Appendix B
Air Quality and Greenhouse Gas Analysis

Urbemis 2007- Air Quality Summary (2 pages)

Bay Area Greenhouse Gas Model (BGM) 1 & 2 (5 pages)

Urbemis 2007
Air Quality Summary (2 pages)

URBEMIS 2007

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Urbemis 2007 Version 9.2.4

Summary Report for Summer Emissions (Pounds/Day)

File Name: P:\TOC430 Task 2080 Text Amend\cardroom.urb924

Project Name: Colma Cardroom

Project Location: Bay Area Air District

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
2007 TOTALS (lbs/day unmitigated)	6.02	43.91	25.38	0.00	0.21	2.70	2.92	0.05	2.49	2.53	3,507.60
2008 TOTALS (lbs/day unmitigated)	7.06	51.98	29.61	0.00	0.21	3.23	3.45	0.05	2.97	3.02	4,409.13

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.13	0.03	1.56	0.00	0.01	0.01	10.81

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	5.05	6.85	68.82	0.07	12.52	2.39	7,026.82

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SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

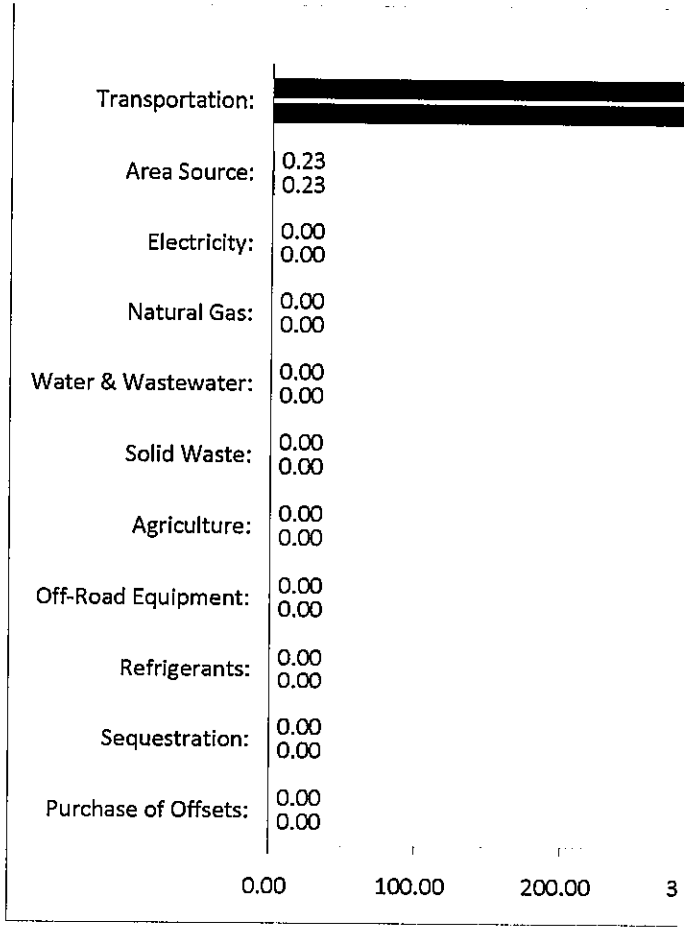
	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	5.18	6.88	70.38	0.07	12.53	2.40	7,037.63

