | 5.56 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:42:45 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/20/2010-9/20/2010<br>Active Days: 22 | **12.99** | **148.29** | **62.09** | **0.12** | 30.77 | **6.46** | 37.23 | 6.48 | **5.94** | 12.42 | **18,311.78** |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 21.13 | 1.25 | 22.38 | 4.41 | 1.15 | 5.56 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/20/2010-09/20/2010 | 8.78 | 115.52 | 43.06 | 0.12 | 9.64 | 4.62 | 14.26 | 2.07 | 4.25 | 6.31 | 15,159.62 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 9.19 | 0.00 | 9.19 | 1.92 | 0.00 | 1.92 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| Mass Grading On Road Diesel | 5.75 | 90.48 | 29.67 | 0.12 | 0.45 | 3.36 | 3.81 | 0.15 | 3.09 | 3.24 | 12,810.03 |
| Mass Grading Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:42:45 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/21/2010-11/1/2010 Active Days: 30 | 4.21 | 32.77 | 19.02 | 0.00 | 21.13 | 1.84 | 22.97 | 4.41 | 1.69 | 6.11 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 21.13 | 1.25 | 22.38 | 4.41 | 1.15 | 5.56 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 11/2/2010-12/31/2010 Active Days: 44 | 3.03 | 25.04 | 13.40 | 0.00 | 21.13 | 1.25 | 22.38 | 4.41 | 1.15 | 5.56 | 2,349.59 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 21.13 | 1.25 | 22.38 | 4.41 | 1.15 | 5.56 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 1/3/2011-10/31/2011 Active Days: 216 | 2.85 | 23.48 | 12.82 | 0.00 | 21.13 | 1.17 | 22.30 | 4.41 | 1.08 | 5.49 | 2,349.64 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 23.48 | 12.82 | 0.00 | 21.13 | 1.17 | 22.30 | 4.41 | 1.08 | 5.49 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 23.44 | 11.96 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.08 | 1.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |

**11/3/2009 2:42:45 PM**

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 11/1/2011-12/30/2011 Active Days: 44 | 6.59 | 39.20 | 33.10 | 0.01 | 21.19 | 2.07 | 23.26 | 4.43 | 1.90 | 6.34 | 5,244.51 |
| Building 11/01/2011-11/01/2012 | 3.74 | 15.72 | 20.29 | 0.01 | 0.06 | 0.90 | 0.96 | 0.02 | 0.82 | 0.84 | 2,894.88 |
| Building Off Road Diesel | 3.39 | 14.14 | 10.85 | 0.00 | 0.00 | 0.83 | 0.83 | 0.00 | 0.76 | 0.76 | 1,621.20 |
| Building Vendor Trips | 0.09 | 1.13 | 0.86 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.04 | 0.04 | 252.11 |
| Building Worker Trips | 0.27 | 0.45 | 8.58 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.57 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 23.48 | 12.82 | 0.00 | 21.13 | 1.17 | 22.30 | 4.41 | 1.08 | 5.49 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 23.44 | 11.96 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.08 | 1.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |
| Time Slice 1/2/2012-6/29/2012 Active Days: 130 | 6.17 | 36.79 | 31.47 | 0.01 | 21.19 | 1.90 | 23.09 | 4.43 | 1.75 | 6.18 | 5,244.93 |
| Building 11/01/2011-11/01/2012 | 3.46 | 14.80 | 19.17 | 0.01 | 0.06 | 0.83 | 0.89 | 0.02 | 0.76 | 0.78 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 13.40 | 10.52 | 0.00 | 0.00 | 0.76 | 0.76 | 0.00 | 0.70 | 0.70 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 21.99 | 12.30 | 0.00 | 21.13 | 1.07 | 22.20 | 4.41 | 0.99 | 5.40 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 21.95 | 11.51 | 0.00 | 0.00 | 1.07 | 1.07 | 0.00 | 0.99 | 0.99 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |

**11/3/2009 2:42:45 PM**

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 7/2/2012-8/1/2012 Active Days: 23 | 9.05 | 49.74 | 41.58 | 0.02 | 21.21 | 2.55 | 23.76 | 4.44 | 2.35 | 6.79 | 6,815.08 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 12.95 | 10.11 | 0.00 | 0.02 | 0.65 | 0.67 | 0.01 | 0.60 | 0.61 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 11.57 | 8.10 | 0.00 | 0.00 | 0.60 | 0.60 | 0.00 | 0.55 | 0.55 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 14.80 | 19.17 | 0.01 | 0.06 | 0.83 | 0.89 | 0.02 | 0.76 | 0.78 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 13.40 | 10.52 | 0.00 | 0.00 | 0.76 | 0.76 | 0.00 | 0.70 | 0.70 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 21.99 | 12.30 | 0.00 | 21.13 | 1.07 | 22.20 | 4.41 | 0.99 | 5.40 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 21.95 | 11.51 | 0.00 | 0.00 | 1.07 | 1.07 | 0.00 | 0.99 | 0.99 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |
| Time Slice 8/2/2012-8/31/2012 Active Days: 22 | 6.33 | 27.75 | 29.28 | 0.02 | 0.08 | 1.48 | 1.56 | 0.03 | 1.36 | 1.39 | 4,465.40 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 12.95 | 10.11 | 0.00 | 0.02 | 0.65 | 0.67 | 0.01 | 0.60 | 0.61 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 11.57 | 8.10 | 0.00 | 0.00 | 0.60 | 0.60 | 0.00 | 0.55 | 0.55 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 14.80 | 19.17 | 0.01 | 0.06 | 0.83 | 0.89 | 0.02 | 0.76 | 0.78 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 13.40 | 10.52 | 0.00 | 0.00 | 0.76 | 0.76 | 0.00 | 0.70 | 0.70 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

**11/3/2009 2:42:45 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/3/2012-11/1/2012<br>Active Days: 44 | 3.46 | 14.80 | 19.17 | 0.01 | 0.06 | 0.83 | 0.89 | 0.02 | 0.76 | 0.78 | 2,895.26 |
| Building 11/01/2011-11/01/2012 | 3.46 | 14.80 | 19.17 | 0.01 | 0.06 | 0.83 | 0.89 | 0.02 | 0.76 | 0.78 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 13.40 | 10.52 | 0.00 | 0.00 | 0.76 | 0.76 | 0.00 | 0.70 | 0.70 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Paving 7/1/2012 - 9/1/2012 - Default Paving Description

For Pavers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Paving Equipment, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rollers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

The following mitigation measures apply to Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

For Cranes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Forklifts, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

**11/3/2009 2:42:45 PM**

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:
NOX: 15% PM10: 50% PM25: 50%

Phase Assumptions

Phase: Demolition 5/1/2010 - 11/1/2010 - Default Fine Site Grading Description
Building Volume Total (cubic feet): 0
Building Volume Daily (cubic feet): 0
On Road Truck Travel (VMT): 0
Off-Road Equipment:
1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description
Total Acres Disturbed: 6.89
Maximum Daily Acreage Disturbed: 4
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 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 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: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export
Total Acres Disturbed: 1.6
Maximum Daily Acreage Disturbed: 1.74
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 3181.82
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

**11/3/2009 2:42:45 PM**

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 7/1/2012 - 9/1/2012 - Default Paving Description

Acres to be Paved: 9

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

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

**11/3/2009 2:42:52 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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

| Source | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| Natural Gas | 0.11 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |
| Hearth - No Summer Emissions | | | | | | | |
| Landscape | 0.25 | 0.04 | 3.09 | 0.00 | 0.01 | 0.01 | 5.62 |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 0.91 | | | | | | |
| TOTALS (lbs/day, unmitigated) | 1.27 | 1.55 | 4.36 | 0.00 | 0.01 | 0.01 | 1,815.22 |

Area Source Changes to Defaults

**11/3/2009 2:42:59 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Summer Area Source Mitigated Emissions (Pounds/Day)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

| Source | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| Natural Gas | 0.11 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |
| Hearth - No Summer Emissions | | | | | | | |
| Landscape | 0.25 | 0.04 | 3.09 | 0.00 | 0.01 | 0.01 | 5.62 |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 0.82 | | | | | | |
| TOTALS (lbs/day, mitigated) | 1.18 | 1.55 | 4.36 | 0.00 | 0.01 | 0.01 | 1,815.22 |

Area Source Mitigation Measures Selected

| Mitigation Description | Percent Reduction |
|---|---|
| For Nonresidential Interior Use Low VOC Coating | 10.00 |
| For Nonresidential Exterior Use Low VOC Coating | 10.00 |

Area Source Changes to Defaults

**11/3/2009 2:43:07 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

| Source | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|---|---|---|---|---|---|---|---|
| Free-standing discount superstore | 34.63 | 41.62 | 358.21 | 0.39 | 68.23 | 13.17 | 40,490.34 |
| Gasoline/service station | 9.36 | 8.45 | 73.64 | 0.07 | 11.78 | 2.29 | 7,198.35 |
| TOTALS (lbs/day, unmitigated) | 43.99 | 50.07 | 431.85 | 0.46 | 80.01 | 15.46 | 47,688.69 |

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2013 Temperature (F): 85 Season: Summer

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 |
|---|---|---|---|---|---|---|
| Free-standing discount superstore | | 53.09 | 1000 sq ft | 155.00 | 8,228.95 | 39,574.23 |
| Gasoline/service station | | 168.56 | pumps | 18.00 | 3,034.08 | 6,819.01 |
| | | | | | 11,263.03 | 46,393.24 |

**11/3/2009 2:43:07 PM**

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Auto | 39.8 | 0.5 | 99.2 | 0.3 |
| Light Truck < 3750 lbs | 14.1 | 1.4 | 91.5 | 7.1 |
| Light Truck 3751-5750 lbs | 22.4 | 0.4 | 99.2 | 0.4 |
| Med Truck 5751-8500 lbs | 11.1 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.6 | 0.0 | 73.1 | 26.9 |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.9 | 0.0 | 44.4 | 55.6 |
| Med-Heavy Truck 14,001-33,000 lbs | 0.9 | 0.0 | 22.2 | 77.8 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 1.2 | 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 | 5.5 | 54.5 | 45.5 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.3 | 0.0 | 84.6 | 15.4 |

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 | | | |

**11/3/2009 2:43:07 PM**

Travel Conditions

| | Residential | | | Commercial | | |
|---|---|---|---|---|---|---|
| | Home-Work | Home-Shop | Home-Other | Commute | Non-Work | Customer |
| % of Trips - Commercial (by land use) | | | | | | |
| Free-standing discount superstore | | | | 2.0 | 1.0 | 97.0 |
| Gasoline/service station | | | | 2.0 | 1.0 | 97.0 |

Operational Changes to Defaults

**11/3/2009 2:43:15 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Summer Operational Mitigated Emissions (Pounds/Day)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

| Source | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|---|---|---|---|---|---|---|---|
| Free-standing discount superstore | 31.48 | 37.71 | 324.50 | 0.36 | 61.81 | 11.93 | 36,680.23 |
| Gasoline/service station | 8.49 | 7.65 | 66.71 | 0.06 | 10.67 | 2.08 | 6,520.99 |
| TOTALS (lbs/day, mitigated) | 39.97 | 45.36 | 391.21 | 0.42 | 72.48 | 14.01 | 43,201.22 |

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2013 Temperature (F): 85 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Operational Mitigation Options Selected

Residential Mitigation Measures

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

---

**11/3/2009 2:43:15 PM**

Nonresidential Mitigation Measures

Percent Reduction in Trips is 5.11%

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are 1098.

The employment for the study area (within a 1/2 mile radius of the project) is 841.

Non-Residential Local-Serving Retail Mitigation

---

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

---

Percent Reduction in Trips is 0.01%

Inputs Selected:

The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 1

The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0

The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

---

Percent Reduction in Trips is 2.29%

**11/3/2009 2:43:15 PM**

Nonresidential Mitigation Measures

Inputs Selected:

The Number of Intersections per Square Mile is 588

The Percent of Streets with Sidewalks on One Side is 8%

The Percent of Streets with Sidewalks on Both Sides is 19%

The Percent of Arterials/Collectors with Bike Lanes or where Suitable,

Direct Parallel Routes Exist is 8%

Summary of Land Uses

| Land Use Type | Acreage | Trip Rate | Unit Type | No. Units | Total Trips | Total VMT |
|---|---|---|---|---|---|---|
| Free-standing discount superstore | | 48.09 | 1000 sq ft | 155.00 | 7,454.61 | 35,850.33 |
| Gasoline/service station | | 152.70 | pumps | 18.00 | 2,748.58 | 6,177.35 |
| | | | | | 10,203.19 | 42,027.68 |

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Auto | 39.8 | 0.5 | 99.2 | 0.3 |
| Light Truck < 3750 lbs | 14.1 | 1.4 | 91.5 | 7.1 |
| Light Truck 3751-5750 lbs | 22.4 | 0.4 | 99.2 | 0.4 |
| Med Truck 5751-8500 lbs | 11.1 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.6 | 0.0 | 73.1 | 26.9 |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.9 | 0.0 | 44.4 | 55.6 |
| Med-Heavy Truck 14,001-33,000 lbs | 0.9 | 0.0 | 22.2 | 77.8 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 1.2 | 0.0 | 0.0 | 100.0 |
| Other Bus | 0.1 | 0.0 | 0.0 | 100.0 |

**11/3/2009 2:43:15 PM**

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Urban Bus | 0.0 | 0.0 | 0.0 | 0.0 |
| Motorcycle | 5.5 | 54.5 | 45.5 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.3 | 0.0 | 84.6 | 15.4 |

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) | | | | | | |
| Free-standing discount superstore | | | | 2.0 | 1.0 | 97.0 |
| Gasoline/service station | | | | 2.0 | 1.0 | 97.0 |

Operational Changes to Defaults

**11/3/2009 2:43:24 PM**

Urbemis 2007 Version 9.2.4

Summary Report for Winter Emissions (Pounds/Day)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 | PM2.5 Dust | PM2.5 Exhaust | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 TOTALS (lbs/day unmitigated) | 12.99 | 148.29 | 62.09 | 0.12 | 115.26 | 6.46 | 121.72 | 24.13 | 5.94 | 30.07 | 18,311.78 |
| 2010 TOTALS (lbs/day mitigated) | 12.99 | 148.29 | 62.09 | 0.12 | 30.77 | 6.46 | 37.23 | 6.48 | 5.94 | 12.42 | 18,311.78 |
| 2011 TOTALS (lbs/day unmitigated) | 6.59 | 40.73 | 33.10 | 0.01 | 80.06 | 2.38 | 82.44 | 16.73 | 2.18 | 18.91 | 5,244.51 |
| 2011 TOTALS (lbs/day mitigated) | 6.59 | 39.20 | 33.10 | 0.01 | 21.19 | 2.07 | 23.26 | 4.43 | 1.90 | 6.34 | 5,244.51 |
| 2012 TOTALS (lbs/day unmitigated) | 9.05 | 53.07 | 41.58 | 0.02 | 80.08 | 3.39 | 83.48 | 16.74 | 3.12 | 19.85 | 6,815.08 |
| 2012 TOTALS (lbs/day mitigated) | 9.05 | 49.74 | 41.58 | 0.02 | 21.21 | 2.55 | 23.76 | 4.44 | 2.35 | 6.79 | 6,815.08 |

**11/3/2009 2:43:24 PM**

AREA SOURCE EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 1.02 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |
| TOTALS (lbs/day, mitigated) | 0.93 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |
| Percent Reduction | 8.82 | 0.00 | 0.00 | NaN | NaN | NaN | 0.00 |

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 56.33 | 71.27 | 522.06 | 0.41 | 80.01 | 15.46 | 41,624.79 |
| TOTALS (lbs/day, mitigated) | 51.03 | 64.57 | 472.94 | 0.38 | 72.48 | 14.01 | 37,707.93 |
| Percent Reduction | 9.41 | 9.40 | 9.41 | 7.32 | 9.41 | 9.38 | 9.41 |

