This appendix contains information from the 2007 EIS (Appendix D of the 2007 EIS) regarding data on aircraft and vehicle fleet mix and operations, emission inventories, and air quality modeling output.[1] The air quality analyses were prepared for a projected initial full year of operation in 2008. While the initial full year of operation is now projected to 2009, test calculations have been determined that the projected emissions for 2008 would be the same for an initial operating year of 2009. The number of projected operations and the associated aircraft emissions for 2015 are the same for both analyses. It should be noted that independent model runs for mobile source related greenhouse gases was performed independently for this IS/MND using EMFAC2007, and are also included.

[1] U.S. Department of Transportation Federal Aviation Administration, *Draft Environmental Impact Statement Request For Operations Specifications Amendment By Horizon Air to Provide Scheduled Air Service to Mammoth Yosemite Airport*, November 2007.

Appendix D

Air Quality

This appendix contains a description of air pollutants considered in this EIS (including Greenhouse Gases); describes the California Air Districts; presents the 2005 air quality monitoring data; provides data on aircraft, motor vehicles, deicer fluid use, and fuel consumption; and a provides description of the methodologies and results of the HAPs analysis.

The air quality analyses were prepared for a projected initial full year of operation in 2008. While the initial full year of operation is now projected to be 2009, test calculations have been determined that the projected emissions for 2008 would be the same for an initial operating year of 2009. The number of projected operations and the associated aircraft emissions for 2015 are the same for both analyses.

A.1 AIR POLLUTANTS ASSESSED IN THE EIS

The air pollutants of concern in the assessment of impacts from Airport-related sources that have federal, state, or local standards are described below, along with a description of their potential health effects.

Carbon monoxide is a colorless, odorless, tasteless gas, which is a product of incomplete combustion. CO is absorbed by the lungs and reacts with hemoglobin to reduce the oxygen-carrying capacity of the blood. At moderate concentrations, CO has been shown to aggravate the symptoms of cardiovascular disease. It can cause headaches and nausea, and at sustained high concentration levels can lead to coma and death. Transportation activities, indoor heating, and open burning are among the predominant anthropogenic (e.g., manmade) sources of CO.

Nitrogen dioxide (NO_2), nitric oxide (NO), and the nitrate radical (NO_3) are collectively called oxides of nitrogen (NO_x). When combustion temperatures are extremely high, as in aircraft engines, boilers, furnaces, or automobile engines, nitrogen gas from the atmosphere and from fuel will combine with oxygen gas to form various oxides of nitrogen. These three compounds are interrelated, often changing from one form to another in chemical reactions, and NO_2 is the compound commonly measured with ambient air monitors. NO_x is generally emitted in the form of NO (a colorless and odorless gas), which is oxidized to NO_2. NO_2 has been found to be a lung irritant capable of producing pulmonary edema at high concentrations and can lead to respiratory illnesses such as bronchitis and pneumonia. The principal man-made sources of NO_x are fuel combustion in aircraft engines, motor vehicles and power plants. Reactions of NO_x with other atmospheric chemicals can lead to formation of ozone.

Volatile organic compounds (VOCs) are a general class of compounds, containing various levels of hydrogen and carbon, which are chemically active in the atmosphere. VOCs in the atmosphere come from evaporated fuel, partially burned fuel, solvent use, industrial processes, and natural sources. While concentrations of VOCs in the atmosphere are not generally measured, VOCs are known precursors to ozone, and it is ozone that is measured and used to assess potential health effects.

Ozone is a pulmonary irritant that affects the respiratory mucous membranes, other lung tissues, and respiratory functions. Exposure to ozone at certain concentrations can result in symptoms such as tightness in the chest, coughing, and wheezing, and can trigger an attack or exacerbate the symptoms of asthma, bronchitis, and emphysema. Exposure to ozone can also cause damage to vegetation. Ground level ozone is a secondary pollutant, formed from daytime reactions of NO_x and volatile organic compounds (VOCs), rather than being directly emitted by natural or man-made sources.

Particulate matter (PM) comprises very small particles of dirt, dust, soot, or liquid droplets called aerosols. The regulatory standards for particulate matter segregate PM by sizes (i.e., less than 10 and less than 2.5 microns as PM_{10} and $PM_{2.5}$, respectively). PM is formed as an exhaust product in the internal combustion engine or can be generated from the breakdown and dispersion of other solid materials (e.g., fugitive dust). Particulates larger than 10 micrometers are captured on the mucous membranes of the nose and throat and are readily expelled. These particles have very little effect on human health. Particles of 10 micrometers and smaller can reach the air ducts (bronchi) and the air sacs (alveoli) of the lung. Particulates have been associated with increased respiratory diseases such as asthma, bronchitis, and emphysema; cardiopulmonary disease (heart attack); and cancer.

Sulfur dioxide (SO_2) is a colorless gas that is formed during the combustion of fuels containing sulfur compounds. It can cause irritation and inflammation of sensitive tissues with which it comes into contact. Inhalation in sufficient concentrations can cause irritation of the mucous membranes, causing bronchial damage, and can exacerbate pre-existing respiratory diseases such as asthma, bronchitis, and emphysema. Exposure to SO_2 can cause damage to vegetation, corrosion damage to many materials, and soiling of clothing and buildings.

Lead (Pb) is a stable compound that accumulates in the environment and in living organisms. Pb interferes with the maturation and development of red blood cells, affects liver and kidney functions, and disturbs enzyme activity. The major source of Pb in ambient air had been from motor vehicles burning fuels containing Pb additives. However, Pb emissions from these sources have been nearly eliminated as unleaded gasoline has replaced leaded gasoline nationwide. The major aircraft fuel used by aircraft, Jet A, does not contain Pb.

Greenhouse Gases (GHG) are atmospheric gases that act as global insulators by reflecting visible light and infrared radiation back to Earth. Some greenhouse gases, such as water vapor, carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), occur naturally and are emitted to the atmosphere through natural processes. Although CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have increased their atmospheric concentrations, which may be causing the Earth's average temperature to rise. Rises in average temperature may lead to changes in climate patterns and shrinking polar ice caps and a rise in sea level, with a host of corresponding impacts to humans and ecosystems. There are no federal requirements for calculating or reporting GHG emissions in the Clean Air Act. There are no approved and generally accepted methodologies for calculating GHG emissions from transportation sources generally and airport-related sources in particular. There are also no significant impact levels for assessing impacts of GHG emissions. For this reason, analysis of impacts on GHG emissions and global climate change would be speculative.

California Air Districts

California is divided into Air Pollution Control Districts (APCDs) and Air Quality Management Districts (AQMDs). These entities are administered by County or regional governing authorities that have primary responsibility for controlling air pollution in California's air basins. Their primary responsibility is preparing the SIPs and/or air quality management plans for nonattainment areas under their jurisdiction. The Great Basin Unified Air Pollution Control District is responsible for monitoring air pollution within the Owens Valley and adjacent areas.

2005 Air Quality Monitoring Data in the Vicinity of MMH

The nearest air quality monitoring station to the Airport is located approximately 7.5 miles from MMH at Highway 203 and Old Mammoth Road at the Gateway Home Center in Mammoth Lakes. This site monitors PM_{10} and $PM_{2.5}$ concentrations. The nearest ozone monitoring station is located in Yosemite National Park at the Merced River Site (about 42 miles from MMH) and also measures CO concentrations. The nearest NO_2 monitoring station is locate about 74 miles from MMH in Fresno County. These last two stations are so far from MMH as to make their data unrepresentative of the air quality conditions around MMH. **Table 4.7-3** of the EIS contains the detailed site information (site location, distance, and direction from MMH) and the measured PM_{10} and $PM_{2.5}$ data from the Gateway Home Center Site for 2005 (the most recent complete year of data available). No air monitoring stations are located directly on, or adjacent to, MMH.