Summary Results

Project Name: Colma Cardroom
Project and Baseline Years: 2020 N/A

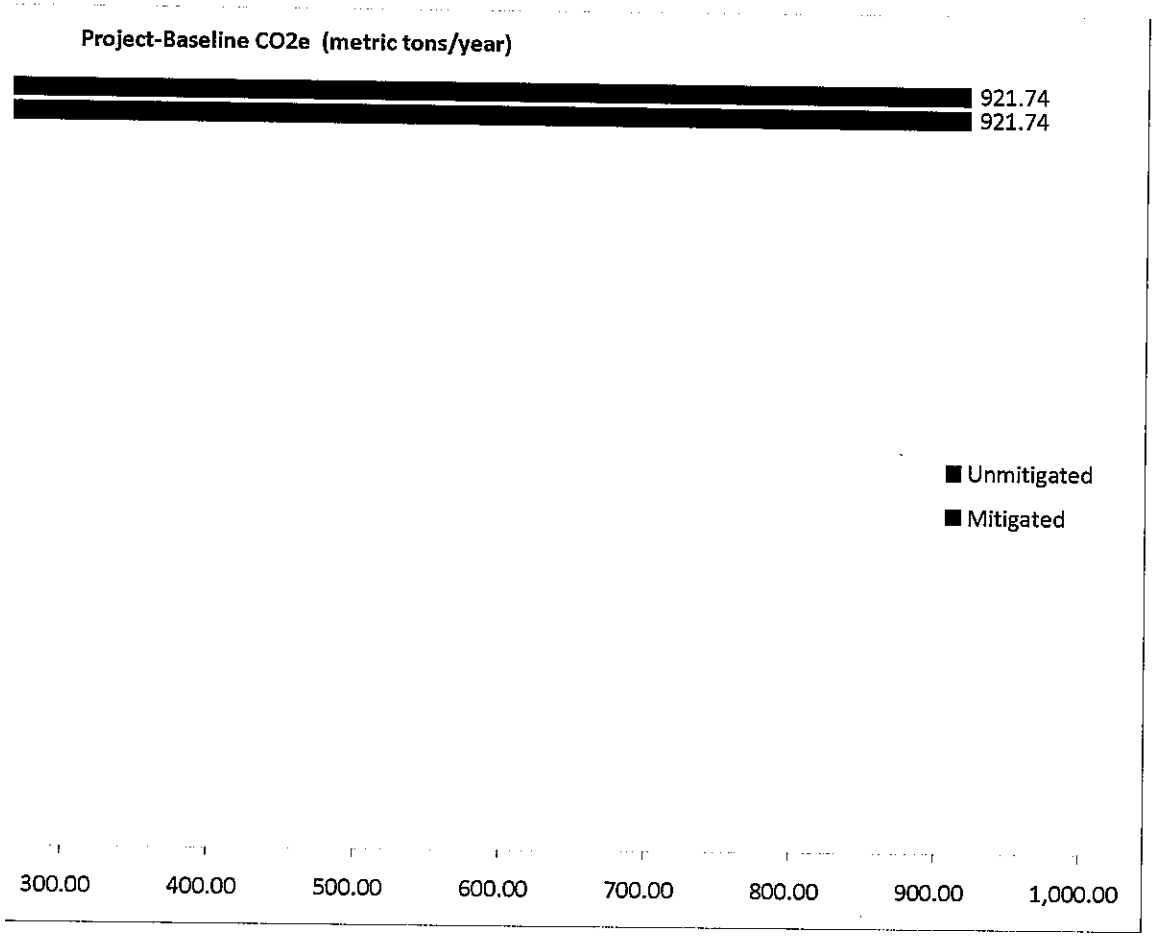
Results	Unmitigated Project-Baseline CO2e (metric tons/year)	Mitigated Project-Baseline CO2e (metric tons/year)
Transportation:	921.74	921.74
Area Source:	0.23	0.23
Electricity:	0.00	0.00
Natural Gas:	0.00	0.00
Water & Wastewater:	0.00	0.00
Solid Waste:	0.00	0.00
Agriculture:	0.00	0.00
Off-Road Equipment:	0.00	0.00
Refrigerants:	0.00	0.00
Sequestration:	N/A	0.00
Purchase of Offsets:	N/A	0.00
Total:	921.96	921.96

Baseline is currently: **OFF**
Baseline Project Name:
Go to Settings Tab to Turn On Baseline



Detailed Results

Unmitigated	CO2 (metric tpy)	CH4 (metric tpy)	N2O (metric tpy)	CO2e (metric tpy)	% of Total