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 57.35 | 72.78 | 523.33 | 0.41 | 80.01 | 15.46 | 43,434.39 |
| TOTALS (lbs/day, mitigated) | 51.96 | 66.08 | 474.21 | 0.38 | 72.48 | 14.01 | 39,517.53 |
| Percent Reduction | 9.40 | 9.21 | 9.39 | 7.32 | 9.41 | 9.38 | 9.02 |

**11/3/2009 2:43:35 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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)

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 Total | PM2.5 Dust | PM2.5 Exhaust | PM2.5 Total | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 5/3/2010-7/30/2010 Active Days: 65 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:43:35 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/2/2010-8/19/2010 Active Days: 14 | 4.21 | 32.77 | 19.02 | 0.00 | 80.01 | 1.84 | 81.85 | 16.71 | 1.69 | 18.40 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:43:35 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/20/2010-9/20/2010<br>Active Days: 22 | **12.99** | **148.29** | **62.09** | **0.12** | **115.26** | **6.46** | **121.72** | **24.13** | **5.94** | **30.07** | **18,311.78** |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/20/2010-09/20/2010 | 8.78 | 115.52 | 43.06 | 0.12 | 35.25 | 4.62 | 39.87 | 7.42 | 4.25 | 11.66 | 15,159.62 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 34.80 | 0.00 | 34.80 | 7.27 | 0.00 | 7.27 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| Mass Grading On Road Diesel | 5.75 | 90.48 | 29.67 | 0.12 | 0.45 | 3.36 | 3.81 | 0.15 | 3.09 | 3.24 | 12,810.03 |
| Mass Grading Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:43:35 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/21/2010-11/1/2010 Active Days: 30 | 4.21 | 32.77 | 19.02 | 0.00 | 80.01 | 1.84 | 81.85 | 16.71 | 1.69 | 18.40 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 11/2/2010-12/31/2010 Active Days: 44 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 1/3/2011-10/31/2011 Active Days: 216 | 2.85 | 23.48 | 12.82 | 0.00 | 80.00 | 1.17 | 81.18 | 16.71 | 1.08 | 17.79 | 2,349.64 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 23.48 | 12.82 | 0.00 | 80.00 | 1.17 | 81.18 | 16.71 | 1.08 | 17.79 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 23.44 | 11.96 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.08 | 1.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |

**11/3/2009 2:43:35 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 11/1/2011-12/30/2011<br>Active Days: 44 | 6.59 | 40.73 | 33.10 | 0.01 | 80.06 | 2.38 | 82.44 | 16.73 | 2.18 | 18.91 | 5,244.51 |
| Building 11/01/2011-11/01/2012 | 3.74 | 17.25 | 20.29 | 0.01 | 0.06 | 1.20 | 1.26 | 0.02 | 1.10 | 1.13 | 2,894.88 |
| Building Off Road Diesel | 3.39 | 15.67 | 10.85 | 0.00 | 0.00 | 1.14 | 1.14 | 0.00 | 1.05 | 1.05 | 1,621.20 |
| Building Vendor Trips | 0.09 | 1.13 | 0.86 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.04 | 0.04 | 252.11 |
| Building Worker Trips | 0.27 | 0.45 | 8.58 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.57 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 23.48 | 12.82 | 0.00 | 80.00 | 1.17 | 81.18 | 16.71 | 1.08 | 17.79 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 23.44 | 11.96 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.08 | 1.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |
| Time Slice 1/2/2012-6/29/2012<br>Active Days: 130 | 6.17 | 38.20 | 31.47 | 0.01 | 80.06 | 2.17 | 82.24 | 16.73 | 2.00 | 18.73 | 5,244.93 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 21.99 | 12.30 | 0.00 | 80.00 | 1.07 | 81.08 | 16.71 | 0.99 | 17.70 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 21.95 | 11.51 | 0.00 | 0.00 | 1.07 | 1.07 | 0.00 | 0.99 | 0.99 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |

**11/3/2009 2:43:35 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 7/2/2012-8/1/2012 Active Days: 23 | 9.05 | 53.07 | 41.58 | 0.02 | 80.08 | 3.39 | 83.48 | 16.74 | 3.12 | 19.85 | 6,815.08 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 14.87 | 10.11 | 0.00 | 0.02 | 1.22 | 1.24 | 0.01 | 1.12 | 1.13 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 13.48 | 8.10 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.07 | 1.07 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 21.99 | 12.30 | 0.00 | 80.00 | 1.07 | 81.08 | 16.71 | 0.99 | 17.70 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 21.95 | 11.51 | 0.00 | 0.00 | 1.07 | 1.07 | 0.00 | 0.99 | 0.99 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |
| Time Slice 8/2/2012-8/31/2012 Active Days: 22 | 6.33 | 31.09 | 29.28 | 0.02 | 0.08 | 2.32 | 2.40 | 0.03 | 2.13 | 2.16 | 4,465.40 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 14.87 | 10.11 | 0.00 | 0.02 | 1.22 | 1.24 | 0.01 | 1.12 | 1.13 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 13.48 | 8.10 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.07 | 1.07 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

**11/3/2009 2:43:35 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/3/2012-11/1/2012<br>Active Days: 44 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

## Phase Assumptions

Phase: Demolition 5/1/2010 - 11/1/2010 - Default Fine Site Grading Description

Building Volume Total (cubic feet): 0

Building Volume Daily (cubic feet): 0

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description

Total Acres Disturbed: 6.89

Maximum Daily Acreage Disturbed: 4

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 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 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: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export

Total Acres Disturbed: 1.6

Maximum Daily Acreage Disturbed: 1.74

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

**11/3/2009 2:43:35 PM**

On Road Truck Travel (VMT): 3181.82

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 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: Paving 7/1/2012 - 9/1/2012 - Default Paving Description

Acres to be Paved: 9

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

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

**11/3/2009 2:43:45 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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, Mitigated)

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 Total | PM2.5 Dust | PM2.5 Exhaust | PM2.5 Total | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 5/3/2010-7/30/2010 Active Days: 65 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:43:45 PM**

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/2/2010-8/19/2010 Active Days: 14 | 4.21 | 32.77 | 19.02 | 0.00 | 21.13 | 1.84 | 22.97 | 4.41 | 1.69 | 6.11 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 21.13 | 1.25 | 22.38 | 4.41 | 1.15 | 5.56 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:43:45 PM**

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/20/2010-9/20/2010<br>Active Days: 22 | **12.99** | **148.29** | **62.09** | **0.12** | 30.77 | **6.46** | 37.23 | 6.48 | **5.94** | 12.42 | **18,311.78** |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 21.13 | 1.25 | 22.38 | 4.41 | 1.15 | 5.56 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/20/2010-09/20/2010 | 8.78 | 115.52 | 43.06 | 0.12 | 9.64 | 4.62 | 14.26 | 2.07 | 4.25 | 6.31 | 15,159.62 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 9.19 | 0.00 | 9.19 | 1.92 | 0.00 | 1.92 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| Mass Grading On Road Diesel | 5.75 | 90.48 | 29.67 | 0.12 | 0.45 | 3.36 | 3.81 | 0.15 | 3.09 | 3.24 | 12,810.03 |
| Mass Grading Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:43:45 PM**

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/21/2010-11/1/2010 Active Days: 30 | 4.21 | 32.77 | 19.02 | 0.00 | 21.13 | 1.84 | 22.97 | 4.41 | 1.69 | 6.11 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 21.13 | 1.25 | 22.38 | 4.41 | 1.15 | 5.56 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 11/2/2010-12/31/2010 Active Days: 44 | 3.03 | 25.04 | 13.40 | 0.00 | 21.13 | 1.25 | 22.38 | 4.41 | 1.15 | 5.56 | 2,349.59 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 21.13 | 1.25 | 22.38 | 4.41 | 1.15 | 5.56 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 1/3/2011-10/31/2011 Active Days: 216 | 2.85 | 23.48 | 12.82 | 0.00 | 21.13 | 1.17 | 22.30 | 4.41 | 1.08 | 5.49 | 2,349.64 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 23.48 | 12.82 | 0.00 | 21.13 | 1.17 | 22.30 | 4.41 | 1.08 | 5.49 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 23.44 | 11.96 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.08 | 1.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |

**11/3/2009 2:43:45 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 11/1/2011-12/30/2011 Active Days: 44 | 6.59 | 39.20 | 33.10 | 0.01 | 21.19 | 2.07 | 23.26 | 4.43 | 1.90 | 6.34 | 5,244.51 |
| Building 11/01/2011-11/01/2012 | 3.74 | 15.72 | 20.29 | 0.01 | 0.06 | 0.90 | 0.96 | 0.02 | 0.82 | 0.84 | 2,894.88 |
| Building Off Road Diesel | 3.39 | 14.14 | 10.85 | 0.00 | 0.00 | 0.83 | 0.83 | 0.00 | 0.76 | 0.76 | 1,621.20 |
| Building Vendor Trips | 0.09 | 1.13 | 0.86 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.04 | 0.04 | 252.11 |
| Building Worker Trips | 0.27 | 0.45 | 8.58 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.57 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 23.48 | 12.82 | 0.00 | 21.13 | 1.17 | 22.30 | 4.41 | 1.08 | 5.49 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 23.44 | 11.96 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.08 | 1.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |
| Time Slice 1/2/2012-6/29/2012 Active Days: 130 | 6.17 | 36.79 | 31.47 | 0.01 | 21.19 | 1.90 | 23.09 | 4.43 | 1.75 | 6.18 | 5,244.93 |
| Building 11/01/2011-11/01/2012 | 3.46 | 14.80 | 19.17 | 0.01 | 0.06 | 0.83 | 0.89 | 0.02 | 0.76 | 0.78 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 13.40 | 10.52 | 0.00 | 0.00 | 0.76 | 0.76 | 0.00 | 0.70 | 0.70 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 21.99 | 12.30 | 0.00 | 21.13 | 1.07 | 22.20 | 4.41 | 0.99 | 5.40 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 21.95 | 11.51 | 0.00 | 0.00 | 1.07 | 1.07 | 0.00 | 0.99 | 0.99 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |

**11/3/2009 2:43:45 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 7/2/2012-8/1/2012 Active Days: 23 | 9.05 | 49.74 | 41.58 | 0.02 | 21.21 | 2.55 | 23.76 | 4.44 | 2.35 | 6.79 | 6,815.08 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 12.95 | 10.11 | 0.00 | 0.02 | 0.65 | 0.67 | 0.01 | 0.60 | 0.61 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 11.57 | 8.10 | 0.00 | 0.00 | 0.60 | 0.60 | 0.00 | 0.55 | 0.55 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 14.80 | 19.17 | 0.01 | 0.06 | 0.83 | 0.89 | 0.02 | 0.76 | 0.78 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 13.40 | 10.52 | 0.00 | 0.00 | 0.76 | 0.76 | 0.00 | 0.70 | 0.70 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 21.99 | 12.30 | 0.00 | 21.13 | 1.07 | 22.20 | 4.41 | 0.99 | 5.40 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 21.12 | 0.00 | 21.12 | 4.41 | 0.00 | 4.41 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 21.95 | 11.51 | 0.00 | 0.00 | 1.07 | 1.07 | 0.00 | 0.99 | 0.99 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |
| Time Slice 8/2/2012-8/31/2012 Active Days: 22 | 6.33 | 27.75 | 29.28 | 0.02 | 0.08 | 1.48 | 1.56 | 0.03 | 1.36 | 1.39 | 4,465.40 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 12.95 | 10.11 | 0.00 | 0.02 | 0.65 | 0.67 | 0.01 | 0.60 | 0.61 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 11.57 | 8.10 | 0.00 | 0.00 | 0.60 | 0.60 | 0.00 | 0.55 | 0.55 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 14.80 | 19.17 | 0.01 | 0.06 | 0.83 | 0.89 | 0.02 | 0.76 | 0.78 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 13.40 | 10.52 | 0.00 | 0.00 | 0.76 | 0.76 | 0.00 | 0.70 | 0.70 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

**11/3/2009 2:43:45 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/3/2012-11/1/2012<br>Active Days: 44 | 3.46 | 14.80 | 19.17 | 0.01 | 0.06 | 0.83 | 0.89 | 0.02 | 0.76 | 0.78 | 2,895.26 |
| Building 11/01/2011-11/01/2012 | 3.46 | 14.80 | 19.17 | 0.01 | 0.06 | 0.83 | 0.89 | 0.02 | 0.76 | 0.78 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 13.40 | 10.52 | 0.00 | 0.00 | 0.76 | 0.76 | 0.00 | 0.70 | 0.70 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Paving 7/1/2012 - 9/1/2012 - Default Paving Description

For Pavers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Paving Equipment, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rollers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

The following mitigation measures apply to Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

For Cranes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Forklifts, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

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For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:
NOX: 15% PM10: 50% PM25: 50%

Phase Assumptions

Phase: Demolition 5/1/2010 - 11/1/2010 - Default Fine Site Grading Description
Building Volume Total (cubic feet): 0
Building Volume Daily (cubic feet): 0
On Road Truck Travel (VMT): 0
Off-Road Equipment:
1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description
Total Acres Disturbed: 6.89
Maximum Daily Acreage Disturbed: 4
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 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 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: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export
Total Acres Disturbed: 1.6
Maximum Daily Acreage Disturbed: 1.74
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 3181.82
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

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1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 7/1/2012 - 9/1/2012 - Default Paving Description

Acres to be Paved: 9

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

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

**11/3/2009 2:43:57 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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)

| Source | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| Natural Gas | 0.11 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |
| Hearth | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping - No Winter Emissions | | | | | | | |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 0.91 | | | | | | |
| TOTALS (lbs/day, unmitigated) | 1.02 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |

Area Source Changes to Defaults

**11/3/2009 2:44:05 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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, Mitigated)

| Source | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| Natural Gas | 0.11 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |
| Hearth | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping - No Winter Emissions | | | | | | | |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 0.82 | | | | | | |
| TOTALS (lbs/day, Mitigated) | 0.93 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |

Area Source Mitigation Measures Selected

| Mitigation Description | Percent Reduction |
|---|---|
| For Nonresidential Interior Use Low VOC Coating | 10.00 |
| For Nonresidential Exterior Use Low VOC Coating | 10.00 |

Area Source Changes to Defaults

**11/3/2009 2:44:15 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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 |
|---|---|---|---|---|---|---|---|
| Free-standing discount superstore | 43.81 | 59.34 | 424.74 | 0.35 | 68.23 | 13.17 | 35,317.73 |
| Gasoline/service station | 12.52 | 11.93 | 97.32 | 0.06 | 11.78 | 2.29 | 6,307.06 |
| TOTALS (lbs/day, unmitigated) | 56.33 | 71.27 | 522.06 | 0.41 | 80.01 | 15.46 | 41,624.79 |

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2013 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 |
|---|---|---|---|---|---|---|
| Free-standing discount superstore | | 53.09 | 1000 sq ft | 155.00 | 8,228.95 | 39,574.23 |
| Gasoline/service station | | 168.56 | pumps | 18.00 | 3,034.08 | 6,819.01 |
| | | | | | 11,263.03 | 46,393.24 |

**11/3/2009 2:44:15 PM**

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Auto | 39.8 | 0.5 | 99.2 | 0.3 |
| Light Truck < 3750 lbs | 14.1 | 1.4 | 91.5 | 7.1 |
| Light Truck 3751-5750 lbs | 22.4 | 0.4 | 99.2 | 0.4 |
| Med Truck 5751-8500 lbs | 11.1 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.6 | 0.0 | 73.1 | 26.9 |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.9 | 0.0 | 44.4 | 55.6 |
| Med-Heavy Truck 14,001-33,000 lbs | 0.9 | 0.0 | 22.2 | 77.8 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 1.2 | 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 | 5.5 | 54.5 | 45.5 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.3 | 0.0 | 84.6 | 15.4 |

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 | | | |

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Travel Conditions

| | Residential | | | Commercial | | |
|---|---|---|---|---|---|---|
| | Home-Work | Home-Shop | Home-Other | Commute | Non-Work | Customer |
| % of Trips - Commercial (by land use) | | | | | | |
| Free-standing discount superstore | | | | 2.0 | 1.0 | 97.0 |
| Gasoline/service station | | | | 2.0 | 1.0 | 97.0 |

Operational Changes to Defaults

**11/3/2009 2:44:26 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

| Source | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|---|---|---|---|---|---|---|---|
| Free-standing discount superstore | 39.69 | 53.76 | 384.78 | 0.32 | 61.81 | 11.93 | 31,994.36 |
| Gasoline/service station | 11.34 | 10.81 | 88.16 | 0.06 | 10.67 | 2.08 | 5,713.57 |
| TOTALS (lbs/day, mitigated) | 51.03 | 64.57 | 472.94 | 0.38 | 72.48 | 14.01 | 37,707.93 |

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2013 Temperature (F): 40 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Operational Mitigation Options Selected

Residential Mitigation Measures

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

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Nonresidential Mitigation Measures

Percent Reduction in Trips is 5.11%

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are 1098.