The annual average PM_{10} concentration in 2005 was 24 $\mu g/m^3$ and is well below the NAAQS of 50 $\mu g/m^3$. The highest recorded 24-hour average $PM_{2.5}$ concentration in 2005 was 27 $\mu g/m^3$, which is well below the NAAQS of 35 $\mu g/m^3$. The annual average $PM_{2.5}$ concentration in 2005 was 7.6 $\mu g/m^3$, which is also well below the NAAQS of 15 $\mu g/m^3$.

California Global Warming Solutions Act

At the state level, Assembly Bill (AB) 32, the California Global Warming Solutions Act, was signed by the Governor of California in September 2006. AB 32 requires that the California Air Resources Board (CARB) adopt regulations requiring the reporting and verification of statewide GHG emissions. AB 32 also requires that CARB adopt a statewide GHG emissions limit equivalent to the statewide GHG emissions in 1990 to be achieved by year 2020.

Although state-wide reduction rates for GHGs were established in AB 32, there are no established significance thresholds and no approved methodologies for calculating GHG emissions from transportation sources generally and airport-related sources in particular as part of or for use in the California Environmental Quality Act (CEQA) process. Part of the issue with establishing CEQA significance thresholds and proposing mitigation is that global warming, as the name implies, is not a localized phenomenon.

Town of Mammoth Lakes Greenhouse Gas Initiatives

At the local level, the Town of Mammoth Lakes is taking the initiative and implementing many strategies to address global warming, greenhouse gases and other emission reductions. These include:

- The Town Council joined and adopted the resolution of the U. S. Mayors Climate Protection Agreement which commits the Town to specific measures to reduce its greenhouse emission,

- The 2007 Mammoth Lakes' General Plan addresses concerns related to global warming and greenhouse gases and has adopted several policies and implementation measures found on pages 111-115, 370 and 426 of Responses to Comments, Volume II of the 2007 General Plan.

- Guiding Principle 1 of the General Plan Vision Statement acknowledges the Town's unique relationship with the natural environment and the need to be committed to the efficient use of energy and continued development of natural resources. Adopted Goals, Policies and Implementation Measures are included in the Resource Management and Conservation Chapter of the General Plan and include being a leader in green building technology, increasing use of renewable resources, and continuing to improve air quality.

- Guiding Principle 7 of the General Plan Vision Statement emphasizes connectivity, convenience and alternatives to the use of the personal automobile with a strong pedestrian emphasis and to that end the Town is spending over $13 million in trails construction, proposing air service combined with public transit to reduce visitor's use of the automobile while they are in the Town, narrowing roadways and accepting a lower level of service for automobile function and programming almost $50 million for pedestrian improvements in the Town's Master Facilities Plan.

- The Town currently has a transportation impact fee on new development to contribute to operations of a town-wide transit system. The Town dedicates 1% of the Transient Occupancy Tax (a measure passed by the voters of Mammoth Lakes) to funding transit services in Town. The Town has formed a multi-jurisdictional agency to address regional transit needs, the Eastern Sierra Transit Authority.

A.2 DATA USED IN THE AIR QUALITY ANALYSIS

Aircraft Data

Annual aircraft Landing and Take Off operations data (LTOs) and fleet mixes were developed specifically for this analysis and are shown in **Table D-1** for the 2005 Existing Conditions, the 2008 No Action Alternative, and the 2015 No Action Alternative. **Table D-2** presents these same parameters for the 2008 and the 2015 Proposed Action Alternatives. Aircraft taxi times were calculated based on the average travel distance from the terminal to the runway ends and back, using an average travel speed of 15 mph.

Motor Vehicle Data

Annual motor vehicle volumes, VMTs, and EMFAC2002 emission factors for the 2005 Existing Conditions are shown in **Table D-3**. Similar data for the 2008 No Action Alternative, the 2008 Proposed Action Alternative, the 2015 No Action Alternative, and the 2015 Proposed Action Alternative are presented in **Tables D-4 through D-7**, respectively.

Emissions factors for motor vehicles were developed specifically for this analysis using CARB's EMFAC2002 motor vehicle emissions program. An example EMFAC2002 input file for Mono County for 2015 is provided in **Figure D-1**, and an excerpt of the EMFAC2002 output file for Mono County for 2015 is presented in **Figure D-2**.

Deicing Fluid Usage Data

Annual deicing fluid usage and fuel consumption data were developed specifically for this analysis and are shown in Table D-8. Data provided by the Town of Mammoth indicated that no deicing was performed at MMH in 2005. For the air quality analysis in this EIS it was assumed that this practice would continue in 2008 and 2015 without the Proposed Action. Data for the 2008 and 2015 Proposed Action were taken from data supplied by Horizon Air.

Fuel Consumption Data

Annual aviation gasoline (Av Gas) and Jet A fuel consumption data were developed specifically for this analysis and are also presented in Table D-8. 2005 consumption data for aviation gasoline and Jet A fuel was provided by the Town of Mammoth. These data were then adjusted for the 2008 and 2015 No Action and Proposed Action Alternatives based on growth in general aviation aircraft operations. Due to operational considerations, it was assumed that the aircraft for the new scheduled air service (the Q400)

TABLE D-1
AIRCRAFT FLEET MIXES AND OPERATIONS FOR THE 2005 EXISTING CONDITIONS AND THE 2008 AND 2015 NO ACTION ALTERNATIVES

Aircraft	Engine	LTOs			Category	Taxi Time[1]
		2005	2008	2015		
Baron58[2]	User-Created	938	993	1133	SGPB	5.80
Bell 206	250B17B	48	50	58	SGTH	5.80
BH-1900	PT6A-67B	12	13	14	SCTP	5.80
C-130 HERCULES	T56 series III	5	5	5	LMTC	5.80
Cessna 172 Skyhawk	IO-360-B	543	575	655	SGPP	5.80
Cessna 208 Caravan	PT6A-114	1242	1314	1499	SGTB	5.80
Cessna 441 Conquest2	TPE331-8	344	364	415	SGTP	5.80
CITATION II	JT15D-4 (B,C,D)	136	144	165	SGJB	5.80
Citation VII	TFE731-3	14	14	16	SGJB	5.80
CITATION X	AE3007C (Type 1)	14	14	16	SGJB	5.80
CL600	CF34-3B	20	21	24	LGJB	5.80
Comanche	TIO-540-J2B2	1754	1855	2116	SGPP	5.80
DHC-6	PT6A-20	634	670	765	SCTP	5.80
Falcon 20	CF700-2D	3	3	4	SGJB	5.80
Gulfstream II	SPEY MK511-8	21	22	25	LCJP	5.80
Gulfstream IV	TAY Mk611-8	12	13	15	LCJP	5.80
H-60 Black Hawk	T700-GE-700	12	13	15	SMTH	5.80
HS 125	TFE731-3	6	7	8	SMJP	5.80
Learjet 25C	CJ610-6	42	45	51	SGJB	5.80
Learjet 35/36	TFE 731-2-2B	139	148	168	SGJB	5.80
MU-300	JT15D-4 (B,C,D)	312	330	377	SGJB	5.80
Navajo	TIO-540-J2B2	6	6	7	SGPB	5.80
OH-6 Cayuse	250B17B	8	9	10	SMTH	5.80
PA-31T Cheyenne	PT6A-28	95	101	115	SGTB	5.80
Piper PA-28	O-320	1	2	2	SGPP	5.80
Robinson R22	IO-360-B	15	15	18	SGPH	5.80
Saberliner 75A	CF700-2D	4	4	5	SGJB	5.80
Westwind 1	TFE731-3	21	22	26	SGJB	5.80
	Total Operations	6401	6772	7727		

Notes:
1. Taxi times are in minutes per LTO.
2. Denotes User Defined Aircraft.

