Ferrini Ranch
Construction-Generated
Greenhouse Gas Emissions

Project Action	CO2 (tons)	CO2 (pounds)	Gallons of Diesel Fuel	N2O (grams)	N2O (pounds)	CH4 (grams)	CH4 (Pounds)	CO2e lbs/year	Total CO2e MT/year
Year One	**157**	314,000.00	14,032.89	3,649	8.044	8,139	17.944	316,870.36	**144**
Year Two	**457**	914,000.00	40,847.34	10,620	23.414	23,691	52.231	922,355.11	**418**
Year Three	**316**	632,000.00	28,244.55	7,344	16.190	16,382	36.116	637,777.28	**289**
Year Four	**302**	604,000.00	26,993.21	7,018	15.473	15,656	34.516	609,521.32	**276**
Year Five	**227**	454,000.00	20,289.60	5,275	11.630	11,768	25.944	458,150.13	**208**

Sources:
Carbon Dioxide Emissions: URBEMIS 2007v.9.2.4; Conversion Ratios: California Climate Action Registry, 2009

Ferrini Ranch - Water, Wastewater, Solid Waste
Monterey County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	212	Dwelling Unit
General Office Building	110	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**		**Utility Company**	Pacific Gas & Electric Company
Climate Zone	4		2.8		
		Precipitation Freq (Days)			

2.0 Emissions Summary

2.1 Operational Water/Wastewater and Solid Waste

Unmitigated Operational

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

Waste											74.89	0.00	74.89	4.43	0.00	167.84
Water											0.00	73.96	73.96	1.02	0.03	103.64

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Waste											74.89	0.00	74.89	4.43	0.00	167.84
Water											0.00	62.10	62.10	0.82	0.02	85.86

3.0 Mitigation

3.1 Mitigation Measures Mobile

Increase Density

3.2 Mitigation Measures Energy

Exceed Title 24

3.3 Mitigation Measures Area

Use only Natural Gas Hearths

3.4 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System