The employment for the study area (within a 1/2 mile radius of the project) is 841.

Non-Residential Local-Serving Retail Mitigation

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Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

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Percent Reduction in Trips is 0.01%

Inputs Selected:

The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 1

The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0

The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

---

Percent Reduction in Trips is 2.29%

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Nonresidential Mitigation Measures

Inputs Selected:

The Number of Intersections per Square Mile is 588

The Percent of Streets with Sidewalks on One Side is 8%

The Percent of Streets with Sidewalks on Both Sides is 19%

The Percent of Arterials/Collectors with Bike Lanes or where Suitable,

Direct Parallel Routes Exist is 8%

Summary of Land Uses

| Land Use Type | Acreage | Trip Rate | Unit Type | No. Units | Total Trips | Total VMT |
|---|---|---|---|---|---|---|
| Free-standing discount superstore | | 48.09 | 1000 sq ft | 155.00 | 7,454.61 | 35,850.33 |
| Gasoline/service station | | 152.70 | pumps | 18.00 | 2,748.58 | 6,177.35 |
| | | | | | 10,203.19 | 42,027.68 |

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Auto | 39.8 | 0.5 | 99.2 | 0.3 |
| Light Truck < 3750 lbs | 14.1 | 1.4 | 91.5 | 7.1 |
| Light Truck 3751-5750 lbs | 22.4 | 0.4 | 99.2 | 0.4 |
| Med Truck 5751-8500 lbs | 11.1 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.6 | 0.0 | 73.1 | 26.9 |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.9 | 0.0 | 44.4 | 55.6 |
| Med-Heavy Truck 14,001-33,000 lbs | 0.9 | 0.0 | 22.2 | 77.8 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 1.2 | 0.0 | 0.0 | 100.0 |
| Other Bus | 0.1 | 0.0 | 0.0 | 100.0 |

**11/3/2009 2:44:26 PM**

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Urban Bus | 0.0 | 0.0 | 0.0 | 0.0 |
| Motorcycle | 5.5 | 54.5 | 45.5 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.3 | 0.0 | 84.6 | 15.4 |

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) | | | | | | |
| Free-standing discount superstore | | | | 2.0 | 1.0 | 97.0 |
| Gasoline/service station | | | | 2.0 | 1.0 | 97.0 |

Operational Changes to Defaults

**11/3/2009 2:44:33 PM**

Urbemis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/Year)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 | PM2.5 Dust | PM2.5 Exhaust | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 TOTALS (tons/year unmitigated) | 0.34 | 3.15 | 1.58 | 0.00 | 4.79 | 0.16 | 4.95 | 1.00 | 0.15 | 1.15 | 348.55 |
| 2010 TOTALS (tons/year mitigated) | 0.34 | 3.15 | 1.58 | 0.00 | 1.27 | 0.16 | 1.43 | 0.27 | 0.15 | 0.41 | 348.55 |
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 73.51 | 0.00 | 71.16 | 73.46 | 0.00 | 64.14 | 0.00 |
| | | | | | | | | | | | |
| 2011 TOTALS (tons/year unmitigated) | 0.45 | 3.43 | 2.11 | 0.00 | 10.40 | 0.18 | 10.58 | 2.17 | 0.16 | 2.34 | 369.14 |
| 2011 TOTALS (tons/year mitigated) | 0.45 | 3.40 | 2.11 | 0.00 | 2.75 | 0.17 | 2.92 | 0.57 | 0.16 | 0.73 | 369.14 |
| Percent Reduction | 0.00 | 0.98 | 0.00 | 0.00 | 73.58 | 3.75 | 72.40 | 73.57 | 3.75 | 68.65 | 0.00 |
| | | | | | | | | | | | |
| 2012 TOTALS (tons/year unmitigated) | 0.65 | 3.79 | 3.27 | 0.00 | 6.13 | 0.23 | 6.36 | 1.28 | 0.21 | 1.49 | 532.11 |
| 2012 TOTALS (tons/year mitigated) | 0.65 | 3.59 | 3.27 | 0.00 | 1.62 | 0.19 | 1.81 | 0.34 | 0.17 | 0.51 | 532.11 |
| Percent Reduction | 0.00 | 5.23 | 0.00 | 0.00 | 73.51 | 18.52 | 71.52 | 73.45 | 18.55 | 65.67 | 0.00 |

**11/3/2009 2:44:33 PM**

AREA SOURCE EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (tons/year, unmitigated) | 0.21 | 0.28 | 0.51 | 0.00 | 0.00 | 0.00 | 330.76 |
| TOTALS (tons/year, mitigated) | 0.19 | 0.28 | 0.51 | 0.00 | 0.00 | 0.00 | 330.76 |
| Percent Reduction | 9.52 | 0.00 | 0.00 | NaN | NaN | NaN | 0.00 |

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (tons/year, unmitigated) | 8.78 | 10.42 | 84.30 | 0.08 | 14.60 | 2.82 | 8,334.30 |
| TOTALS (tons/year, mitigated) | 7.96 | 9.45 | 76.37 | 0.07 | 13.23 | 2.56 | 7,550.05 |
| Percent Reduction | 9.34 | 9.31 | 9.41 | 12.50 | 9.38 | 9.22 | 9.41 |

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (tons/year, unmitigated) | 8.99 | 10.70 | 84.81 | 0.08 | 14.60 | 2.82 | 8,665.06 |
| TOTALS (tons/year, mitigated) | 8.15 | 9.73 | 76.88 | 0.07 | 13.23 | 2.56 | 7,880.81 |
| Percent Reduction | 9.34 | 9.07 | 9.35 | 12.50 | 9.38 | 9.22 | 9.05 |

**11/3/2009 2:44:41 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 Total | PM2.5 Dust | PM2.5 Exhaust | PM2.5 Total | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | 0.34 | 3.15 | 1.58 | 0.00 | 4.79 | 0.16 | 4.95 | 1.00 | 0.15 | 1.15 | 348.55 |
| Demolition 05/01/2010-11/01/2010 | 0.08 | 0.51 | 0.37 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 52.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 0.07 | 0.50 | 0.31 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 45.87 |
| Demo 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 |
| Demo Worker Trips | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.70 |
| Mass Grading 08/01/2010-08/01/2012 | 0.17 | 1.38 | 0.74 | 0.00 | 4.40 | 0.07 | 4.47 | 0.92 | 0.06 | 0.98 | 129.23 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 4.40 | 0.00 | 4.40 | 0.92 | 0.00 | 0.92 | 0.00 |
| Mass Grading Off Road Diesel | 0.17 | 1.37 | 0.69 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.06 | 0.06 | 123.60 |
| 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 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.62 |
| Mass Grading 08/20/2010-09/20/2010 | 0.10 | 1.27 | 0.47 | 0.00 | 0.39 | 0.05 | 0.44 | 0.08 | 0.05 | 0.13 | 166.76 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 0.00 | 0.38 | 0.08 | 0.00 | 0.08 | 0.00 |
| Mass Grading Off Road Diesel | 0.03 | 0.27 | 0.14 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 24.72 |
| Mass Grading On Road Diesel | 0.06 | 1.00 | 0.33 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.03 | 0.04 | 140.91 |
| Mass Grading Worker Trips | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.12 |

**11/3/2009 2:44:41 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2011 | 0.45 | 3.43 | 2.11 | 0.00 | 10.40 | 0.18 | 10.58 | 2.17 | 0.16 | 2.34 | 369.14 |
| Mass Grading 08/01/2010-08/01/2012 | 0.37 | 3.05 | 1.67 | 0.00 | 10.40 | 0.15 | 10.55 | 2.17 | 0.14 | 2.31 | 305.45 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 10.40 | 0.00 | 10.40 | 2.17 | 0.00 | 2.17 | 0.00 |
| Mass Grading Off Road Diesel | 0.37 | 3.05 | 1.55 | 0.00 | 0.00 | 0.15 | 0.15 | 0.00 | 0.14 | 0.14 | 292.15 |
| 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 | 0.00 | 0.01 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.30 |
| Building 11/01/2011-11/01/2012 | 0.08 | 0.38 | 0.45 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.02 | 0.02 | 63.69 |
| Building Off Road Diesel | 0.07 | 0.34 | 0.24 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.02 | 0.02 | 35.67 |
| Building Vendor Trips | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.55 |
| Building Worker Trips | 0.01 | 0.01 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 22.47 |
| 2012 | 0.65 | 3.79 | 3.27 | 0.00 | 6.13 | 0.23 | 6.36 | 1.28 | 0.21 | 1.49 | 532.11 |
| Building 11/01/2011-11/01/2012 | 0.38 | 1.78 | 2.10 | 0.00 | 0.01 | 0.12 | 0.13 | 0.00 | 0.11 | 0.11 | 317.03 |
| Building Off Road Diesel | 0.34 | 1.62 | 1.15 | 0.00 | 0.00 | 0.11 | 0.11 | 0.00 | 0.10 | 0.10 | 177.52 |
| Building Vendor Trips | 0.01 | 0.11 | 0.09 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 27.61 |
| Building Worker Trips | 0.03 | 0.04 | 0.86 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 111.90 |
| Mass Grading 08/01/2010-08/01/2012 | 0.21 | 1.68 | 0.94 | 0.00 | 6.12 | 0.08 | 6.20 | 1.28 | 0.08 | 1.35 | 179.75 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 6.12 | 0.00 | 6.12 | 1.28 | 0.00 | 1.28 | 0.00 |
| Mass Grading Off Road Diesel | 0.21 | 1.68 | 0.88 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.08 | 0.08 | 171.92 |
| 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 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.83 |
| Asphalt 07/01/2012-09/01/2012 | 0.06 | 0.33 | 0.23 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.03 | 0.03 | 35.33 |
| Paving Off-Gas | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 0.05 | 0.30 | 0.18 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.02 | 0.02 | 25.47 |
| Paving On Road Diesel | 0.00 | 0.03 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.25 |
| Paving Worker Trips | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.61 |

**11/3/2009 2:44:41 PM**

Phase Assumptions

Phase: Demolition 5/1/2010 - 11/1/2010 - Default Fine Site Grading Description
Building Volume Total (cubic feet): 0
Building Volume Daily (cubic feet): 0
On Road Truck Travel (VMT): 0
Off-Road Equipment:
1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description
Total Acres Disturbed: 6.89
Maximum Daily Acreage Disturbed: 4
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 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 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: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export
Total Acres Disturbed: 1.6
Maximum Daily Acreage Disturbed: 1.74
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 3181.82
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 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

**11/3/2009 2:44:41 PM**

Phase: Paving 7/1/2012 - 9/1/2012 - Default Paving Description

Acres to be Paved: 9

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

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

**11/3/2009 2:44:47 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Annual Construction Mitigated Emissions (Tons/Year)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Mitigated)

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 Total | PM2.5 Dust | PM2.5 Exhaust | PM2.5 Total | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | 0.34 | 3.15 | 1.58 | 0.00 | 1.27 | 0.16 | 1.43 | 0.27 | 0.15 | 0.41 | 348.55 |
| Demolition 05/01/2010-11/01/2010 | 0.08 | 0.51 | 0.37 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 52.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 0.07 | 0.50 | 0.31 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 45.87 |
| Demo 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 |
| Demo Worker Trips | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.70 |
| Mass Grading 08/01/2010-08/01/2012 | 0.17 | 1.38 | 0.74 | 0.00 | 1.16 | 0.07 | 1.23 | 0.24 | 0.06 | 0.31 | 129.23 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 1.16 | 0.00 | 1.16 | 0.24 | 0.00 | 0.24 | 0.00 |
| Mass Grading Off Road Diesel | 0.17 | 1.37 | 0.69 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.06 | 0.06 | 123.60 |
| 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 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.62 |
| Mass Grading 08/20/2010-09/20/2010 | 0.10 | 1.27 | 0.47 | 0.00 | 0.11 | 0.05 | 0.16 | 0.02 | 0.05 | 0.07 | 166.76 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.10 | 0.00 | 0.10 | 0.02 | 0.00 | 0.02 | 0.00 |
| Mass Grading Off Road Diesel | 0.03 | 0.27 | 0.14 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 24.72 |
| Mass Grading On Road Diesel | 0.06 | 1.00 | 0.33 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.03 | 0.04 | 140.91 |
| Mass Grading Worker Trips | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.12 |

**11/3/2009 2:44:47 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2011 | 0.45 | 3.40 | 2.11 | 0.00 | 2.75 | 0.17 | 2.92 | 0.57 | 0.16 | 0.73 | 369.14 |
| Mass Grading 08/01/2010-08/01/2012 | 0.37 | 3.05 | 1.67 | 0.00 | 2.75 | 0.15 | 2.90 | 0.57 | 0.14 | 0.71 | 305.45 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 2.75 | 0.00 | 2.75 | 0.57 | 0.00 | 0.57 | 0.00 |
| Mass Grading Off Road Diesel | 0.37 | 3.05 | 1.55 | 0.00 | 0.00 | 0.15 | 0.15 | 0.00 | 0.14 | 0.14 | 292.15 |
| 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 | 0.00 | 0.01 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.30 |
| Building 11/01/2011-11/01/2012 | 0.08 | 0.35 | 0.45 | 0.00 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 0.02 | 63.69 |
| Building Off Road Diesel | 0.07 | 0.31 | 0.24 | 0.00 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 0.02 | 35.67 |
| Building Vendor Trips | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.55 |
| Building Worker Trips | 0.01 | 0.01 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 22.47 |
| 2012 | 0.65 | 3.59 | 3.27 | 0.00 | 1.62 | 0.19 | 1.81 | 0.34 | 0.17 | 0.51 | 532.11 |
| Building 11/01/2011-11/01/2012 | 0.38 | 1.62 | 2.10 | 0.00 | 0.01 | 0.09 | 0.10 | 0.00 | 0.08 | 0.09 | 317.03 |
| Building Off Road Diesel | 0.34 | 1.47 | 1.15 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.08 | 0.08 | 177.52 |
| Building Vendor Trips | 0.01 | 0.11 | 0.09 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 27.61 |
| Building Worker Trips | 0.03 | 0.04 | 0.86 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 111.90 |
| Mass Grading 08/01/2010-08/01/2012 | 0.21 | 1.68 | 0.94 | 0.00 | 1.62 | 0.08 | 1.70 | 0.34 | 0.08 | 0.41 | 179.75 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 1.62 | 0.00 | 1.62 | 0.34 | 0.00 | 0.34 | 0.00 |
| Mass Grading Off Road Diesel | 0.21 | 1.68 | 0.88 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.08 | 0.08 | 171.92 |
| 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 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.83 |
| Asphalt 07/01/2012-09/01/2012 | 0.06 | 0.29 | 0.23 | 0.00 | 0.00 | 0.01 | 0.02 | 0.00 | 0.01 | 0.01 | 35.33 |
| Paving Off-Gas | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 0.05 | 0.26 | 0.18 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 25.47 |
| Paving On Road Diesel | 0.00 | 0.03 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.25 |
| Paving Worker Trips | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.61 |