Source: URS Corporation, 2006.

TABLE D-2
AIRCRAFT FLEET MIXES AND OPERATIONS FOR THE 2008 AND 2015 PROPOSED ACTION ALTERNATIVES

Aircraft	Engine	LTOs		Category	Taxi Time[1]
		2008	2015		
Baron58[2]	User-Created	993	1133	SGPB	5.80
Bell 206	250B17B	50	58	SGTH	5.80
BH-1900	PT6A-67B	13	14	SCTP	5.80
C-130 HERCULES	T56 series III	5	5	LMTC	5.80
Cessna 172 Skyhawk	IO-360-B	575	655	SGPP	5.80
Cessna 208 Caravan	PT6A-114	1314	1499	SGTB	5.80
Cessna 441 Conquest2	TPE331-8	364	415	SGTP	5.80
CITATION II	JT15D-4 (B,C,D)	144	165	SGJB	5.80
Citation VII	TFE731-3	14	16	SGJB	5.80
CITATION X	AE3007C (Type 1)	14	16	SGJB	5.80
CL600	CF34-3B	21	24	LGJB	5.80
Comanche	TIO-540-J2B2	1855	2116	SGPP	5.80
Dash 8-400	PW123	224	1016	LCTP	5.80
DHC-6	PT6A-20	670	765	SCTP	5.80
Falcon 20	CF700-2D	3	4	SGJB	5.80
Gulfstream II	SPEY MK511-8	22	25	LCJP	5.80
Gulfstream IV	TAY Mk611-8	13	15	LCJP	5.80
H-60 Black Hawk	T700-GE-700	13	15	SMTH	5.80
HS 125	TFE731-3	7	8	SMJP	5.80
Learjet 25C	CJ610-6	45	51	SGJB	5.80
Learjet 35/36	TFE 731-2-2B	148	168	SGJB	5.80
MU-300	JT15D-4 (B,C,D)	330	377	SGJB	5.80
Navajo	TIO-540-J2B2	6	7	SGPB	5.80
OH-6 Cayuse	250B17B	9	10	SMTH	5.80
PA-31T Cheyenne	PT6A-28	101	115	SGTB	5.80
Piper PA-28	O-320	2	2	SGPP	5.80
Robinson R22	IO-360-B	15	18	SGPH	5.80
Saberliner 75A	CF700-2D	4	5	SGJB	5.80
Westwind 1	TFE731-3	22	26	SGJB	5.80
	Total Operations	6996	8743		

Notes:
1. Taxi times are in minutes per LTO.
2. Denotes User Defined Aircraft.

Source: URS Corporation, 2006.

TABLE D-3
VEHICLE VOLUMES, VMTS, AND EMFAC2002 EMISSION FACTORS
FOR THE 2005 EXISTING CONDITIONS

Source	Volume (trips) Per Year	Miles (RT)	VMT Per year	Speed (mph)	Emission Factor (g/mi)				
					VOCs	CO	NOx	PM	SO_2
Shuttle Vans	3,791	17	64,447	varies					
US 395	3791	6	22,746	65	0.370	8.177	2.234	0.039	0.009
SR 203 - Link 1	3791	2.32	8,795	35	0.346	6.393	1.600	0.039	0.008
SR 203 - Link 2	3791	0.48	1,820	45	0.293	5.964	1.631	0.036	0.008
SR 203 - Link 3	3791	5	18,955	55	0.299	6.381	1.817	0.036	0.008
Hot Creek Rd.	3791	0.6	2,275	35	0.346	6.393	1.600	0.039	0.008
Airport Rd.	3791	2.6	9,857	35	0.346	6.393	1.600	0.039	0.008
Rental Cars	840	17	14,280	varies					
US 395	840	6	5,040	65	0.372	8.602	1.260	0.034	0.005
SR 203 - Link 1	840	2.32	1,949	35	0.328	7.337	1.009	0.065	0.004
SR 203 - Link 2	840	0.48	403	45	0.282	6.778	1.004	0.032	0.004
SR 203 - Link 3	840	5	4,200	55	0.293	7.037	1.079	0.032	0.004
Hot Creek Rd.	840	0.6	504	35	0.328	7.337	1.009	0.065	0.004
Airport Rd.	840	2.6	2,184	35	0.328	7.337	1.009	0.065	0.004
Private Vehicles, employees	8,424	17	143,208	varies					
US 395	8424	6	50,544	65	0.372	8.602	1.260	0.034	0.005
SR 203 - Link 1	8424	2.32	19,544	35	0.328	7.337	1.009	0.065	0.004
SR 203 - Link 2	8424	0.48	4,044	45	0.282	6.778	1.004	0.032	0.004
SR 203 - Link 3	8424	5	42,120	55	0.293	7.037	1.079	0.032	0.004
Hot Creek Rd.	8424	0.6	5,054	35	0.328	7.337	1.009	0.065	0.004
Airport Rd.	8424	2.6	21,902	35	0.328	7.337	1.009	0.065	0.004
Private Vehicles, dropoff/pickup	2,254	17	38,318	varies					
US 395	2254	6	13,524	65	0.372	8.602	1.260	0.034	0.005
SR 203 - Link 1	2254	2.32	5,229	35	0.328	7.337	1.009	0.065	0.004
SR 203 - Link 2	2254	0.48	1,082	45	0.282	6.778	1.004	0.032	0.004
SR 203 - Link 3	2254	5	11,270	55	0.293	7.037	1.079	0.032	0.004
Hot Creek Rd.	2254	0.6	1,352	35	0.328	7.337	1.009	0.065	0.004
Airport Rd.	2254	2.6	5,860	35	0.328	7.337	1.009	0.065	0.004
Total	15,309		260,253						

Notes:

1. Average Round Trip Distance from MMH Airport to Downtown Mammoth is 17 miles.
2. Miles are for Round Trip distance.
3. VMT = vehicle-miles-traveled.

Source: URS Corporation, 2006.