Baseline	CO2 (metric tpy)	CH4 (metric tpy)	N2O (metric tpy)	CO2e (metric tpy)	% of Total

Transportation*:				921.74	99.98%
Area Source:	0.23	0.00	0.00	0.23	0.02%
Electricity:	0.00	0.00	0.00	0.00	0.00%
Natural Gas:	0.00	0.00	0.00	0.00	0.00%
Water & Wastewater:	0.00	0.00	0.00	0.00	0.00%
Solid Waste:	0.00	0.00	N/A	0.00	0.00%
Agriculture:	0.00	0.00	0.00	0.00	0.00%
Off-Road Equipment:	0.00	0.00	0.00	0.00	0.00%
Refrigerants:	N/A	N/A	N/A	0.00	0.00%
Sequestration:	N/A	N/A	N/A	N/A	N/A
Purchase of Offsets:	N/A	N/A	N/A	N/A	N/A
Total:				921.96	100.00%

* Several adjustments were made to transportation emissions after they have been imported from URBEMIS.
After importing from URBEMIS, CO2 emissions are converted to metric tons and then adjusted to account for the "Pavley" regulation. Then, CO2 is converted to CO2e by multiplying by 100/95 to account for the contribution of other GHGs (CH4, N2O, and HFCs [from leaking air con
Finally, CO2e is adjusted to account for th low carbon fuels rule.

Mitigated

	CO2 (metric tpy)	CH4 (metric tpy)	N2O (metric tpy)	CO2e (metric tpy)	% of Total
Transportation*:				921.74	99.98%
Area Source:	0.23	0.00	0.00	0.23	0.02%
Electricity:	0.00	0.00	0.00	0.00	0.00%
Natural Gas:	0.00	0.00	0.00	0.00	0.00%
Water & Wastewater:	0.00	0.00	0.00	0.00	0.00%
Solid Waste:	0.00	0.00	N/A	0.00	0.00%
Agriculture:	0.00	0.00	0.00	0.00	0.00%
Off-Road Equipment:	0.00	0.00	0.00	0.00	0.00%
Refrigerants:	N/A	N/A	N/A	0.00	0.00%
Sequestration:	N/A	N/A	N/A	0.00	0.00%
Purchase of Offsets:	N/A	N/A	N/A	0.00	0.00%
Total:				921.96	100.00%

Mitigation Measures Selected:

Transportation: Go to the following tab: Transp. Detail Mit for a list of the transportation mitigation measures selected (in URBI

Transportation*:				0.00	N/A
Area Source:	0.00	0.00	0.00	0.00	N/A
Electricity:	0.00	0.00	0.00	0.00	N/A
Natural Gas:	0.00	0.00	0.00	0.00	N/A
Water & Wastewater:	0.00	0.00	0.00	0.00	N/A
Solid Waste:	0.00	0.00	N/A	0.00	N/A
Agriculture:	0.00	0.00	0.00	0.00	N/A
Off-Road Equipment:	0.00	0.00	0.00	0.00	N/A
Refrigerants:	N/A	N/A	N/A	0.00	N/A
Sequestration:	N/A	N/A	N/A	N/A	N/A
Purchase of Offsets:	N/A	N/A	N/A	N/A	N/A
Total:				0.00	0.00%

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EMIS)

Electricity: The following mitigation measure(s) have been selected to reduce electricity emissions.

Natural Gas: The following mitigation measure(s) have been selected to reduce natural gas emissions.

Water and Wastewater: The following mitigation measure(s) have been selected to reduce water and wastewater emissions.

Solid Waste: The following mitigation measure has been selected to reduce solid waste related GHG emissions.

Ag: No existing mitigation measures available.

Off-Road Equipment: No existing mitigation measures available.

Refrigerants: The following mitigation measure has ben selected to reduce refrigerant emissions:

Carbon Sequestration: Project does not include carbon sequestration through tree planting.

Emission Offsets/Credits: Project does not include purchase of emission offsets/credits.

Bay Area Greenhouse Gas Model (BGM) 1 & 2
(5 pages)