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description

**11/3/2009 2:44:47 PM**

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

The following mitigation measures apply to Phase: Paving 7/1/2012 - 9/1/2012 - Default Paving Description

For Pavers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Paving Equipment, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rollers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

The following mitigation measures apply to Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

For Cranes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Forklifts, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

## Phase Assumptions

Phase: Demolition 5/1/2010 - 11/1/2010 - Default Fine Site Grading Description

Building Volume Total (cubic feet): 0

Building Volume Daily (cubic feet): 0

On Road Truck Travel (VMT): 0

Off-Road Equipment:

**11/3/2009 2:44:47 PM**

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description
Total Acres Disturbed: 6.89
Maximum Daily Acreage Disturbed: 4
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 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 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: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export
Total Acres Disturbed: 1.6
Maximum Daily Acreage Disturbed: 1.74
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 3181.82
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 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: Paving 7/1/2012 - 9/1/2012 - Default Paving Description
Acres to be Paved: 9
Off-Road Equipment:
4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

**11/3/2009 2:44:47 PM**

Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

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

**11/3/2009 2:44:56 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Annual Area Source Unmitigated Emissions (Tons/Year)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

| Source | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| Natural Gas | 0.02 | 0.28 | 0.23 | 0.00 | 0.00 | 0.00 | 330.25 |
| Hearth | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscape | 0.02 | 0.00 | 0.28 | 0.00 | 0.00 | 0.00 | 0.51 |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 0.17 | | | | | | |
| TOTALS (tons/year, unmitigated) | 0.21 | 0.28 | 0.51 | 0.00 | 0.00 | 0.00 | 330.76 |

Area Source Changes to Defaults

**11/3/2009 2:45:04 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Annual Area Source Mitigated Emissions (Tons/Year)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Annual Tons Per Year, Mitigated)

| Source | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| Natural Gas | 0.02 | 0.28 | 0.23 | 0.00 | 0.00 | 0.00 | 330.25 |
| Hearth | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscape | 0.02 | 0.00 | 0.28 | 0.00 | 0.00 | 0.00 | 0.51 |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 0.15 | | | | | | |
| TOTALS (tons/year, mitigated) | 0.19 | 0.28 | 0.51 | 0.00 | 0.00 | 0.00 | 330.76 |

Area Source Mitigation Measures Selected

| Mitigation Description | Percent Reduction |
|---|---|
| For Nonresidential Interior Use Low VOC Coating | 10.00 |
| For Nonresidential Exterior Use Low VOC Coating | 10.00 |

Area Source Changes to Defaults

**11/3/2009 2:45:11 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Annual Operational Unmitigated Emissions (Tons/Year)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

| Source | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|---|---|---|---|---|---|---|---|
| Free-standing discount superstore | 6.88 | 8.67 | 69.42 | 0.07 | 12.45 | 2.40 | 7,074.82 |
| Gasoline/service station | 1.90 | 1.75 | 14.88 | 0.01 | 2.15 | 0.42 | 1,259.48 |
| TOTALS (tons/year, unmitigated) | 8.78 | 10.42 | 84.30 | 0.08 | 14.60 | 2.82 | 8,334.30 |

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2013 Season: Annual

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 |
|---|---|---|---|---|---|---|
| Free-standing discount superstore | | 53.09 | 1000 sq ft | 155.00 | 8,228.95 | 39,574.23 |

**11/3/2009 2:45:11 PM**

## Summary of Land Uses

| Land Use Type | Acreage | Trip Rate | Unit Type | No. Units | Total Trips | Total VMT |
|---|---|---|---|---|---|---|
| Gasoline/service station | | 168.56 | pumps | 18.00 | 3,034.08 | 6,819.01 |
| | | | | | 11,263.03 | 46,393.24 |

## Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Auto | 39.8 | 0.5 | 99.2 | 0.3 |
| Light Truck < 3750 lbs | 14.1 | 1.4 | 91.5 | 7.1 |
| Light Truck 3751-5750 lbs | 22.4 | 0.4 | 99.2 | 0.4 |
| Med Truck 5751-8500 lbs | 11.1 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.6 | 0.0 | 73.1 | 26.9 |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.9 | 0.0 | 44.4 | 55.6 |
| Med-Heavy Truck 14,001-33,000 lbs | 0.9 | 0.0 | 22.2 | 77.8 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 1.2 | 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 | 5.5 | 54.5 | 45.5 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.3 | 0.0 | 84.6 | 15.4 |

## 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 |

**11/3/2009 2:45:11 PM**

Travel Conditions

| | Residential | | | Commercial | | |
|---|---|---|---|---|---|---|
| | Home-Work | Home-Shop | Home-Other | Commute | Non-Work | Customer |
| 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) | | | | | | |
| Free-standing discount superstore | | | | 2.0 | 1.0 | 97.0 |
| Gasoline/service station | | | | 2.0 | 1.0 | 97.0 |

Operational Changes to Defaults

**11/3/2009 2:45:25 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Annual Operational Mitigated Emissions (Tons/Year)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative Option 2 Free Standing Discount Superstore.urb924

Project Name: Bohemia Retail - Alternative 2 - Free Standing Discount Superstore

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Annual Tons Per Year, Mitigated)

| Source | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|---|---|---|---|---|---|---|---|
| Free-standing discount superstore | 6.24 | 7.86 | 62.89 | 0.06 | 11.28 | 2.18 | 6,409.09 |
| Gasoline/service station | 1.72 | 1.59 | 13.48 | 0.01 | 1.95 | 0.38 | 1,140.96 |
| TOTALS (tons/year, mitigated) | 7.96 | 9.45 | 76.37 | 0.07 | 13.23 | 2.56 | 7,550.05 |

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Operational Mitigation Options Selected

Residential Mitigation Measures

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

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**11/3/2009 2:45:25 PM**

Nonresidential Mitigation Measures

Percent Reduction in Trips is 5.11%

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are 1098.

The employment for the study area (within a 1/2 mile radius of the project) is 841.

Non-Residential Local-Serving Retail Mitigation

---

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

---

Percent Reduction in Trips is 0.01%

Inputs Selected:

The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 1

The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0

The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

---

Percent Reduction in Trips is 2.29%

**11/3/2009 2:45:25 PM**

Nonresidential Mitigation Measures

Inputs Selected:

The Number of Intersections per Square Mile is 588

The Percent of Streets with Sidewalks on One Side is 8%

The Percent of Streets with Sidewalks on Both Sides is 19%

The Percent of Arterials/Collectors with Bike Lanes or where Suitable,

Direct Parallel Routes Exist is 8%

Summary of Land Uses

| Land Use Type | Acreage | Trip Rate | Unit Type | No. Units | Total Trips | Total VMT |
|---|---|---|---|---|---|---|
| Free-standing discount superstore | | 48.09 | 1000 sq ft | 155.00 | 7,454.61 | 35,850.33 |
| Gasoline/service station | | 152.70 | pumps | 18.00 | 2,748.58 | 6,177.35 |
| | | | | | 10,203.19 | 42,027.68 |

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Auto | 39.8 | 0.5 | 99.2 | 0.3 |
| Light Truck < 3750 lbs | 14.1 | 1.4 | 91.5 | 7.1 |
| Light Truck 3751-5750 lbs | 22.4 | 0.4 | 99.2 | 0.4 |
| Med Truck 5751-8500 lbs | 11.1 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.6 | 0.0 | 73.1 | 26.9 |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.9 | 0.0 | 44.4 | 55.6 |
| Med-Heavy Truck 14,001-33,000 lbs | 0.9 | 0.0 | 22.2 | 77.8 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 1.2 | 0.0 | 0.0 | 100.0 |
| Other Bus | 0.1 | 0.0 | 0.0 | 100.0 |

**11/3/2009 2:45:25 PM**

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Urban Bus | 0.0 | 0.0 | 0.0 | 0.0 |
| Motorcycle | 5.5 | 54.5 | 45.5 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.3 | 0.0 | 84.6 | 15.4 |

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) | | | | | | |
| Free-standing discount superstore | | | | 2.0 | 1.0 | 97.0 |
| Gasoline/service station | | | | 2.0 | 1.0 | 97.0 |

Operational Changes to Defaults

**11/3/2009 2:28:07 PM**

Urbemis 2007 Version 9.2.4

Summary Report for Summer Emissions (Pounds/Day)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 | PM2.5 Dust | PM2.5 Exhaust | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 TOTALS (lbs/day unmitigated) | 12.99 | 148.29 | 62.09 | 0.12 | 115.26 | 6.46 | 121.72 | 24.13 | 5.94 | 30.07 | 18,311.78 |
| 2010 TOTALS (lbs/day mitigated) | 12.99 | 132.29 | 62.09 | 0.12 | 12.74 | 3.60 | 16.34 | 2.72 | 3.31 | 6.03 | 18,311.78 |
| 2011 TOTALS (lbs/day unmitigated) | 6.59 | 40.73 | 33.10 | 0.01 | 80.06 | 2.38 | 82.44 | 16.73 | 2.18 | 18.91 | 5,244.51 |
| 2011 TOTALS (lbs/day mitigated) | 6.59 | 29.88 | 33.10 | 0.01 | 8.62 | 0.24 | 8.86 | 1.81 | 0.22 | 2.03 | 5,244.51 |
| 2012 TOTALS (lbs/day unmitigated) | 9.05 | 53.07 | 41.58 | 0.02 | 80.08 | 3.39 | 83.48 | 16.74 | 3.12 | 19.85 | 6,815.08 |
| 2012 TOTALS (lbs/day mitigated) | 9.05 | 39.13 | 41.58 | 0.02 | 8.64 | 0.36 | 9.00 | 1.82 | 0.33 | 2.15 | 6,815.08 |

**11/3/2009 2:28:07 PM**

AREA SOURCE EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 1.27 | 1.55 | 4.36 | 0.00 | 0.01 | 0.01 | 1,815.22 |
| TOTALS (lbs/day, mitigated) | 1.18 | 1.55 | 4.36 | 0.00 | 0.01 | 0.01 | 1,815.22 |
| Percent Reduction | 7.09 | 0.00 | 0.00 | NaN | 0.00 | 0.00 | 0.00 |

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 36.87 | 41.22 | 355.67 | 0.38 | 65.50 | 12.66 | 39,078.10 |
| TOTALS (lbs/day, mitigated) | 33.53 | 37.34 | 322.20 | 0.34 | 59.34 | 11.47 | 35,400.89 |
| Percent Reduction | 9.06 | 9.41 | 9.41 | 10.53 | 9.40 | 9.40 | 9.41 |

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 38.14 | 42.77 | 360.03 | 0.38 | 65.51 | 12.67 | 40,893.32 |
| TOTALS (lbs/day, mitigated) | 34.71 | 38.89 | 326.56 | 0.34 | 59.35 | 11.48 | 37,216.11 |
| Percent Reduction | 8.99 | 9.07 | 9.30 | 10.53 | 9.40 | 9.39 | 8.99 |

**11/3/2009 2:29:03 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 Total | PM2.5 Dust | PM2.5 Exhaust | PM2.5 Total | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 5/3/2010-7/30/2010 Active Days: 65 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/2/2010-8/19/2010 Active Days: 14 | 4.21 | 32.77 | 19.02 | 0.00 | 80.01 | 1.84 | 81.85 | 16.71 | 1.69 | 18.40 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:29:03 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/20/2010-9/20/2010<br>Active Days: 22 | **12.99** | **148.29** | **62.09** | **0.12** | **115.26** | **6.46** | **121.72** | **24.13** | **5.94** | **30.07** | **18,311.78** |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/20/2010-09/20/2010 | 8.78 | 115.52 | 43.06 | 0.12 | 35.25 | 4.62 | 39.87 | 7.42 | 4.25 | 11.66 | 15,159.62 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 34.80 | 0.00 | 34.80 | 7.27 | 0.00 | 7.27 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| Mass Grading On Road Diesel | 5.75 | 90.48 | 29.67 | 0.12 | 0.45 | 3.36 | 3.81 | 0.15 | 3.09 | 3.24 | 12,810.03 |
| Mass Grading Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:29:03 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/21/2010-11/1/2010 Active Days: 30 | 4.21 | 32.77 | 19.02 | 0.00 | 80.01 | 1.84 | 81.85 | 16.71 | 1.69 | 18.40 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 11/2/2010-12/31/2010 Active Days: 44 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 1/3/2011-10/31/2011 Active Days: 216 | 2.85 | 23.48 | 12.82 | 0.00 | 80.00 | 1.17 | 81.18 | 16.71 | 1.08 | 17.79 | 2,349.64 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 23.48 | 12.82 | 0.00 | 80.00 | 1.17 | 81.18 | 16.71 | 1.08 | 17.79 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 23.44 | 11.96 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.08 | 1.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |

**11/3/2009 2:29:03 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 11/1/2011-12/30/2011<br>Active Days: 44 | 6.59 | 40.73 | 33.10 | 0.01 | 80.06 | 2.38 | 82.44 | 16.73 | 2.18 | 18.91 | 5,244.51 |
| Building 11/01/2011-11/01/2012 | 3.74 | 17.25 | 20.29 | 0.01 | 0.06 | 1.20 | 1.26 | 0.02 | 1.10 | 1.13 | 2,894.88 |
| Building Off Road Diesel | 3.39 | 15.67 | 10.85 | 0.00 | 0.00 | 1.14 | 1.14 | 0.00 | 1.05 | 1.05 | 1,621.20 |
| Building Vendor Trips | 0.09 | 1.13 | 0.86 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.04 | 0.04 | 252.11 |
| Building Worker Trips | 0.27 | 0.45 | 8.58 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.57 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 23.48 | 12.82 | 0.00 | 80.00 | 1.17 | 81.18 | 16.71 | 1.08 | 17.79 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 23.44 | 11.96 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.08 | 1.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |
| Time Slice 1/2/2012-6/29/2012<br>Active Days: 130 | 6.17 | 38.20 | 31.47 | 0.01 | 80.06 | 2.17 | 82.24 | 16.73 | 2.00 | 18.73 | 5,244.93 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 21.99 | 12.30 | 0.00 | 80.00 | 1.07 | 81.08 | 16.71 | 0.99 | 17.70 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 21.95 | 11.51 | 0.00 | 0.00 | 1.07 | 1.07 | 0.00 | 0.99 | 0.99 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |

**11/3/2009 2:29:04 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 7/2/2012-8/1/2012 Active Days: 23 | 9.05 | 53.07 | 41.58 | 0.02 | 80.08 | 3.39 | 83.48 | 16.74 | 3.12 | 19.85 | 6,815.08 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 14.87 | 10.11 | 0.00 | 0.02 | 1.22 | 1.24 | 0.01 | 1.12 | 1.13 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 13.48 | 8.10 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.07 | 1.07 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 21.99 | 12.30 | 0.00 | 80.00 | 1.07 | 81.08 | 16.71 | 0.99 | 17.70 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 21.95 | 11.51 | 0.00 | 0.00 | 1.07 | 1.07 | 0.00 | 0.99 | 0.99 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |
| Time Slice 8/2/2012-8/31/2012 Active Days: 22 | 6.33 | 31.09 | 29.28 | 0.02 | 0.08 | 2.32 | 2.40 | 0.03 | 2.13 | 2.16 | 4,465.40 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 14.87 | 10.11 | 0.00 | 0.02 | 1.22 | 1.24 | 0.01 | 1.12 | 1.13 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 13.48 | 8.10 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.07 | 1.07 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

**11/3/2009 2:29:04 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/3/2012-11/1/2012<br>Active Days: 44 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

## Phase Assumptions

Phase: Demolition 5/1/2010 - 11/1/2010 - Default Fine Site Grading Description

Building Volume Total (cubic feet): 0

Building Volume Daily (cubic feet): 0

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description

Total Acres Disturbed: 6.89

Maximum Daily Acreage Disturbed: 4

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 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 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: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export