TABLE D-4
VEHICLE VOLUMES, VMTS, AND EMFAC2002 EMISSION FACTORS
FOR THE 2008 NO ACTION ALTERNATIVE

Source	Volume (trips) Per Year	Miles (RT)	VMT Per year	Speed (mph)	Emission Factor (g/mi) VOCs	CO	NOx	PM	SO_2
Shuttle Vans	4,011	17	68,193	varies					
US 395	4011	6	24,068	65	0.272	5.875	1.747	0.039	0.006
SR 203 - Link 1	4011	2.32	9,306	35	0.254	4.862	1.259	0.039	0.005
SR 203 - Link 2	4011	0.48	1,925	45	0.215	4.499	1.279	0.036	0.005
SR 203 - Link 3	4011	5	20,057	55	0.219	4.718	1.422	0.036	0.005
Hot Creek Rd.	4011	0.6	2,407	35	0.254	4.862	1.259	0.039	0.005
Airport Rd.	4011	2.6	10,430	35	0.254	4.862	1.259	0.039	0.005
Rental Cars	889	17	15,110	varies					
US 395	889	6	5,333	65	0.267	6.369	0.959	0.034	0.005
SR 203 - Link 1	889	2.32	2,062	35	0.236	5.626	0.777	0.033	0.004
SR 203 - Link 2	889	0.48	427	45	0.202	5.170	0.771	0.032	0.004
SR 203 - Link 3	889	5	4,444	55	0.210	5.303	0.825	0.032	0.004
Hot Creek Rd.	889	0.6	533	35	0.236	5.626	0.777	0.033	0.004
Airport Rd.	889	2.6	2,311	35	0.236	5.626	0.777	0.033	0.004
Private Vehicles, employees	8,914	17	151,532	varies					
US 395	8,914	6	53,482	65	0.267	6.369	0.959	0.034	0.005
SR 203 - Link 1	8,914	2.32	20,680	35	0.236	5.626	0.777	0.033	0.004
SR 203 - Link 2	8,914	0.48	4,279	45	0.202	5.170	0.771	0.032	0.004
SR 203 - Link 3	8,914	5	44,568	55	0.210	5.303	0.825	0.032	0.004
Hot Creek Rd.	8,914	0.6	5,348	35	0.236	5.626	0.777	0.033	0.004
Airport Rd.	8,914	2.6	23,175	35	0.236	5.626	0.777	0.033	0.004
Private Vehicles, dropoff/pickup	2,385	17	40,545	varies					
US 395	2385	6	14,310	65	0.267	6.369	0.959	0.034	0.005
SR 203 - Link 1	2385	2.32	5,533	35	0.236	5.626	0.777	0.033	0.004
SR 203 - Link 2	2385	0.48	1,145	45	0.202	5.170	0.771	0.032	0.004
SR 203 - Link 3	2385	5	11,925	55	0.210	5.303	0.825	0.032	0.004
Hot Creek Rd.	2385	0.6	1,431	35	0.236	5.626	0.777	0.033	0.004
Airport Rd.	2385	2.6	6,201	35	0.236	5.626	0.777	0.033	0.004
Total	16,199		275,380						

Notes:

1. Average Round Trip Distance from MMH Airport to Downtown Mammoth is 17 miles.
2. Miles are for Round Trip distance.
3. VMT = vehicle-miles-traveled.

Source: URS Corporation, 2006.

TABLE D-5
VEHICLE VOLUMES, VMTS, AND EMFAC2002 EMISSION FACTORS
FOR THE 2008 PROPOSED ACTION ALTERNATIVE

Source	Volume (trips) Per Year	Miles (RT)	VMT Per year	Speed (mph)	Emission Factor (g/mi) VOCs	CO	NOx	PM	SO_2
Shuttle Vans	6,327	17	107,552	varies					
US 395	6327	6	37,960	65	0.272	5.875	1.747	0.039	0.006
SR 203 - Link 1	6327	2.32	14,678	35	0.254	4.862	1.259	0.039	0.005
SR 203 - Link 2	6327	0.48	3,037	45	0.215	4.499	1.279	0.036	0.005
SR 203 - Link 3	6327	5	31,633	55	0.219	4.718	1.422	0.036	0.005
Hot Creek Rd.	6327	0.6	3,796	35	0.254	4.862	1.259	0.039	0.005
Airport Rd.	6327	2.6	16,449	35	0.254	4.862	1.259	0.039	0.005
Rental Cars	1,655	17	28,133	varies					
US 395	1655	6	9,929	65	0.267	6.369	0.959	0.034	0.005
SR 203 - Link 1	1655	2.32	3,839	35	0.236	5.626	0.777	0.033	0.004
SR 203 - Link 2	1655	0.48	794	45	0.202	5.170	0.771	0.032	0.004
SR 203 - Link 3	1655	5	8,275	55	0.210	5.303	0.825	0.032	0.004
Hot Creek Rd.	1655	0.6	993	35	0.236	5.626	0.777	0.033	0.004
Airport Rd.	1655	2.6	4,303	35	0.236	5.626	0.777	0.033	0.004
Private Vehicles, employees	14,290	17	242,924	varies					
US 395	14290	6	85,738	65	0.267	6.369	0.959	0.034	0.005
SR 203 - Link 1	14290	2.32	33,152	35	0.236	5.626	0.777	0.033	0.004
SR 203 - Link 2	14290	0.48	6,859	45	0.202	5.170	0.771	0.032	0.004
SR 203 - Link 3	14290	5	71,448	55	0.210	5.303	0.825	0.032	0.004
Hot Creek Rd.	14290	0.6	8,574	35	0.236	5.626	0.777	0.033	0.004
Airport Rd.	14290	2.6	37,153	35	0.236	5.626	0.777	0.033	0.004
Private Vehicles, dropoff/pickup	2,794	17	47,491	varies					
US 395	2794	6	16,762	65	0.267	6.369	0.959	0.034	0.005
SR 203 - Link 1	2794	2.32	6,481	35	0.236	5.626	0.777	0.033	0.004
SR 203 - Link 2	2794	0.48	1,341	45	0.202	5.170	0.771	0.032	0.004
SR 203 - Link 3	2794	5	13,968	55	0.210	5.303	0.825	0.032	0.004
Hot Creek Rd.	2794	0.6	1,676	35	0.236	5.626	0.777	0.033	0.004
Airport Rd.	2794	2.6	7,263	35	0.236	5.626	0.777	0.033	0.004
Total	25,065		426,101						

Notes:

1. Average Round Trip Distance from MMH Airport to Downtown Mammoth is 17 miles.
2. Miles are for Round Trip distance.
3. VMT = vehicle-miles-traveled.

Source: URS Corporation, 2006.

TABLE D-6
VEHICLE VOLUMES, VMTS, AND EMFAC2002 EMISSION FACTORS
FOR THE 2015 NO ACTION ALTERNATIVE

Source	Volume (trips) Per Year	Miles (RT)	VMT Per year	Speed (mph)	Emission Factor (g/mi) VOCs	CO	NOx	PM	SO_2
Shuttle Vans	4,576	17	77,795	varies					
US 395	4576	6	27,457	65	0.131	2.820	0.928	0.039	0.006
SR 203 - Link 1	4576	2.32	10,617	35	0.124	2.730	0.686	0.039	0.005
SR 203 - Link 2	4576	0.48	2,197	45	0.104	2.469	0.692	0.036	0.005
SR 203 - Link 3	4576	5	22,881	55	0.106	2.457	0.763	0.036	0.005
Hot Creek Rd.	4576	0.6	2,746	35	0.124	2.730	0.686	0.039	0.005
Airport Rd.	4576	2.6	11,898	35	0.124	2.730	0.686	0.039	0.005
Rental Cars	1,014	17	17,238	varies					
US 395	1014	6	6,084	65	0.089	2.368	0.407	0.033	0.005
SR 203 - Link 1	1014	2.32	2,352	35	0.081	2.455	0.339	0.032	0.004
SR 203 - Link 2	1014	0.48	487	45	0.069	2.205	0.332	0.030	0.003
SR 203 - Link 3	1014	5	5,070	55	0.071	2.147	0.353	0.031	0.004
Hot Creek Rd.	1014	0.6	608	35	0.081	2.455	0.339	0.032	0.004
Airport Rd.	1014	2.6	2,636	35	0.081	2.455	0.339	0.032	0.004
Private Vehicles, employees	10,169	17	172,868	varies					
US 395	10169	6	61,012	65	0.089	2.368	0.407	0.033	0.005
SR 203 - Link 1	10169	2.32	23,591	35	0.081	2.455	0.339	0.032	0.004
SR 203 - Link 2	10169	0.48	4,881	45	0.069	2.205	0.332	0.030	0.003
SR 203 - Link 3	10169	5	50,843	55	0.071	2.147	0.353	0.031	0.004
Hot Creek Rd.	10169	0.6	6,101	35	0.081	2.455	0.339	0.032	0.004
Airport Rd.	10169	2.6	26,439	35	0.081	2.455	0.339	0.032	0.004
Private Vehicles, dropoff/pickup	2,721	17	46,254	varies					
US 395	2721	6	16,325	65	0.089	2.368	0.407	0.033	0.005
SR 203 - Link 1	2721	2.32	6,312	35	0.081	2.455	0.339	0.032	0.004
SR 203 - Link 2	2721	0.48	1,306	45	0.069	2.205	0.332	0.030	0.003
SR 203 - Link 3	2721	5	13,604	55	0.071	2.147	0.353	0.031	0.004
Hot Creek Rd.	2721	0.6	1,632	35	0.081	2.455	0.339	0.032	0.004
Airport Rd.	2721	2.6	7,074	35	0.081	2.455	0.339	0.032	0.004
Total	18,480		314,154						