Total Acres Disturbed: 4.82

Maximum Daily Acreage Disturbed: 1.74

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

**11/3/2009 2:29:04 PM**

On Road Truck Travel (VMT): 3181.82

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 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: Paving 7/1/2012 - 9/1/2012 - Default Paving Description

Acres to be Paved: 9

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

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

**11/3/2009 2:29:11 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Mitigated Emissions (Pounds/Day)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 Total | PM2.5 Dust | PM2.5 Exhaust | PM2.5 Total | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 5/3/2010-7/30/2010 Active Days: 65 | 1.17 | 5.60 | 5.62 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.04 | 0.04 | 802.57 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 5.60 | 5.62 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.04 | 0.04 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 5.55 | 4.68 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:29:11 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/2/2010-8/19/2010 Active Days: 14 | 4.21 | 23.71 | 19.02 | 0.00 | 8.57 | 0.14 | 8.71 | 1.79 | 0.13 | 1.92 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 5.60 | 5.62 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.04 | 0.04 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 5.55 | 4.68 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 18.10 | 13.40 | 0.00 | 8.56 | 0.10 | 8.66 | 1.79 | 0.09 | 1.88 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 18.05 | 12.46 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 0.09 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:29:11 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/20/2010-9/20/2010 Active Days: 22 | **12.99** | 132.29 | **62.09** | **0.12** | 12.74 | 3.60 | 16.34 | 2.72 | 3.31 | 6.03 | **18,311.78** |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 5.60 | 5.62 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.04 | 0.04 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 5.55 | 4.68 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 18.10 | 13.40 | 0.00 | 8.56 | 0.10 | 8.66 | 1.79 | 0.09 | 1.88 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 18.05 | 12.46 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 0.09 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/20/2010-09/20/2010 | 8.78 | 108.58 | 43.06 | 0.12 | 4.18 | 3.46 | 7.64 | 0.93 | 3.18 | 4.11 | 15,159.62 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 3.72 | 0.00 | 3.72 | 0.78 | 0.00 | 0.78 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 18.05 | 12.46 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 0.09 | 2,247.32 |
| Mass Grading On Road Diesel | 5.75 | 90.48 | 29.67 | 0.12 | 0.45 | 3.36 | 3.81 | 0.15 | 3.09 | 3.24 | 12,810.03 |
| Mass Grading Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:29:11 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/21/2010-11/1/2010 Active Days: 30 | 4.21 | 23.71 | 19.02 | 0.00 | 8.57 | 0.14 | 8.71 | 1.79 | 0.13 | 1.92 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 5.60 | 5.62 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.04 | 0.04 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 5.55 | 4.68 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 18.10 | 13.40 | 0.00 | 8.56 | 0.10 | 8.66 | 1.79 | 0.09 | 1.88 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 18.05 | 12.46 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 0.09 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 11/2/2010-12/31/2010 Active Days: 44 | 3.03 | 18.10 | 13.40 | 0.00 | 8.56 | 0.10 | 8.66 | 1.79 | 0.09 | 1.88 | 2,349.59 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 18.10 | 13.40 | 0.00 | 8.56 | 0.10 | 8.66 | 1.79 | 0.09 | 1.88 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 18.05 | 12.46 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 0.09 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 1/3/2011-10/31/2011 Active Days: 216 | 2.85 | 16.98 | 12.82 | 0.00 | 8.56 | 0.09 | 8.65 | 1.79 | 0.08 | 1.87 | 2,349.64 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 16.98 | 12.82 | 0.00 | 8.56 | 0.09 | 8.65 | 1.79 | 0.08 | 1.87 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 16.93 | 11.96 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.08 | 0.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |

**11/3/2009 2:29:11 PM**

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 11/1/2011-12/30/2011<br>Active Days: 44 | 6.59 | 29.88 | 33.10 | 0.01 | 8.62 | 0.24 | 8.86 | 1.81 | 0.22 | 2.03 | 5,244.51 |
| Building 11/01/2011-11/01/2012 | 3.74 | 12.90 | 20.29 | 0.01 | 0.06 | 0.15 | 0.21 | 0.02 | 0.14 | 0.16 | 2,894.88 |
| Building Off Road Diesel | 3.39 | 11.32 | 10.85 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.08 | 0.08 | 1,621.20 |
| Building Vendor Trips | 0.09 | 1.13 | 0.86 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.04 | 0.04 | 252.11 |
| Building Worker Trips | 0.27 | 0.45 | 8.58 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.57 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 16.98 | 12.82 | 0.00 | 8.56 | 0.09 | 8.65 | 1.79 | 0.08 | 1.87 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 16.93 | 11.96 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.08 | 0.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |
| Time Slice 1/2/2012-6/29/2012<br>Active Days: 130 | 6.17 | 28.00 | 31.47 | 0.01 | 8.62 | 0.22 | 8.84 | 1.81 | 0.20 | 2.01 | 5,244.93 |
| Building 11/01/2011-11/01/2012 | 3.46 | 12.11 | 19.17 | 0.01 | 0.06 | 0.14 | 0.20 | 0.02 | 0.13 | 0.15 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 10.70 | 10.52 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.07 | 0.07 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 15.90 | 12.30 | 0.00 | 8.56 | 0.08 | 8.64 | 1.79 | 0.08 | 1.86 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 15.86 | 11.51 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.07 | 0.07 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |

**11/3/2009 2:29:11 PM**

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 7/2/2012-8/1/2012 Active Days: 23 | 9.05 | 39.13 | 41.58 | 0.02 | 8.64 | 0.36 | 9.00 | 1.82 | 0.33 | 2.15 | 6,815.08 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 11.13 | 10.11 | 0.00 | 0.02 | 0.14 | 0.16 | 0.01 | 0.13 | 0.13 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 9.74 | 8.10 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.08 | 0.08 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 12.11 | 19.17 | 0.01 | 0.06 | 0.14 | 0.20 | 0.02 | 0.13 | 0.15 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 10.70 | 10.52 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.07 | 0.07 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 15.90 | 12.30 | 0.00 | 8.56 | 0.08 | 8.64 | 1.79 | 0.08 | 1.86 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 15.86 | 11.51 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.07 | 0.07 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |
| Time Slice 8/2/2012-8/31/2012 Active Days: 22 | 6.33 | 23.23 | 29.28 | 0.02 | 0.08 | 0.28 | 0.36 | 0.03 | 0.25 | 0.28 | 4,465.40 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 11.13 | 10.11 | 0.00 | 0.02 | 0.14 | 0.16 | 0.01 | 0.13 | 0.13 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 9.74 | 8.10 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.08 | 0.08 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 12.11 | 19.17 | 0.01 | 0.06 | 0.14 | 0.20 | 0.02 | 0.13 | 0.15 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 10.70 | 10.52 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.07 | 0.07 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

**11/3/2009 2:29:11 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/3/2012-11/1/2012<br>Active Days: 44 | 3.46 | 12.11 | 19.17 | 0.01 | 0.06 | 0.14 | 0.20 | 0.02 | 0.13 | 0.15 | 2,895.26 |
| Building 11/01/2011-11/01/2012 | 3.46 | 12.11 | 19.17 | 0.01 | 0.06 | 0.14 | 0.20 | 0.02 | 0.13 | 0.15 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 10.70 | 10.52 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.07 | 0.07 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Demolition 5/1/2010 - 11/1/2010 - Default Fine Site Grading Description

For Concrete/Industrial Saws, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Concrete/Industrial Saws, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Concrete/Industrial Saws, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Rubber Tired Dozers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

**11/3/2009 2:29:11 PM**

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Graders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Graders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Rubber Tired Dozers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Water Trucks, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Water Trucks, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

**11/3/2009 2:29:11 PM**

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Graders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Graders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Rubber Tired Dozers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Water Trucks, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Water Trucks, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Paving 7/1/2012 - 9/1/2012 - Default Paving Description

For Cement and Mortar Mixers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Cement and Mortar Mixers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Cement and Mortar Mixers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

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For Pavers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Pavers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Pavers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Paving Equipment, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Paving Equipment, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Paving Equipment, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Rollers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rollers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rollers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

For Cranes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Cranes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Cranes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Forklifts, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Forklifts, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Forklifts, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Generator Sets, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Generator Sets, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

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PM10: 85% PM25: 85%

For Generator Sets, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Welders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Welders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Welders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

## Phase Assumptions

Phase: Demolition 5/1/2010 - 11/1/2010 - Default Fine Site Grading Description

Building Volume Total (cubic feet): 0

Building Volume Daily (cubic feet): 0

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description

Total Acres Disturbed: 6.89

Maximum Daily Acreage Disturbed: 4

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 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

**11/3/2009 2:29:11 PM**

1 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: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export
Total Acres Disturbed: 4.82
Maximum Daily Acreage Disturbed: 1.74
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 3181.82
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 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: Paving 7/1/2012 - 9/1/2012 - Default Paving Description
Acres to be Paved: 9
Off-Road Equipment:
4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description
Off-Road Equipment:
1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

**11/3/2009 2:29:29 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

| Source | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|---|---|---|---|---|---|---|---|
| Discount club | 27.51 | 32.77 | 282.03 | 0.31 | 53.72 | 10.37 | 31,879.75 |
| Gasoline/service station | 9.36 | 8.45 | 73.64 | 0.07 | 11.78 | 2.29 | 7,198.35 |
| TOTALS (lbs/day, unmitigated) | 36.87 | 41.22 | 355.67 | 0.38 | 65.50 | 12.66 | 39,078.10 |

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2013 Temperature (F): 85 Season: Summer

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 |
|---|---|---|---|---|---|---|
| Discount club | | 41.80 | 1000 sq ft | 155.00 | 6,479.00 | 31,158.46 |
| Gasoline/service station | | 168.56 | pumps | 18.00 | 3,034.08 | 6,819.01 |
| | | | | | 9,513.08 | 37,977.47 |

**11/3/2009 2:29:29 PM**

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Auto | 39.8 | 0.5 | 99.2 | 0.3 |
| Light Truck < 3750 lbs | 14.1 | 1.4 | 91.5 | 7.1 |
| Light Truck 3751-5750 lbs | 22.4 | 0.4 | 99.2 | 0.4 |
| Med Truck 5751-8500 lbs | 11.1 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.6 | 0.0 | 73.1 | 26.9 |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.9 | 0.0 | 44.4 | 55.6 |
| Med-Heavy Truck 14,001-33,000 lbs | 0.9 | 0.0 | 22.2 | 77.8 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 1.2 | 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 | 5.5 | 54.5 | 45.5 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.3 | 0.0 | 84.6 | 15.4 |

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 | | | |

**11/3/2009 2:29:29 PM**

Travel Conditions

| | Residential | | | Commercial | | |
|---|---|---|---|---|---|---|
| | Home-Work | Home-Shop | Home-Other | Commute | Non-Work | Customer |
| % of Trips - Commercial (by land use) | | | | | | |
| Discount club | | | | 2.0 | 1.0 | 97.0 |
| Gasoline/service station | | | | 2.0 | 1.0 | 97.0 |

Operational Changes to Defaults

**11/3/2009 2:29:35 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Summer Operational Mitigated Emissions (Pounds/Day)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

| Source | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|---|---|---|---|---|---|---|---|
| Discount club | 25.04 | 29.69 | 255.49 | 0.28 | 48.67 | 9.39 | 28,879.90 |
| Gasoline/service station | 8.49 | 7.65 | 66.71 | 0.06 | 10.67 | 2.08 | 6,520.99 |
| TOTALS (lbs/day, mitigated) | 33.53 | 37.34 | 322.20 | 0.34 | 59.34 | 11.47 | 35,400.89 |

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2013 Temperature (F): 85 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Operational Mitigation Options Selected

Residential Mitigation Measures

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

---

Percent Reduction in Trips is 5.11%

**11/3/2009 2:29:35 PM**

Nonresidential Mitigation Measures

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are 1098.

The employment for the study area (within a 1/2 mile radius of the project) is 841.

Non-Residential Local-Serving Retail Mitigation

---

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

---

Percent Reduction in Trips is 0.01%

Inputs Selected:

The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 1

The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0

The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

---

Percent Reduction in Trips is 2.29%

Inputs Selected:

**11/3/2009 2:29:35 PM**

Nonresidential Mitigation Measures

The Number of Intersections per Square Mile is 588

The Percent of Streets with Sidewalks on One Side is 8%

The Percent of Streets with Sidewalks on Both Sides is 19%

The Percent of Arterials/Collectors with Bike Lanes or where Suitable,

Direct Parallel Routes Exist is 8%

Summary of Land Uses

| Land Use Type | Acreage | Trip Rate | Unit Type | No. Units | Total Trips | Total VMT |
|---|---|---|---|---|---|---|
| Discount club | | 37.87 | 1000 sq ft | 155.00 | 5,869.33 | 28,226.47 |
| Gasoline/service station | | 152.70 | pumps | 18.00 | 2,748.58 | 6,177.35 |
| | | | | | 8,617.91 | 34,403.82 |

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Auto | 39.8 | 0.5 | 99.2 | 0.3 |
| Light Truck < 3750 lbs | 14.1 | 1.4 | 91.5 | 7.1 |
| Light Truck 3751-5750 lbs | 22.4 | 0.4 | 99.2 | 0.4 |
| Med Truck 5751-8500 lbs | 11.1 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.6 | 0.0 | 73.1 | 26.9 |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.9 | 0.0 | 44.4 | 55.6 |
| Med-Heavy Truck 14,001-33,000 lbs | 0.9 | 0.0 | 22.2 | 77.8 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 1.2 | 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 |

**11/3/2009 2:29:35 PM**

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Motorcycle | 5.5 | 54.5 | 45.5 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.3 | 0.0 | 84.6 | 15.4 |

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) | | | | | | |
| Discount club | | | | 2.0 | 1.0 | 97.0 |
| Gasoline/service station | | | | 2.0 | 1.0 | 97.0 |

Operational Changes to Defaults

**11/3/2009 2:29:16 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

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

| Source | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| Natural Gas | 0.11 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |
| Hearth - No Summer Emissions | | | | | | | |
| Landscape | 0.25 | 0.04 | 3.09 | 0.00 | 0.01 | 0.01 | 5.62 |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 0.91 | | | | | | |
| TOTALS (lbs/day, unmitigated) | 1.27 | 1.55 | 4.36 | 0.00 | 0.01 | 0.01 | 1,815.22 |

Area Source Changes to Defaults

**11/3/2009 2:29:23 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Summer Area Source Mitigated Emissions (Pounds/Day)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

| Source | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| Natural Gas | 0.11 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |
| Hearth - No Summer Emissions | | | | | | | |
| Landscape | 0.25 | 0.04 | 3.09 | 0.00 | 0.01 | 0.01 | 5.62 |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 0.82 | | | | | | |
| TOTALS (lbs/day, mitigated) | 1.18 | 1.55 | 4.36 | 0.00 | 0.01 | 0.01 | 1,815.22 |

Area Source Mitigation Measures Selected

| Mitigation Description | Percent Reduction |
|---|---|
| For Residential Interior Use Low VOC Coating | 10.00 |
| For Residential Exterior Use Low VOC Coating | 10.00 |
| For Nonresidential Interior Use Low VOC Coating | 10.00 |
| For Nonresidential Exterior Use Low VOC Coating | 10.00 |