Notes:

1. Average Round Trip Distance from MMH Airport to Downtown Mammoth is 17 miles.
2. Miles are for Round Trip distance.
3. VMT = vehicle-miles-traveled.

Source: URS Corporation, 2006.

TABLE D-7
VEHICLE VOLUMES, VMTS, AND EMFAC2002 EMISSION FACTORS
FOR THE 2015 PROPOSED ACTION ALTERNATIVE

Source	Volume (trips) Per Year	Miles (RT)	VMT Per year	Speed (mph)	Emission Factor (g/mi) VOCs	CO	NOx	PM	SO_2
Shuttle Vans	19,801	17	336,615	varies					
US 395	19801	6	118,805	65	0.131	2.820	0.928	0.039	0.006
SR 203 - Link 1	19801	2.32	45,938	35	0.124	2.730	0.686	0.039	0.005
SR 203 - Link 2	19801	0.48	9,504	45	0.104	2.469	0.692	0.036	0.005
SR 203 - Link 3	19801	5	99,004	55	0.106	2.457	0.763	0.036	0.005
Hot Creek Rd.	19801	0.6	11,881	35	0.124	2.730	0.686	0.039	0.005
Airport Rd.	19801	2.6	51,482	35	0.124	2.730	0.686	0.039	0.005
Rental Cars	6,052	17	102,877	varies					
US 395	6052	6	36,309	65	0.089	2.368	0.407	0.033	0.005
SR 203 - Link 1	6052	2.32	14,040	35	0.081	2.455	0.339	0.032	0.004
SR 203 - Link 2	6052	0.48	2,905	45	0.069	2.205	0.332	0.030	0.003
SR 203 - Link 3	6052	5	30,258	55	0.071	2.147	0.353	0.031	0.004
Hot Creek Rd.	6052	0.6	3,631	35	0.081	2.455	0.339	0.032	0.004
Airport Rd.	6052	2.6	15,734	35	0.081	2.455	0.339	0.032	0.004
Private Vehicles, employees	18,425	17	313,220	varies					
US 395	18425	6	110,548	65	0.089	2.368	0.407	0.033	0.005
SR 203 - Link 1	18425	2.32	42,745	35	0.081	2.455	0.339	0.032	0.004
SR 203 - Link 2	18425	0.48	8,844	45	0.069	2.205	0.332	0.030	0.003
SR 203 - Link 3	18425	5	92,123	55	0.071	2.147	0.353	0.031	0.004
Hot Creek Rd.	18425	0.6	11,055	35	0.081	2.455	0.339	0.032	0.004
Airport Rd.	18425	2.6	47,904	35	0.081	2.455	0.339	0.032	0.004
Private Vehicles, dropoff/pickup	5,408	17	91,928	varies					
US 395	5408	6	32,445	65	0.089	2.368	0.407	0.033	0.005
SR 203 - Link 1	5408	2.32	12,546	35	0.081	2.455	0.339	0.032	0.004
SR 203 - Link 2	5408	0.48	2,596	45	0.069	2.205	0.332	0.030	0.003
SR 203 - Link 3	5408	5	27,038	55	0.071	2.147	0.353	0.031	0.004
Hot Creek Rd.	5408	0.6	3,245	35	0.081	2.455	0.339	0.032	0.004
Airport Rd.	5408	2.6	14,060	35	0.081	2.455	0.339	0.032	0.004
Total	49,685		844,640						

Notes:

1. Average Round Trip Distance from MMH Airport to Downtown Mammoth is 17 miles.
2. Miles are for Round Trip distance.
3. VMT = vehicle-miles-traveled.

Source: URS Corporation, 2006.

TABLE D-8
ANNUAL DEICING FLUID USAGE AND FUEL CONSUMPTION (GAL/YR)

Analysis Scenario	Deicing Fluid[1]	Fuel Type[2]	
		Av Gas	Jet A
2005 Existing Conditions	0	60,000	180,000
2008 No Action	0	63,482	190,420
2008 Proposed Action	3,700	63,482	190,420
2015 No Action	0	72,398	217,385
2015 Proposed Action	16,800	72,398	217,385

Note:

1. No deicing fluid is consumed by the existing aircraft at MMH in 2005, and it was assumed that no deicing fluid would be consumed at MMH without the Proposed Action in 2008 and 2015. Data for deicing usage in 2008 and 2015 was provided by Horizon Air.

2. 2005 data provided by the Town of Mammoth, July 2006.

Source: URS Corporation, 2006.

FIGURE D – 1
EMFAC2002 INPUT FILE FOR MONO COUNTY

```
3 2 20 6 30423            ! Number of scenarios in file, version info
Mono County Avg 2015 Annual ! Scenario Title
Emfac     9  2            ! Program mode ROG  PM10
2015                      ! Calendar Year
15                        ! Month/Season
 4                        ! Geographic area selection: Mono County
26                        ! County Number
    4    1    1           ! Number of "Emfac" mode speeds, temps, RHs
                          ! Emfac speeds (hours 1-24)
  35.0  45.0  55.0  65.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
                          ! Emfac temperatures (hours 1-24)
  56.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
                          ! Emfac rel humidities (hours 1-24)
  40.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
FFFFF                     ! WEIGHT Output Options
FFTTF                     ! EMFAC Output Options
TFFFF                     ! BURDEN Output Options
FTFFF                     ! CALIMFAC Output Options
FFFFF                     ! EMFACnn Output Options
25                        ! First hour printed for detailed Burden output
6 1                       ! Bag and correction for Calimfac output
1970                      ! First model year considered in calculations
2015                      ! Last model year considered in calculations
                          ! Data on I/M Programs
                          ! --------------------
 0                        ! Number of I/M programs (num_prog) in scenario  1

#
Mono County Avg 2008 Annual ! Scenario Title
Emfac     9  2            ! Program mode ROG  PM10
2008                      ! Calendar Year
15                        ! Month/Season
 4                        ! Geographic area selection: Mono County
26                        ! County Number
    4    1    1           ! Number of "Emfac" mode speeds, temps, RHs
                          ! Emfac speeds (hours 1-24)
  35.0  45.0  55.0  65.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
                          ! Emfac temperatures (hours 1-24)
  56.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
                          ! Emfac rel humidities (hours 1-24)
  40.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
FFFFF                     ! WEIGHT Output Options
FFTTF                     ! EMFAC Output Options
TFFFF                     ! BURDEN Output Options
FTFFF                     ! CALIMFAC Output Options
FFFFF                     ! EMFACnn Output Options
25                        ! First hour printed for detailed Burden output
6 1                       ! Bag and correction for Calimfac output
1965                      ! First model year considered in calculations
2008                      ! Last model year considered in calculations
                          ! Data on I/M Programs
                          ! --------------------
 0                        ! Number of I/M programs (num_prog) in scenario  3
```

```
#
Mono County Avg 2005 Annual ! Scenario Title
Emfac     9  2            ! Program mode ROG  PM10
2005                      ! Calendar Year
15                        ! Month/Season
 4                        ! Geographic area selection: Mono County
26                        ! County Number
    4    1    1           ! Number of "Emfac" mode speeds, temps, RHs
                          ! Emfac speeds (hours 1-24)
  35.0  45.0  55.0  65.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
                          ! Emfac temperatures (hours 1-24)
  56.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
                          ! Emfac rel humidities (hours 1-24)
  40.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0
FFFFF                     ! WEIGHT Output Options
FFTTF                     ! EMFAC Output Options
TFFFF                     ! BURDEN Output Options
FTFFF                     ! CALIMFAC Output Options
FFFFF                     ! EMFACnn Output Options
25                        ! First hour printed for detailed Burden output
6 1                       ! Bag and correction for Calimfac output
1965                      ! First model year considered in calculations
2005                      ! Last model year considered in calculations

                          ! Data on I/M Programs
                          ! --------------------
 0                        ! Number of I/M programs (num_prog) in scenario  4
#
```