Area Source Changes to Defaults

**11/3/2009 2:29:43 PM**

Urbemis 2007 Version 9.2.4

Summary Report for Winter Emissions (Pounds/Day)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 | PM2.5 Dust | PM2.5 Exhaust | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 TOTALS (lbs/day unmitigated) | 12.99 | 148.29 | 62.09 | 0.12 | 115.26 | 6.46 | 121.72 | 24.13 | 5.94 | 30.07 | 18,311.78 |
| 2010 TOTALS (lbs/day mitigated) | 12.99 | 132.29 | 62.09 | 0.12 | 12.74 | 3.60 | 16.34 | 2.72 | 3.31 | 6.03 | 18,311.78 |
| 2011 TOTALS (lbs/day unmitigated) | 6.59 | 40.73 | 33.10 | 0.01 | 80.06 | 2.38 | 82.44 | 16.73 | 2.18 | 18.91 | 5,244.51 |
| 2011 TOTALS (lbs/day mitigated) | 6.59 | 29.88 | 33.10 | 0.01 | 8.62 | 0.24 | 8.86 | 1.81 | 0.22 | 2.03 | 5,244.51 |
| 2012 TOTALS (lbs/day unmitigated) | 9.05 | 53.07 | 41.58 | 0.02 | 80.08 | 3.39 | 83.48 | 16.74 | 3.12 | 19.85 | 6,815.08 |
| 2012 TOTALS (lbs/day mitigated) | 9.05 | 39.13 | 41.58 | 0.02 | 8.64 | 0.36 | 9.00 | 1.82 | 0.33 | 2.15 | 6,815.08 |

**11/3/2009 2:29:43 PM**

AREA SOURCE EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 1.02 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |
| TOTALS (lbs/day, mitigated) | 0.93 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |
| Percent Reduction | 8.82 | 0.00 | 0.00 | NaN | NaN | NaN | 0.00 |

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 47.01 | 58.65 | 431.74 | 0.34 | 65.50 | 12.66 | 34,114.20 |
| TOTALS (lbs/day, mitigated) | 42.59 | 53.14 | 391.11 | 0.31 | 59.34 | 11.47 | 30,904.08 |
| Percent Reduction | 9.40 | 9.39 | 9.41 | 8.82 | 9.40 | 9.40 | 9.41 |

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day, unmitigated) | 48.03 | 60.16 | 433.01 | 0.34 | 65.50 | 12.66 | 35,923.80 |
| TOTALS (lbs/day, mitigated) | 43.52 | 54.65 | 392.38 | 0.31 | 59.34 | 11.47 | 32,713.68 |
| Percent Reduction | 9.39 | 9.16 | 9.38 | 8.82 | 9.40 | 9.40 | 8.94 |

**11/3/2009 2:29:49 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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)

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 Total | PM2.5 Dust | PM2.5 Exhaust | PM2.5 Total | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 5/3/2010-7/30/2010 Active Days: 65 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:29:49 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/2/2010-8/19/2010 Active Days: 14 | 4.21 | 32.77 | 19.02 | 0.00 | 80.01 | 1.84 | 81.85 | 16.71 | 1.69 | 18.40 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:29:49 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/20/2010-9/20/2010<br>Active Days: 22 | **12.99** | **148.29** | **62.09** | **0.12** | **115.26** | **6.46** | **121.72** | **24.13** | **5.94** | **30.07** | **18,311.78** |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/20/2010-09/20/2010 | 8.78 | 115.52 | 43.06 | 0.12 | 35.25 | 4.62 | 39.87 | 7.42 | 4.25 | 11.66 | 15,159.62 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 34.80 | 0.00 | 34.80 | 7.27 | 0.00 | 7.27 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| Mass Grading On Road Diesel | 5.75 | 90.48 | 29.67 | 0.12 | 0.45 | 3.36 | 3.81 | 0.15 | 3.09 | 3.24 | 12,810.03 |
| Mass Grading Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:29:49 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/21/2010-11/1/2010 Active Days: 30 | 4.21 | 32.77 | 19.02 | 0.00 | 80.01 | 1.84 | 81.85 | 16.71 | 1.69 | 18.40 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 7.73 | 5.62 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 7.68 | 4.68 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.54 | 0.54 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 11/2/2010-12/31/2010 Active Days: 44 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 25.04 | 13.40 | 0.00 | 80.00 | 1.25 | 81.26 | 16.71 | 1.15 | 17.86 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 24.99 | 12.46 | 0.00 | 0.00 | 1.25 | 1.25 | 0.00 | 1.15 | 1.15 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 1/3/2011-10/31/2011 Active Days: 216 | 2.85 | 23.48 | 12.82 | 0.00 | 80.00 | 1.17 | 81.18 | 16.71 | 1.08 | 17.79 | 2,349.64 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 23.48 | 12.82 | 0.00 | 80.00 | 1.17 | 81.18 | 16.71 | 1.08 | 17.79 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 23.44 | 11.96 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.08 | 1.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |

**11/3/2009 2:29:49 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 11/1/2011-12/30/2011<br>Active Days: 44 | 6.59 | 40.73 | 33.10 | 0.01 | 80.06 | 2.38 | 82.44 | 16.73 | 2.18 | 18.91 | 5,244.51 |
| Building 11/01/2011-11/01/2012 | 3.74 | 17.25 | 20.29 | 0.01 | 0.06 | 1.20 | 1.26 | 0.02 | 1.10 | 1.13 | 2,894.88 |
| Building Off Road Diesel | 3.39 | 15.67 | 10.85 | 0.00 | 0.00 | 1.14 | 1.14 | 0.00 | 1.05 | 1.05 | 1,621.20 |
| Building Vendor Trips | 0.09 | 1.13 | 0.86 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.04 | 0.04 | 252.11 |
| Building Worker Trips | 0.27 | 0.45 | 8.58 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.57 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 23.48 | 12.82 | 0.00 | 80.00 | 1.17 | 81.18 | 16.71 | 1.08 | 17.79 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 23.44 | 11.96 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.08 | 1.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |
| Time Slice 1/2/2012-6/29/2012<br>Active Days: 130 | 6.17 | 38.20 | 31.47 | 0.01 | 80.06 | 2.17 | 82.24 | 16.73 | 2.00 | 18.73 | 5,244.93 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 21.99 | 12.30 | 0.00 | 80.00 | 1.07 | 81.08 | 16.71 | 0.99 | 17.70 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 21.95 | 11.51 | 0.00 | 0.00 | 1.07 | 1.07 | 0.00 | 0.99 | 0.99 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |

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| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 7/2/2012-8/1/2012 Active Days: 23 | 9.05 | 53.07 | 41.58 | 0.02 | 80.08 | 3.39 | 83.48 | 16.74 | 3.12 | 19.85 | 6,815.08 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 14.87 | 10.11 | 0.00 | 0.02 | 1.22 | 1.24 | 0.01 | 1.12 | 1.13 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 13.48 | 8.10 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.07 | 1.07 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 21.99 | 12.30 | 0.00 | 80.00 | 1.07 | 81.08 | 16.71 | 0.99 | 17.70 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 80.00 | 0.00 | 80.00 | 16.71 | 0.00 | 16.71 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 21.95 | 11.51 | 0.00 | 0.00 | 1.07 | 1.07 | 0.00 | 0.99 | 0.99 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |
| Time Slice 8/2/2012-8/31/2012 Active Days: 22 | 6.33 | 31.09 | 29.28 | 0.02 | 0.08 | 2.32 | 2.40 | 0.03 | 2.13 | 2.16 | 4,465.40 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 14.87 | 10.11 | 0.00 | 0.02 | 1.22 | 1.24 | 0.01 | 1.12 | 1.13 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 13.48 | 8.10 | 0.00 | 0.00 | 1.17 | 1.17 | 0.00 | 1.07 | 1.07 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

**11/3/2009 2:29:49 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/3/2012-11/1/2012<br>Active Days: 44 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building 11/01/2011-11/01/2012 | 3.46 | 16.22 | 19.17 | 0.01 | 0.06 | 1.10 | 1.16 | 0.02 | 1.01 | 1.03 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 14.81 | 10.52 | 0.00 | 0.00 | 1.04 | 1.04 | 0.00 | 0.95 | 0.95 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

## Phase Assumptions

Phase: Demolition 5/1/2010 - 11/1/2010 - Default Fine Site Grading Description

Building Volume Total (cubic feet): 0

Building Volume Daily (cubic feet): 0

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description

Total Acres Disturbed: 6.89

Maximum Daily Acreage Disturbed: 4

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 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 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: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export

Total Acres Disturbed: 4.82

Maximum Daily Acreage Disturbed: 1.74

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

**11/3/2009 2:29:49 PM**

On Road Truck Travel (VMT): 3181.82

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 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: Paving 7/1/2012 - 9/1/2012 - Default Paving Description

Acres to be Paved: 9

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

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

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Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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, Mitigated)

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 Total | PM2.5 Dust | PM2.5 Exhaust | PM2.5 Total | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 5/3/2010-7/30/2010 Active Days: 65 | 1.17 | 5.60 | 5.62 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.04 | 0.04 | 802.57 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 5.60 | 5.62 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.04 | 0.04 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 5.55 | 4.68 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:29:56 PM**

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/2/2010-8/19/2010 Active Days: 14 | 4.21 | 23.71 | 19.02 | 0.00 | 8.57 | 0.14 | 8.71 | 1.79 | 0.13 | 1.92 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 5.60 | 5.62 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.04 | 0.04 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 5.55 | 4.68 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 18.10 | 13.40 | 0.00 | 8.56 | 0.10 | 8.66 | 1.79 | 0.09 | 1.88 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 18.05 | 12.46 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 0.09 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:29:56 PM**

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 8/20/2010-9/20/2010<br>Active Days: 22 | **12.99** | 132.29 | **62.09** | **0.12** | 12.74 | 3.60 | 16.34 | 2.72 | 3.31 | 6.03 | **18,311.78** |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 5.60 | 5.62 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.04 | 0.04 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 5.55 | 4.68 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 18.10 | 13.40 | 0.00 | 8.56 | 0.10 | 8.66 | 1.79 | 0.09 | 1.88 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 18.05 | 12.46 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 0.09 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/20/2010-09/20/2010 | 8.78 | 108.58 | 43.06 | 0.12 | 4.18 | 3.46 | 7.64 | 0.93 | 3.18 | 4.11 | 15,159.62 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 3.72 | 0.00 | 3.72 | 0.78 | 0.00 | 0.78 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 18.05 | 12.46 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 0.09 | 2,247.32 |
| Mass Grading On Road Diesel | 5.75 | 90.48 | 29.67 | 0.12 | 0.45 | 3.36 | 3.81 | 0.15 | 3.09 | 3.24 | 12,810.03 |
| Mass Grading Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |

**11/3/2009 2:29:56 PM**

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/21/2010-11/1/2010 Active Days: 30 | 4.21 | 23.71 | 19.02 | 0.00 | 8.57 | 0.14 | 8.71 | 1.79 | 0.13 | 1.92 | 3,152.16 |
| Demolition 05/01/2010-11/01/2010 | 1.17 | 5.60 | 5.62 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.04 | 0.04 | 802.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 1.14 | 5.55 | 4.68 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 700.30 |
| Demo 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 |
| Demo Worker Trips | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 18.10 | 13.40 | 0.00 | 8.56 | 0.10 | 8.66 | 1.79 | 0.09 | 1.88 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 18.05 | 12.46 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 0.09 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 11/2/2010-12/31/2010 Active Days: 44 | 3.03 | 18.10 | 13.40 | 0.00 | 8.56 | 0.10 | 8.66 | 1.79 | 0.09 | 1.88 | 2,349.59 |
| Mass Grading 08/01/2010-08/01/2012 | 3.03 | 18.10 | 13.40 | 0.00 | 8.56 | 0.10 | 8.66 | 1.79 | 0.09 | 1.88 | 2,349.59 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 3.00 | 18.05 | 12.46 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 0.09 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.94 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.27 |
| Time Slice 1/3/2011-10/31/2011 Active Days: 216 | 2.85 | 16.98 | 12.82 | 0.00 | 8.56 | 0.09 | 8.65 | 1.79 | 0.08 | 1.87 | 2,349.64 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 16.98 | 12.82 | 0.00 | 8.56 | 0.09 | 8.65 | 1.79 | 0.08 | 1.87 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 16.93 | 11.96 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.08 | 0.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |

**11/3/2009 2:29:56 PM**

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 11/1/2011-12/30/2011<br>Active Days: 44 | 6.59 | 29.88 | 33.10 | 0.01 | 8.62 | 0.24 | 8.86 | 1.81 | 0.22 | 2.03 | 5,244.51 |
| Building 11/01/2011-11/01/2012 | 3.74 | 12.90 | 20.29 | 0.01 | 0.06 | 0.15 | 0.21 | 0.02 | 0.14 | 0.16 | 2,894.88 |
| Building Off Road Diesel | 3.39 | 11.32 | 10.85 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.08 | 0.08 | 1,621.20 |
| Building Vendor Trips | 0.09 | 1.13 | 0.86 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.04 | 0.04 | 252.11 |
| Building Worker Trips | 0.27 | 0.45 | 8.58 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.57 |
| Mass Grading 08/01/2010-08/01/2012 | 2.85 | 16.98 | 12.82 | 0.00 | 8.56 | 0.09 | 8.65 | 1.79 | 0.08 | 1.87 | 2,349.64 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 2.83 | 16.93 | 11.96 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.08 | 0.08 | 2,247.32 |
| 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 | 0.03 | 0.05 | 0.86 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.32 |
| Time Slice 1/2/2012-6/29/2012<br>Active Days: 130 | 6.17 | 28.00 | 31.47 | 0.01 | 8.62 | 0.22 | 8.84 | 1.81 | 0.20 | 2.01 | 5,244.93 |
| Building 11/01/2011-11/01/2012 | 3.46 | 12.11 | 19.17 | 0.01 | 0.06 | 0.14 | 0.20 | 0.02 | 0.13 | 0.15 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 10.70 | 10.52 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.07 | 0.07 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 15.90 | 12.30 | 0.00 | 8.56 | 0.08 | 8.64 | 1.79 | 0.08 | 1.86 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 15.86 | 11.51 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.07 | 0.07 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |

**11/3/2009 2:29:56 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 7/2/2012-8/1/2012 Active Days: 23 | 9.05 | 39.13 | 41.58 | 0.02 | 8.64 | 0.36 | 9.00 | 1.82 | 0.33 | 2.15 | 6,815.08 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 11.13 | 10.11 | 0.00 | 0.02 | 0.14 | 0.16 | 0.01 | 0.13 | 0.13 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 9.74 | 8.10 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.08 | 0.08 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 12.11 | 19.17 | 0.01 | 0.06 | 0.14 | 0.20 | 0.02 | 0.13 | 0.15 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 10.70 | 10.52 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.07 | 0.07 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |
| Mass Grading 08/01/2010-08/01/2012 | 2.71 | 15.90 | 12.30 | 0.00 | 8.56 | 0.08 | 8.64 | 1.79 | 0.08 | 1.86 | 2,349.68 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 8.56 | 0.00 | 8.56 | 1.79 | 0.00 | 1.79 | 0.00 |
| Mass Grading Off Road Diesel | 2.69 | 15.86 | 11.51 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.07 | 0.07 | 2,247.32 |
| 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 | 0.02 | 0.04 | 0.79 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 102.36 |
| Time Slice 8/2/2012-8/31/2012 Active Days: 22 | 6.33 | 23.23 | 29.28 | 0.02 | 0.08 | 0.28 | 0.36 | 0.03 | 0.25 | 0.28 | 4,465.40 |
| Asphalt 07/01/2012-09/01/2012 | 2.88 | 11.13 | 10.11 | 0.00 | 0.02 | 0.14 | 0.16 | 0.01 | 0.13 | 0.13 | 1,570.15 |
| Paving Off-Gas | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 2.23 | 9.74 | 8.10 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.08 | 0.08 | 1,131.92 |
| Paving On Road Diesel | 0.09 | 1.30 | 0.44 | 0.00 | 0.01 | 0.05 | 0.06 | 0.00 | 0.04 | 0.05 | 233.51 |
| Paving Worker Trips | 0.05 | 0.08 | 1.57 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 204.72 |
| Building 11/01/2011-11/01/2012 | 3.46 | 12.11 | 19.17 | 0.01 | 0.06 | 0.14 | 0.20 | 0.02 | 0.13 | 0.15 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 10.70 | 10.52 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.07 | 0.07 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