FIGURE D – 2
EXCERPTS OF THE EMFAC2002 OUTPUT FILE FOR MONO CO.

```
Title    : Mono County Avg 2005 Annual
Version  : Emfac2002 V2.2 Apr 23 2003
Run Date : 08/11/06 08:40:08
Scen Year: 2005 -- Model Years: 1965 to 2005
Season   : Annual
Area     : Mono County
*******************************************************************************
     Year:2005 -- Model Years 1965 to 2005 Inclusive --  Annual
     Emfac2002 Emission Factors: V2.2 Apr 23 2003

     County Average                                  Mono Count          County Average

                            Table   1:  Running Exhaust Emissions (grams/mile)

     Pollutant Name: Reactive Org Gases        Temperature:  56F  Relative Humidity:  40%

     Speed
      MPH       LDA      LDT      MDT      HDT      UBUS     MCY      ALL

       35      0.267    0.359    0.346    0.664    0.634    2.756    0.389
       45      0.228    0.310    0.293    0.516    0.503    3.110    0.335
       55      0.236    0.323    0.299    0.456    0.465    4.229    0.349
       65      0.299    0.410    0.370    0.455    0.500    6.905    0.444



     Pollutant Name: Carbon Monoxide           Temperature:  56F  Relative Humidity:  40%

     Speed
      MPH       LDA      LDT      MDT      HDT      UBUS     MCY      ALL

       35      5.677    8.193    6.393    8.866    6.704   30.321    7.497
       45      5.162    7.612    5.964    7.959    6.017   39.840    7.030
       55      5.172    7.999    6.381    8.860    6.754   64.409    7.620
       65      5.984    9.953    8.177   12.242    9.480  128.200   10.013



     Pollutant Name: Oxides of Nitrogen        Temperature:  56F  Relative Humidity:  40%

     Speed
      MPH       LDA      LDT      MDT      HDT      UBUS     MCY      ALL

       35      0.710    1.163    1.600    9.680    9.760    1.477    2.007
       45      0.701    1.161    1.631   10.558   10.924    1.592    2.103
       55      0.745    1.252    1.817   13.113   14.843    1.710    2.463
       65      0.855    1.469    2.234   18.637   24.577    1.830    3.269



     Pollutant Name: Carbon Dioxide            Temperature:  56F  Relative Humidity:  40%

     Speed
      MPH       LDA      LDT      MDT      HDT      UBUS     MCY      ALL

       35    320.359  384.746  522.530 1813.396 1742.808  110.644  538.472
       45    296.858  357.056  484.663 1805.317 1722.730  100.104  511.667
       55    318.872  382.995  522.531 1815.111 1747.070   97.202  537.404
       65    397.132  475.203  657.424 1850.184 1834.236  101.958  629.130
```

Pollutant Name: Sulfur Dioxide Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.003	0.005	0.008	0.155	0.139	0.002	0.020
45	0.003	0.004	0.008	0.155	0.138	0.002	0.020
55	0.003	0.005	0.008	0.155	0.139	0.002	0.020
65	0.004	0.006	0.009	0.155	0.140	0.003	0.021

Pollutant Name: PM10 Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.010	0.015	0.017	0.209	0.143	0.032	0.033
45	0.008	0.013	0.014	0.171	0.118	0.036	0.028
55	0.008	0.013	0.014	0.154	0.113	0.048	0.026
65	0.010	0.015	0.017	0.150	0.123	0.078	0.028

Pollutant Name: PM10 - Tire Wear Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.008	0.008	0.009	0.029	0.010	0.004	0.010
45	0.008	0.008	0.009	0.029	0.010	0.004	0.010
55	0.008	0.008	0.009	0.029	0.010	0.004	0.010
65	0.008	0.008	0.009	0.029	0.010	0.004	0.010

Pollutant Name: PM10 - Break Wear Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.013	0.013	0.013	0.013	0.013	0.013	0.013
45	0.013	0.013	0.013	0.013	0.013	0.013	0.013
55	0.013	0.013	0.013	0.013	0.013	0.013	0.013
65	0.013	0.013	0.013	0.013	0.013	0.013	0.013

A.3 HAZARDOUS AIR POLLUTANTS EMISSIONS INVENTORY

Methodology

The assessment of toxic air pollutants was prepared in response to comments received during the scoping process for this EIS and was prepared for disclosure purposes only, as part of the overall environmental disclosure. Emissions inventories of HAPs were prepared in accordance with FAA guidelines for conducting air quality analyses. For the purposes of this discussion, the terms "toxic air pollutants", "toxics", "toxic air contaminants", and "hazardous air pollutants" are interchangeable. These terms all refer to pollutants that do not have established NAAQS but present potential adverse human health risks from short-term or long-term exposures. Although no federal or state reporting requirements applicable to airports exist for these pollutants, the analysis presented here is consistent with current agency guidelines for quantifying emissions of toxics from airports.

The toxic substances evaluated here are a subset of VOC and particulate emissions. Their effects and potential toxicity vary, and they have or are suspected to have impacts on human health, including risks of cancer, respiratory conditions, and other health effects. The substances evaluated here include only those aircraft and airport-related pollutants identified in Table 1 of FAA's guidance document *Select Resource Materials and Annotated Bibliography on the Topic of Hazardous Air Pollutants (HAPS) Associated with Aircraft, Airports, and Aviation* (FAA, 2003). The twelve compounds that were assessed in this analysis represent the vast majority (about 99 percent) of HAPs that are reported to occur in aircraft and GSE exhaust (FAA, 2003). Diesel particulate matter from GSE and other motor vehicles is also considered appropriate to include in this assessment. These compounds are identified as follows: formaldehyde, acetaldehyde, benzene, toluene, acrolein, 1,3-butadiene, xylenes, lead, naphthalene, propionaldehyde, ethylbenzene, styrene, and diesel particulate matter.

The emissions inventories of HAPs were developed using published source-specific speciation profile data. Speciation profiles list the weight fractions or weight percentages of compounds which are included in the total hydrocarbons (THC) and particulate matter (assumed to be PM_{10}) emissions for each source category. Because some of the speciation profiles present the data in terms of volatile organic compounds (VOC) or total organic gases (TOG), it was necessary to convert the calculated THC emissions to corresponding VOC or TOG emissions prior to applying the speciation profile data.

For this analysis, the same emissions sources and activity data that were analyzed for the EPA "criteria pollutants" analysis described in Air Quality impacts Section of the EA were assessed for HAPs emissions. These sources include aircraft, GSE, motor vehicles, and stationary sources (i.e., fuel storage facilities and deicing activities) associated with the airport.

Emissions of individual HAPs were calculated by multiplying the appropriate criteria pollutant (VOC or particulate matter) emissions (in units of tons per year) by the relative toxic pollutant speciation profile factor.

HAPs Emissions Inventory Results

The detailed results of this analysis are presented in **Tables D-9 through D-13**.

2005 Existing Conditions HAPs Emissions Inventory

As shown in **Table D-9**, under the 2005 Existing Conditions, emissions of xylenes (the pollutant with the highest emissions) are estimated to be about 0.121046 tons per year (tpy) and toluene emissions (the pollutant with the second highest emissions) are estimated to be approximately 0.073416 tpy. Emissions of formaldehyde (the pollutant with the third highest emissions) are estimated to be about 0.073095 tpy.

2008 No-Action HAPs Emissions Inventory

As shown in **Table D-10**, under the No-Action Alternative in 2008, emissions of xylenes (the pollutant with the highest emissions) are estimated to be about 0.126929 tpy and formaldehyde emissions (the pollutant with the second highest emissions) are estimated to be approximately 0.076760 tpy. Emissions of toluene (the pollutant with the third highest emissions) are estimated to be about 0.076206 tpy.

2008 Proposed Action HAPs Emissions Inventory

As presented in **Table D-11**, for the Proposed Action in 2008, emissions of xylenes (the pollutant with the highest emissions) are estimated to be about 0.132974 tpy and toluene emissions (the pollutant with the second highest emissions) are estimated to be approximately 0.081189 tpy. Emissions of formaldehyde (the pollutant with the third highest emissions) are estimated to be about 0.078244 tpy. Compared to the results for the 2008 No-Action Alternative, the Proposed Action, in 2008, is estimated to have increases in emissions of each of the toxic pollutants analyzed, except for diesel particulates which decrease due the implementation of the low sulfur diesel fuel rules. These increases are attributable to the addition of air carrier operations and associated increase in motor vehicle trips.

2015 No-Action Hazardous Air Pollutant Emissions Inventory

Table D-12 presents the HAPs emissions inventories for the No-Action Alternative in 2015, and shows that emissions of xylenes (the pollutant with the highest emissions) are estimated to be about 0.141648 tpy and formaldehyde emissions (the pollutant with the second highest emissions) are estimated to be approximately 0.086446 tpy. Emissions of toluene (the pollutant with the third highest emissions) are estimated to be about 0.083170 tpy.

2015 Proposed Action Hazardous Air Pollutant Emissions Inventory

As presented in **Table D-13**, for the Proposed Action in 2015, emissions of xylenes (the pollutant with the highest emissions) are estimated to be about 0.176827 tpy and toluene emissions (the pollutant with the second highest emissions) are estimated to be approximately 0.105066 tpy. Emissions of formaldehyde (the pollutant with the third highest emissions) are estimated to be about 0.090848 tpy. Compared to the results for the 2015 No-Action Alternative, the Proposed Action in 2015 is estimated to have emissions increases of 0.03518 tpy of xylenes, 0.02189 tpy of toluene, and 0.00294 tpy of diesel particulate. Similar increases occur for the other pollutants that were analyzed. These increases are attributable to the increase in scheduled air carrier operations and associated increase in motor vehicle trips.

TABLE D-9
2005 HAPS EMISSIONS BY SOURCE CATEGORY (TONS PER YEAR)

Pollutant	Jet-Fueled Aircraft	Aviation Gas-Fueled Aircraft	Jet-Fueled APU	Gas-Fueled GSE	Diesel-Fueled GSE	Gas Motor Vehicles	Diesel Motor Vehicles	Aviation Gas Evaporation	Total Emissions
Formaldehyde	0.063471	0.007303	0.000000	0.000000	0.000036	0.001894	0.000391	0.000000	0.073095
Acetaldehyde	0.010148	0.004445	0.000000	0.000000	0.000018	0.000269	0.000196	0.000000	0.015076
Benzene	0.010418	0.029846	0.000000	0.000000	0.000005	0.002925	0.000053	0.024951	0.068198
Toluene	0.008330	0.058502	0.000000	0.000000	0.000000	0.006545	0.000039	0.000000	0.073416
Acrolein	0.004854	0.001032	0.000000	0.000000	0.000001	0.000157	0.000000	0.000000	0.006044
1,3-Butadiene	0.008128	0.005715	0.000000	0.000000	0.000000	0.000605	0.000005	0.000005	0.014459
Xylene	0.010713	0.104859	0.000000	0.000000	0.000000	0.005447	0.000028	0.000000	0.121046
Lead	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Naphthalene	0.002252	0.000953	0.000000	0.000000	0.000000	0.000056	0.000002	0.000000	0.003263
Propionaldehyde	0.000000	0.000000	0.000000	0.000000	0.000000	0.000045	0.000026	0.000000	0.000071
Ethylbenzene	0.001389	0.011669	0.000000	0.000000	0.000000	0.001199	0.000008	0.000000	0.014265
Styrene	0.002069	0.002223	0.000000	0.000000	0.000000	0.000134	0.000002	0.000000	0.004428
Diesel PM	N/A	N/A	N/A	N/A	0.008818	N/A	0.000185	N/A	0.009004

TABLE D-10
2008 NO ACTION HAPS EMISSIONS BY SOURCE CATEGORY (TONS PER YEAR)

Pollutant	Jet-Fueled Aircraft	Aviation Gas-Fueled Aircraft	Jet-Fueled APU	Gas-Fueled GSE	Diesel-Fueled GSE	Gas Motor Vehicles	Diesel Motor Vehicles	Aviation Gas Evaporation	Total Emissions
Formaldehyde	0.067178	0.007737	0.000000	0.000000	0.000032	0.001557	0.000256	0.000000	0.076760
Acetaldehyde	0.010741	0.004709	0.000000	0.000000	0.000016	0.000221	0.000128	0.000000	0.015816
Benzene	0.011028	0.031620	0.000000	0.000000	0.000004	0.002405	0.000035	0.024951	0.070043
Toluene	0.008821	0.061979	0.000000	0.000000	0.000000	0.005380	0.000026	0.000000	0.076206
Acrolein	0.005140	0.001093	0.000000	0.000000	0.000001	0.000129	0.000000	0.000000	0.006363
1,3-Butadiene	0.008606	0.006055	0.000000	0.000000	0.000000	0.000498	0.000003	0.000003	0.015166
Xylene	0.011342	0.111091	0.000000	0.000000	0.000000	0.004478	0.000018	0.000000	0.126929
Lead	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Naphthalene	0.002384	0.001009	0.000000	0.000000	0.000000	0.000046	0.000001	0.000000	0.003441
Propionaldehyde	0.000000	0.000000	0.000000	0.000000	0.000000	0.000037	0.000017	0.000000	0.000054
Ethylbenzene	0.001471	0.012362	0.000000	0.000000	0.000000	0.000986	0.000005	0.000000	0.014824
Styrene	0.002190	0.002355	0.000000	0.000000	0.000000	0.000111	0.000001	0.000000	0.004657
Diesel PM	N/A	N/A	N/A	N/A	0.020944	N/A	0.000185	N/A	0.021129