**11/3/2009 2:29:56 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Slice 9/3/2012-11/1/2012<br>Active Days: 44 | 3.46 | 12.11 | 19.17 | 0.01 | 0.06 | 0.14 | 0.20 | 0.02 | 0.13 | 0.15 | 2,895.26 |
| Building 11/01/2011-11/01/2012 | 3.46 | 12.11 | 19.17 | 0.01 | 0.06 | 0.14 | 0.20 | 0.02 | 0.13 | 0.15 | 2,895.26 |
| Building Off Road Diesel | 3.14 | 10.70 | 10.52 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.07 | 0.07 | 1,621.20 |
| Building Vendor Trips | 0.08 | 1.00 | 0.80 | 0.00 | 0.01 | 0.04 | 0.05 | 0.00 | 0.03 | 0.04 | 252.10 |
| Building Worker Trips | 0.24 | 0.41 | 7.86 | 0.01 | 0.05 | 0.02 | 0.07 | 0.02 | 0.02 | 0.04 | 1,021.96 |

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Demolition 5/1/2010 - 11/1/2010 - Default Fine Site Grading Description

For Concrete/Industrial Saws, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Concrete/Industrial Saws, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Concrete/Industrial Saws, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Rubber Tired Dozers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

**11/3/2009 2:29:56 PM**

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Graders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Graders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Rubber Tired Dozers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Water Trucks, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Water Trucks, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

**11/3/2009 2:29:56 PM**

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Graders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Graders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Rubber Tired Dozers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Water Trucks, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Water Trucks, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Paving 7/1/2012 - 9/1/2012 - Default Paving Description

For Cement and Mortar Mixers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Cement and Mortar Mixers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Cement and Mortar Mixers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

**11/3/2009 2:29:56 PM**

For Pavers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Pavers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Pavers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Paving Equipment, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Paving Equipment, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Paving Equipment, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Rollers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rollers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rollers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

For Cranes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Cranes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Cranes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Forklifts, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Forklifts, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Forklifts, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Generator Sets, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Generator Sets, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

**11/3/2009 2:29:56 PM**

PM10: 85% PM25: 85%

For Generator Sets, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Welders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Welders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Welders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

## Phase Assumptions

Phase: Demolition 5/1/2010 - 11/1/2010 - Default Fine Site Grading Description

Building Volume Total (cubic feet): 0

Building Volume Daily (cubic feet): 0

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description

Total Acres Disturbed: 6.89

Maximum Daily Acreage Disturbed: 4

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 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

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1 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: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export
Total Acres Disturbed: 4.82
Maximum Daily Acreage Disturbed: 1.74
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 3181.82
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 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: Paving 7/1/2012 - 9/1/2012 - Default Paving Description
Acres to be Paved: 9
Off-Road Equipment:
4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description
Off-Road Equipment:
1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

**11/3/2009 2:30:33 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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 |
|---|---|---|---|---|---|---|---|
| Discount club | 34.49 | 46.72 | 334.42 | 0.28 | 53.72 | 10.37 | 27,807.14 |
| Gasoline/service station | 12.52 | 11.93 | 97.32 | 0.06 | 11.78 | 2.29 | 6,307.06 |
| TOTALS (lbs/day, unmitigated) | 47.01 | 58.65 | 431.74 | 0.34 | 65.50 | 12.66 | 34,114.20 |

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2013 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 |
|---|---|---|---|---|---|---|
| Discount club | | 41.80 | 1000 sq ft | 155.00 | 6,479.00 | 31,158.46 |
| Gasoline/service station | | 168.56 | pumps | 18.00 | 3,034.08 | 6,819.01 |
| | | | | | 9,513.08 | 37,977.47 |

**11/3/2009 2:30:33 PM**

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Auto | 39.8 | 0.5 | 99.2 | 0.3 |
| Light Truck < 3750 lbs | 14.1 | 1.4 | 91.5 | 7.1 |
| Light Truck 3751-5750 lbs | 22.4 | 0.4 | 99.2 | 0.4 |
| Med Truck 5751-8500 lbs | 11.1 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.6 | 0.0 | 73.1 | 26.9 |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.9 | 0.0 | 44.4 | 55.6 |
| Med-Heavy Truck 14,001-33,000 lbs | 0.9 | 0.0 | 22.2 | 77.8 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 1.2 | 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 | 5.5 | 54.5 | 45.5 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.3 | 0.0 | 84.6 | 15.4 |

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 | | | |

**11/3/2009 2:30:33 PM**

Travel Conditions

| | Residential | | | Commercial | | |
|---|---|---|---|---|---|---|
| | Home-Work | Home-Shop | Home-Other | Commute | Non-Work | Customer |
| % of Trips - Commercial (by land use) | | | | | | |
| Discount club | | | | 2.0 | 1.0 | 97.0 |
| Gasoline/service station | | | | 2.0 | 1.0 | 97.0 |

Operational Changes to Defaults

**11/3/2009 2:30:38 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Summer Pounds Per Day, Mitigated)

| Source | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|---|---|---|---|---|---|---|---|
| Discount club | 31.25 | 42.33 | 302.95 | 0.25 | 48.67 | 9.39 | 25,190.51 |
| Gasoline/service station | 11.34 | 10.81 | 88.16 | 0.06 | 10.67 | 2.08 | 5,713.57 |
| TOTALS (lbs/day, mitigated) | 42.59 | 53.14 | 391.11 | 0.31 | 59.34 | 11.47 | 30,904.08 |

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2013 Temperature (F): 40 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Operational Mitigation Options Selected

Residential Mitigation Measures

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

---

Percent Reduction in Trips is 5.11%

**11/3/2009 2:30:38 PM**

Nonresidential Mitigation Measures

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are 1098.

The employment for the study area (within a 1/2 mile radius of the project) is 841.

Non-Residential Local-Serving Retail Mitigation

---

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

---

Percent Reduction in Trips is 0.01%

Inputs Selected:

The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 1

The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0

The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

---

Percent Reduction in Trips is 2.29%

Inputs Selected:

**11/3/2009 2:30:38 PM**

Nonresidential Mitigation Measures

The Number of Intersections per Square Mile is 588

The Percent of Streets with Sidewalks on One Side is 8%

The Percent of Streets with Sidewalks on Both Sides is 19%

The Percent of Arterials/Collectors with Bike Lanes or where Suitable,

Direct Parallel Routes Exist is 8%

Summary of Land Uses

| Land Use Type | Acreage | Trip Rate | Unit Type | No. Units | Total Trips | Total VMT |
|---|---|---|---|---|---|---|
| Discount club | | 37.87 | 1000 sq ft | 155.00 | 5,869.33 | 28,226.47 |
| Gasoline/service station | | 152.70 | pumps | 18.00 | 2,748.58 | 6,177.35 |
| | | | | | 8,617.91 | 34,403.82 |

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Auto | 39.8 | 0.5 | 99.2 | 0.3 |
| Light Truck < 3750 lbs | 14.1 | 1.4 | 91.5 | 7.1 |
| Light Truck 3751-5750 lbs | 22.4 | 0.4 | 99.2 | 0.4 |
| Med Truck 5751-8500 lbs | 11.1 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.6 | 0.0 | 73.1 | 26.9 |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.9 | 0.0 | 44.4 | 55.6 |
| Med-Heavy Truck 14,001-33,000 lbs | 0.9 | 0.0 | 22.2 | 77.8 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 1.2 | 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 |

**11/3/2009 2:30:38 PM**

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Motorcycle | 5.5 | 54.5 | 45.5 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.3 | 0.0 | 84.6 | 15.4 |

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) | | | | | | |
| Discount club | | | | 2.0 | 1.0 | 97.0 |
| Gasoline/service station | | | | 2.0 | 1.0 | 97.0 |

Operational Changes to Defaults

**11/3/2009 2:30:02 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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)

| Source | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| Natural Gas | 0.11 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |
| Hearth | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping - No Winter Emissions | | | | | | | |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 0.91 | | | | | | |
| TOTALS (lbs/day, unmitigated) | 1.02 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |

Area Source Changes to Defaults

**11/3/2009 2:30:08 PM**

Urbemis 2007 Version 9.2.4

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

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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, Mitigated)

| Source | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| Natural Gas | 0.11 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |
| Hearth | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping - No Winter Emissions | | | | | | | |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 0.82 | | | | | | |
| TOTALS (lbs/day, Mitigated) | 0.93 | 1.51 | 1.27 | 0.00 | 0.00 | 0.00 | 1,809.60 |

Area Source Mitigation Measures Selected

| Mitigation Description | Percent Reduction |
|---|---|
| For Residential Interior Use Low VOC Coating | 10.00 |
| For Residential Exterior Use Low VOC Coating | 10.00 |
| For Nonresidential Interior Use Low VOC Coating | 10.00 |
| For Nonresidential Exterior Use Low VOC Coating | 10.00 |

Area Source Changes to Defaults

**11/3/2009 2:30:45 PM**

Urbemis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/Year)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 | PM2.5 Dust | PM2.5 Exhaust | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 TOTALS (tons/year unmitigated) | 0.34 | 3.15 | 1.58 | 0.00 | 4.79 | 0.16 | 4.95 | 1.00 | 0.15 | 1.15 | 348.55 |
| 2010 TOTALS (tons/year mitigated) | 0.34 | 2.56 | 1.58 | 0.00 | 0.52 | 0.05 | 0.56 | 0.11 | 0.04 | 0.15 | 348.55 |
| Percent Reduction | 0.00 | 18.94 | 0.00 | 0.00 | 89.20 | 70.67 | 88.61 | 89.14 | 70.69 | 86.80 | 0.00 |
| | | | | | | | | | | | |
| 2011 TOTALS (tons/year unmitigated) | 0.45 | 3.43 | 2.11 | 0.00 | 10.40 | 0.18 | 10.58 | 2.17 | 0.16 | 2.34 | 369.14 |
| 2011 TOTALS (tons/year mitigated) | 0.45 | 2.49 | 2.11 | 0.00 | 1.11 | 0.02 | 1.13 | 0.23 | 0.01 | 0.25 | 369.14 |
| Percent Reduction | 0.00 | 27.42 | 0.00 | 0.00 | 89.29 | 91.58 | 89.33 | 89.28 | 91.63 | 89.44 | 0.00 |
| | | | | | | | | | | | |
| 2012 TOTALS (tons/year unmitigated) | 0.65 | 3.79 | 3.27 | 0.00 | 6.13 | 0.23 | 6.36 | 1.28 | 0.21 | 1.49 | 532.11 |
| 2012 TOTALS (tons/year mitigated) | 0.65 | 2.79 | 3.27 | 0.00 | 0.66 | 0.02 | 0.69 | 0.14 | 0.02 | 0.16 | 532.11 |
| Percent Reduction | 0.00 | 26.37 | 0.00 | 0.00 | 89.20 | 89.21 | 89.20 | 89.12 | 89.35 | 89.16 | 0.00 |

**11/3/2009 2:30:45 PM**

AREA SOURCE EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (tons/year, unmitigated) | 0.21 | 0.28 | 0.51 | 0.00 | 0.00 | 0.00 | 330.76 |
| TOTALS (tons/year, mitigated) | 0.19 | 0.28 | 0.51 | 0.00 | 0.00 | 0.00 | 330.76 |
| Percent Reduction | 9.52 | 0.00 | 0.00 | NaN | NaN | NaN | 0.00 |

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (tons/year, unmitigated) | 7.35 | 8.58 | 69.54 | 0.06 | 11.95 | 2.31 | 6,829.78 |
| TOTALS (tons/year, mitigated) | 6.67 | 7.78 | 62.99 | 0.06 | 10.83 | 2.09 | 6,187.10 |
| Percent Reduction | 9.25 | 9.32 | 9.42 | 0.00 | 9.37 | 9.52 | 9.41 |

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| TOTALS (tons/year, unmitigated) | 7.56 | 8.86 | 70.05 | 0.06 | 11.95 | 2.31 | 7,160.54 |
| TOTALS (tons/year, mitigated) | 6.86 | 8.06 | 63.50 | 0.06 | 10.83 | 2.09 | 6,517.86 |
| Percent Reduction | 9.26 | 9.03 | 9.35 | 0.00 | 9.37 | 9.52 | 8.98 |

**11/3/2009 2:30:50 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 Total | PM2.5 Dust | PM2.5 Exhaust | PM2.5 Total | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | 0.34 | 3.15 | 1.58 | 0.00 | 4.79 | 0.16 | 4.95 | 1.00 | 0.15 | 1.15 | 348.55 |
| Demolition 05/01/2010-11/01/2010 | 0.08 | 0.51 | 0.37 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 52.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 0.07 | 0.50 | 0.31 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.04 | 0.04 | 45.87 |
| Demo 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 |
| Demo Worker Trips | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.70 |
| Mass Grading 08/01/2010-08/01/2012 | 0.17 | 1.38 | 0.74 | 0.00 | 4.40 | 0.07 | 4.47 | 0.92 | 0.06 | 0.98 | 129.23 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 4.40 | 0.00 | 4.40 | 0.92 | 0.00 | 0.92 | 0.00 |
| Mass Grading Off Road Diesel | 0.17 | 1.37 | 0.69 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.06 | 0.06 | 123.60 |
| 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 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.62 |
| Mass Grading 08/20/2010-09/20/2010 | 0.10 | 1.27 | 0.47 | 0.00 | 0.39 | 0.05 | 0.44 | 0.08 | 0.05 | 0.13 | 166.76 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 0.00 | 0.38 | 0.08 | 0.00 | 0.08 | 0.00 |
| Mass Grading Off Road Diesel | 0.03 | 0.27 | 0.14 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 24.72 |
| Mass Grading On Road Diesel | 0.06 | 1.00 | 0.33 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.03 | 0.04 | 140.91 |
| Mass Grading Worker Trips | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.12 |

**11/3/2009 2:30:50 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2011 | 0.45 | 3.43 | 2.11 | 0.00 | 10.40 | 0.18 | 10.58 | 2.17 | 0.16 | 2.34 | 369.14 |
| Mass Grading 08/01/2010-08/01/2012 | 0.37 | 3.05 | 1.67 | 0.00 | 10.40 | 0.15 | 10.55 | 2.17 | 0.14 | 2.31 | 305.45 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 10.40 | 0.00 | 10.40 | 2.17 | 0.00 | 2.17 | 0.00 |
| Mass Grading Off Road Diesel | 0.37 | 3.05 | 1.55 | 0.00 | 0.00 | 0.15 | 0.15 | 0.00 | 0.14 | 0.14 | 292.15 |
| 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 | 0.00 | 0.01 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.30 |
| Building 11/01/2011-11/01/2012 | 0.08 | 0.38 | 0.45 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.02 | 0.02 | 63.69 |
| Building Off Road Diesel | 0.07 | 0.34 | 0.24 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.02 | 0.02 | 35.67 |
| Building Vendor Trips | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.55 |
| Building Worker Trips | 0.01 | 0.01 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 22.47 |
| 2012 | 0.65 | 3.79 | 3.27 | 0.00 | 6.13 | 0.23 | 6.36 | 1.28 | 0.21 | 1.49 | 532.11 |
| Building 11/01/2011-11/01/2012 | 0.38 | 1.78 | 2.10 | 0.00 | 0.01 | 0.12 | 0.13 | 0.00 | 0.11 | 0.11 | 317.03 |
| Building Off Road Diesel | 0.34 | 1.62 | 1.15 | 0.00 | 0.00 | 0.11 | 0.11 | 0.00 | 0.10 | 0.10 | 177.52 |
| Building Vendor Trips | 0.01 | 0.11 | 0.09 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 27.61 |
| Building Worker Trips | 0.03 | 0.04 | 0.86 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 111.90 |
| Mass Grading 08/01/2010-08/01/2012 | 0.21 | 1.68 | 0.94 | 0.00 | 6.12 | 0.08 | 6.20 | 1.28 | 0.08 | 1.35 | 179.75 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 6.12 | 0.00 | 6.12 | 1.28 | 0.00 | 1.28 | 0.00 |
| Mass Grading Off Road Diesel | 0.21 | 1.68 | 0.88 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.08 | 0.08 | 171.92 |
| 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 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.83 |
| Asphalt 07/01/2012-09/01/2012 | 0.06 | 0.33 | 0.23 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.03 | 0.03 | 35.33 |
| Paving Off-Gas | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 0.05 | 0.30 | 0.18 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.02 | 0.02 | 25.47 |
| Paving On Road Diesel | 0.00 | 0.03 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.25 |
| Paving Worker Trips | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.61 |

**11/3/2009 2:30:50 PM**

Phase Assumptions

Phase: Demolition 5/1/2010 - 11/1/2010 - Default Fine Site Grading Description
Building Volume Total (cubic feet): 0
Building Volume Daily (cubic feet): 0
On Road Truck Travel (VMT): 0
Off-Road Equipment:
1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description
Total Acres Disturbed: 6.89
Maximum Daily Acreage Disturbed: 4
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 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 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: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export
Total Acres Disturbed: 4.82
Maximum Daily Acreage Disturbed: 1.74
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 3181.82
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
1 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

**11/3/2009 2:30:50 PM**

Phase: Paving 7/1/2012 - 9/1/2012 - Default Paving Description

Acres to be Paved: 9

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

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

**11/3/2009 2:30:56 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Annual Construction Mitigated Emissions (Tons/Year)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Mitigated)

| | ROG | NOx | CO | SO2 | PM10 Dust | PM10 Exhaust | PM10 Total | PM2.5 Dust | PM2.5 Exhaust | PM2.5 Total | CO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | 0.34 | 2.56 | 1.58 | 0.00 | 0.52 | 0.05 | 0.56 | 0.11 | 0.04 | 0.15 | 348.55 |
| Demolition 05/01/2010-11/01/2010 | 0.08 | 0.37 | 0.37 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 52.57 |
| Fugitive Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Demo Off Road Diesel | 0.07 | 0.36 | 0.31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 45.87 |
| Demo 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 |
| Demo Worker Trips | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.70 |
| Mass Grading 08/01/2010-08/01/2012 | 0.17 | 1.00 | 0.74 | 0.00 | 0.47 | 0.01 | 0.48 | 0.10 | 0.00 | 0.10 | 129.23 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.47 | 0.00 | 0.47 | 0.10 | 0.00 | 0.10 | 0.00 |
| Mass Grading Off Road Diesel | 0.17 | 0.99 | 0.69 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 123.60 |
| 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 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.62 |
| Mass Grading 08/20/2010-09/20/2010 | 0.10 | 1.19 | 0.47 | 0.00 | 0.05 | 0.04 | 0.08 | 0.01 | 0.04 | 0.05 | 166.76 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.04 | 0.01 | 0.00 | 0.01 | 0.00 |
| Mass Grading Off Road Diesel | 0.03 | 0.20 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 24.72 |
| Mass Grading On Road Diesel | 0.06 | 1.00 | 0.33 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.03 | 0.04 | 140.91 |
| Mass Grading Worker Trips | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.12 |

**11/3/2009 2:30:56 PM**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2011 | 0.45 | 2.49 | 2.11 | 0.00 | 1.11 | 0.02 | 1.13 | 0.23 | 0.01 | 0.25 | 369.14 |
| Mass Grading 08/01/2010-08/01/2012 | 0.37 | 2.21 | 1.67 | 0.00 | 1.11 | 0.01 | 1.12 | 0.23 | 0.01 | 0.24 | 305.45 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 1.11 | 0.00 | 1.11 | 0.23 | 0.00 | 0.23 | 0.00 |
| Mass Grading Off Road Diesel | 0.37 | 2.20 | 1.55 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 292.15 |
| 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 | 0.00 | 0.01 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.30 |
| Building 11/01/2011-11/01/2012 | 0.08 | 0.28 | 0.45 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 63.69 |
| Building Off Road Diesel | 0.07 | 0.25 | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 35.67 |
| Building Vendor Trips | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.55 |
| Building Worker Trips | 0.01 | 0.01 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 22.47 |
| 2012 | 0.65 | 2.79 | 3.27 | 0.00 | 0.66 | 0.02 | 0.69 | 0.14 | 0.02 | 0.16 | 532.11 |
| Building 11/01/2011-11/01/2012 | 0.38 | 1.33 | 2.10 | 0.00 | 0.01 | 0.02 | 0.02 | 0.00 | 0.01 | 0.02 | 317.03 |
| Building Off Road Diesel | 0.34 | 1.17 | 1.15 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 177.52 |
| Building Vendor Trips | 0.01 | 0.11 | 0.09 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 27.61 |
| Building Worker Trips | 0.03 | 0.04 | 0.86 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 111.90 |
| Mass Grading 08/01/2010-08/01/2012 | 0.21 | 1.22 | 0.94 | 0.00 | 0.65 | 0.01 | 0.66 | 0.14 | 0.01 | 0.14 | 179.75 |
| Mass Grading Dust | 0.00 | 0.00 | 0.00 | 0.00 | 0.65 | 0.00 | 0.65 | 0.14 | 0.00 | 0.14 | 0.00 |
| Mass Grading Off Road Diesel | 0.21 | 1.21 | 0.88 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 171.92 |
| 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 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.83 |
| Asphalt 07/01/2012-09/01/2012 | 0.06 | 0.25 | 0.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 35.33 |
| Paving Off-Gas | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving Off Road Diesel | 0.05 | 0.22 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 25.47 |
| Paving On Road Diesel | 0.00 | 0.03 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.25 |
| Paving Worker Trips | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.61 |

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Demolition 5/1/2010 - 11/1/2010 - Default Fine Site Grading Description

**11/3/2009 2:30:56 PM**

For Concrete/Industrial Saws, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Concrete/Industrial Saws, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Concrete/Industrial Saws, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Rubber Tired Dozers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Graders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Graders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

**11/3/2009 2:30:56 PM**

For Rubber Tired Dozers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Water Trucks, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Water Trucks, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export

For Soil Stablizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stablizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stablizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Graders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Graders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Graders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

**11/3/2009 2:30:56 PM**

For Rubber Tired Dozers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rubber Tired Dozers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Water Trucks, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Water Trucks, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Water Trucks, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Paving 7/1/2012 - 9/1/2012 - Default Paving Description

For Cement and Mortar Mixers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Cement and Mortar Mixers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Cement and Mortar Mixers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Pavers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Pavers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Pavers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Paving Equipment, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Paving Equipment, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

**11/3/2009 2:30:56 PM**

For Paving Equipment, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Rollers, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Rollers, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Rollers, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

For Cranes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Cranes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Cranes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Forklifts, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Forklifts, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Forklifts, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Generator Sets, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Generator Sets, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Generator Sets, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Tractors/Loaders/Backhoes, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

NOX: 15% PM10: 50% PM25: 50%

For Tractors/Loaders/Backhoes, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

For Welders, the Use Aqueous Diesel Fuel mitigation reduces emissions by:

**11/3/2009 2:30:56 PM**

NOX: 15% PM10: 50% PM25: 50%

For Welders, the Diesel Particulate Filter (DPF) 1st Tier mitigation reduces emissions by:

PM10: 85% PM25: 85%

For Welders, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

## Phase Assumptions

Phase: Demolition 5/1/2010 - 11/1/2010 - Default Fine Site Grading Description

Building Volume Total (cubic feet): 0

Building Volume Daily (cubic feet): 0

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Mass Grading 8/1/2010 - 8/1/2012 - Default Architectural Coating Description

Total Acres Disturbed: 6.89

Maximum Daily Acreage Disturbed: 4

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 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 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: Mass Grading 8/20/2010 - 9/20/2010 - Soil Export

Total Acres Disturbed: 4.82

Maximum Daily Acreage Disturbed: 1.74

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 3181.82

Off-Road Equipment:

**11/3/2009 2:30:56 PM**

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 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: Paving 7/1/2012 - 9/1/2012 - Default Paving Description

Acres to be Paved: 9

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 11/1/2011 - 11/1/2012 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

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

**11/3/2009 2:31:14 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Annual Operational Unmitigated Emissions (Tons/Year)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

| Source | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|---|---|---|---|---|---|---|---|
| Discount club | 5.45 | 6.83 | 54.66 | 0.05 | 9.80 | 1.89 | 5,570.30 |
| Gasoline/service station | 1.90 | 1.75 | 14.88 | 0.01 | 2.15 | 0.42 | 1,259.48 |
| TOTALS (tons/year, unmitigated) | 7.35 | 8.58 | 69.54 | 0.06 | 11.95 | 2.31 | 6,829.78 |

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2013 Season: Annual

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 |
|---|---|---|---|---|---|---|
| Discount club | | 41.80 | 1000 sq ft | 155.00 | 6,479.00 | 31,158.46 |
| Gasoline/service station | | 168.56 | pumps | 18.00 | 3,034.08 | 6,819.01 |
| | | | | | 9,513.08 | 37,977.47 |

**11/3/2009 2:31:14 PM**

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Auto | 39.8 | 0.5 | 99.2 | 0.3 |
| Light Truck < 3750 lbs | 14.1 | 1.4 | 91.5 | 7.1 |
| Light Truck 3751-5750 lbs | 22.4 | 0.4 | 99.2 | 0.4 |
| Med Truck 5751-8500 lbs | 11.1 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.6 | 0.0 | 73.1 | 26.9 |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.9 | 0.0 | 44.4 | 55.6 |
| Med-Heavy Truck 14,001-33,000 lbs | 0.9 | 0.0 | 22.2 | 77.8 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 1.2 | 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 | 5.5 | 54.5 | 45.5 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.3 | 0.0 | 84.6 | 15.4 |

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 | | | |

**11/3/2009 2:31:14 PM**

Travel Conditions

| | Residential | | | Commercial | | |
|---|---|---|---|---|---|---|
| | Home-Work | Home-Shop | Home-Other | Commute | Non-Work | Customer |
| % of Trips - Commercial (by land use) | | | | | | |
| Discount club | | | | 2.0 | 1.0 | 97.0 |
| Gasoline/service station | | | | 2.0 | 1.0 | 97.0 |

Operational Changes to Defaults

**11/3/2009 2:31:23 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Annual Operational Mitigated Emissions (Tons/Year)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Annual Tons Per Year, Mitigated)

| Source | ROG | NOX | CO | SO2 | PM10 | PM25 | CO2 |
|---|---|---|---|---|---|---|---|
| Discount club | 4.95 | 6.19 | 49.51 | 0.05 | 8.88 | 1.71 | 5,046.14 |
| Gasoline/service station | 1.72 | 1.59 | 13.48 | 0.01 | 1.95 | 0.38 | 1,140.96 |
| TOTALS (tons/year, mitigated) | 6.67 | 7.78 | 62.99 | 0.06 | 10.83 | 2.09 | 6,187.10 |

Includes correction for passby trips

Includes the following double counting adjustment for internal trips:

Residential Trip % Reduction: 0.00 Nonresidential Trip % Reduction: 0.00

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Operational Mitigation Options Selected

Residential Mitigation Measures

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

---

Percent Reduction in Trips is 5.11%

**11/3/2009 2:31:23 PM**

Nonresidential Mitigation Measures

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are 1098.

The employment for the study area (within a 1/2 mile radius of the project) is 841.

Non-Residential Local-Serving Retail Mitigation

---

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

---

Percent Reduction in Trips is 0.01%

Inputs Selected:

The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 1

The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0

The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

---

Percent Reduction in Trips is 2.29%

Inputs Selected:

**11/3/2009 2:31:23 PM**

Nonresidential Mitigation Measures

The Number of Intersections per Square Mile is 588

The Percent of Streets with Sidewalks on One Side is 8%

The Percent of Streets with Sidewalks on Both Sides is 19%

The Percent of Arterials/Collectors with Bike Lanes or where Suitable,

Direct Parallel Routes Exist is 8%

Summary of Land Uses

| Land Use Type | Acreage | Trip Rate | Unit Type | No. Units | Total Trips | Total VMT |
|---|---|---|---|---|---|---|
| Discount club | | 37.87 | 1000 sq ft | 155.00 | 5,869.33 | 28,226.47 |
| Gasoline/service station | | 152.70 | pumps | 18.00 | 2,748.58 | 6,177.35 |
| | | | | | 8,617.91 | 34,403.82 |

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Auto | 39.8 | 0.5 | 99.2 | 0.3 |
| Light Truck < 3750 lbs | 14.1 | 1.4 | 91.5 | 7.1 |
| Light Truck 3751-5750 lbs | 22.4 | 0.4 | 99.2 | 0.4 |
| Med Truck 5751-8500 lbs | 11.1 | 0.0 | 100.0 | 0.0 |
| Lite-Heavy Truck 8501-10,000 lbs | 2.6 | 0.0 | 73.1 | 26.9 |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.9 | 0.0 | 44.4 | 55.6 |
| Med-Heavy Truck 14,001-33,000 lbs | 0.9 | 0.0 | 22.2 | 77.8 |
| Heavy-Heavy Truck 33,001-60,000 lbs | 1.2 | 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 |

**11/3/2009 2:31:23 PM**

Vehicle Fleet Mix

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Motorcycle | 5.5 | 54.5 | 45.5 | 0.0 |
| School Bus | 0.1 | 0.0 | 0.0 | 100.0 |
| Motor Home | 1.3 | 0.0 | 84.6 | 15.4 |

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) | | | | | | |
| Discount club | | | | 2.0 | 1.0 | 97.0 |
| Gasoline/service station | | | | 2.0 | 1.0 | 97.0 |

Operational Changes to Defaults

**11/3/2009 2:31:02 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Annual Area Source Unmitigated Emissions (Tons/Year)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

| Source | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| Natural Gas | 0.02 | 0.28 | 0.23 | 0.00 | 0.00 | 0.00 | 330.25 |
| Hearth | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscape | 0.02 | 0.00 | 0.28 | 0.00 | 0.00 | 0.00 | 0.51 |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 0.17 | | | | | | |
| TOTALS (tons/year, unmitigated) | 0.21 | 0.28 | 0.51 | 0.00 | 0.00 | 0.00 | 330.76 |

Area Source Changes to Defaults

**11/3/2009 2:31:08 PM**

Urbemis 2007 Version 9.2.4

Detail Report for Annual Area Source Mitigated Emissions (Tons/Year)

File Name: I:\Projects\Active\Placer County\Bohemia Retail Project\Technical Reports\Air Quality\Proposed Project\Alternative 1 Option 1 Discount Club with mitigation.urb924

Project Name: Bohemia Retail - Alternative 1 - Discount Club

Project Location: Placer County APCD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Annual Tons Per Year, Mitigated)

| Source | ROG | NOx | CO | SO2 | PM10 | PM2.5 | CO2 |
|---|---|---|---|---|---|---|---|
| Natural Gas | 0.02 | 0.28 | 0.23 | 0.00 | 0.00 | 0.00 | 330.25 |
| Hearth | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscape | 0.02 | 0.00 | 0.28 | 0.00 | 0.00 | 0.00 | 0.51 |
| Consumer Products | 0.00 | | | | | | |
| Architectural Coatings | 0.15 | | | | | | |
| TOTALS (tons/year, mitigated) | 0.19 | 0.28 | 0.51 | 0.00 | 0.00 | 0.00 | 330.76 |

Area Source Mitigation Measures Selected

| Mitigation Description | Percent Reduction |
|---|---|
| For Residential Interior Use Low VOC Coating | 10.00 |
| For Residential Exterior Use Low VOC Coating | 10.00 |
| For Nonresidential Interior Use Low VOC Coating | 10.00 |
| For Nonresidential Exterior Use Low VOC Coating | 10.00 |

Area Source Changes to Defaults