TABLE D-11
2008 PROPOSED ACTION HAPS EMISSIONS BY SOURCE CATEGORY (TONS PER YEAR)

Pollutant	Jet-Fueled Aircraft[1]	Aviation Gas-Fueled Aircraft	Jet-Fueled APU	Gas-Fueled GSE	Diesel-Fueled GSE	Gas Motor Vehicles	Diesel Motor Vehicles	Aviation Gas Evaporation	Total Emissions
Formaldehyde	0.067178	0.007737	0.000000	0.001366	0.000083	0.002422	0.000398	0.000000	0.079184
Acetaldehyde	0.010741	0.004709	0.000000	0.000832	0.000041	0.000344	0.000199	0.000000	0.016866
Benzene	0.011028	0.031620	0.000000	0.005585	0.000011	0.003741	0.000054	0.024951	0.076990
Toluene	0.008821	0.061979	0.000000	0.010947	0.000000	0.008370	0.000040	0.036040	0.126196
Acrolein	0.005140	0.001093	0.000000	0.000193	0.000002	0.000201	0.000000	0.000000	0.006629
1,3-Butadiene	0.008606	0.006055	0.000000	0.001069	0.000001	0.000774	0.000005	0.000000	0.016511
Xylene	0.011342	0.111091	0.000000	0.019621	0.000000	0.006965	0.000028	0.013862	0.162908
Lead	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Naphthalene	0.002384	0.001009	0.000000	0.000178	0.000000	0.000072	0.000002	0.001386	0.005032
Propionaldehyde	0.000000	0.000000	0.000000	0.000000	0.000000	0.000057	0.000026	0.000000	0.000084
Ethylbenzene	0.001471	0.012362	0.000000	0.002183	0.000000	0.001533	0.000008	0.002772	0.020330
Styrene	0.002190	0.002355	0.000000	0.000416	0.000000	0.000172	0.000002	0.000000	0.005135
Diesel PM	N/A	N/A	N/A	N/A	0.021357	N/A	0.000370	N/A	0.021728

[1] EDMS Version 4.5 (and previous versions) does not have any Emission Indices for HC for the Q-400 (Dash8-400) engines.

TABLE D-12
2015 NO ACTION HAPS EMISSIONS BY SOURCE CATEGORY (TONS PER YEAR)

Pollutant	Jet-Fueled Aircraft	Aviation Gas-Fueled Aircraft	Jet-Fueled APU	Gas-Fueled GSE	Diesel-Fueled GSE	Gas Motor Vehicles	Diesel Motor Vehicles	Aviation Gas Evaporation	Total Emissions
Formaldehyde	0.076852	0.008822	0.000000	0.000000	0.000017	0.000699	0.000057	0.000000	0.086446
Acetaldehyde	0.012288	0.005370	0.000000	0.000000	0.000008	0.000099	0.000028	0.000000	0.017794
Benzene	0.012611	0.036055	0.000000	0.000000	0.000002	0.001079	0.000008	0.024951	0.074706
Toluene	0.010079	0.070672	0.000000	0.000000	0.000000	0.002414	0.000006	0.000000	0.083170
Acrolein	0.005874	0.001247	0.000000	0.000000	0.000000	0.000058	0.000000	0.000000	0.007179
1,3-Butadiene	0.009829	0.006904	0.000000	0.000000	0.000000	0.000223	0.000001	0.000001	0.016958
Xylene	0.012963	0.126672	0.000000	0.000000	0.000000	0.002009	0.000004	0.000000	0.141648
Lead	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Naphthalene	0.002724	0.001151	0.000000	0.000000	0.000000	0.000021	0.000000	0.000000	0.003895
Propionaldehyde	0.000000	0.000000	0.000000	0.000000	0.000000	0.000017	0.000004	0.000000	0.000020
Ethylbenzene	0.001681	0.014096	0.000000	0.000000	0.000000	0.000442	0.000001	0.000000	0.016221
Styrene	0.002503	0.002685	0.000000	0.000000	0.000000	0.000050	0.000000	0.000000	0.005238
Diesel PM	N/A	N/A	N/A	N/A	0.062832	N/A	0.000093	N/A	0.062924

TABLE D-13
2015 PROPOSED ACTION HAPS EMISSIONS BY SOURCE CATEGORY (TONS PER YEAR)

Pollutant	Jet-Fueled Aircraft[1]	Aviation Gas-Fueled Aircraft	Jet-Fueled APU	Gas-Fueled GSE	Diesel-Fueled GSE	Gas Motor Vehicles	Diesel Motor Vehicles	Aviation Gas Evaporation	Total Emissions
Formaldehyde	0.076852	0.008822	0.000000	0.003993	0.000606	0.001921	0.000156	0.000000	0.092351
Acetaldehyde	0.012288	0.005370	0.000000	0.002431	0.000303	0.000273	0.000078	0.000000	0.020743
Benzene	0.012611	0.036055	0.000000	0.016320	0.000082	0.002967	0.000021	0.024951	0.093008
Toluene	0.010079	0.070672	0.000000	0.031989	0.000000	0.006638	0.000016	0.036040	0.155433
Acrolein	0.005874	0.001247	0.000000	0.000564	0.000014	0.000159	0.000000	0.000000	0.007859
1,3-Butadiene	0.009829	0.006904	0.000000	0.003125	0.000008	0.000614	0.000002	0.000000	0.020482
Xylene	0.012963	0.126672	0.000000	0.057337	0.000000	0.005524	0.000011	0.013862	0.216369
Lead	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Naphthalene	0.002724	0.001151	0.000000	0.000521	0.000000	0.000057	0.000001	0.001386	0.005839
Propionaldehyde	0.000000	0.000000	0.000000	0.000000	0.000000	0.000045	0.000010	0.000000	0.000056
Ethylbenzene	0.001681	0.014096	0.000000	0.006380	0.000000	0.001216	0.000003	0.002772	0.026149
Styrene	0.002503	0.002685	0.000000	0.001215	0.000000	0.000136	0.000001	0.000000	0.006540
Diesel PM	N/A	N/A	N/A	N/A	0.076589	N/A	0.000278	N/A	0.076867

[1] EDMS Version 4.5 (and previous versions) does not have any Emission Indices for HC for the Q-400 (Dash8-400) engines.

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2009 -- All model years in the range 1965 to 2009 selected
Season : Annual
Area : Mono

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Year: 2009 -- Model Years 1965 to 2009 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Methane Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.032	0.043	0.038	0.043	0.000	0.204	0.042
45	0.029	0.039	0.034	0.035	0.000	0.216	0.038
55	0.029	0.040	0.034	0.038	0.000	0.255	0.040
65	0.034	0.045	0.038	0.053	0.000	0.347	0.047

Pollutant Name: Carbon Monoxide Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	3.533	5.600	3.869	5.853	0.000	25.531	5.279
45	3.209	5.139	3.511	4.716	0.000	32.985	4.861
55	3.201	5.253	3.584	4.598	0.000	52.511	5.171
65	3.685	6.278	4.306	5.658	0.000	103.444	6.724

Pollutant Name: Oxides of Nitrogen Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.432	0.813	1.342	15.685	0.000	1.411	3.063
45	0.427	0.807	1.393	15.485	0.000	1.511	3.037
55	0.452	0.868	1.601	15.993	0.000	1.624	3.180
65	0.517	1.017	2.065	17.334	0.000	1.755	3.537

Pollutant Name: Carbon Dioxide Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	313.001	385.059	520.740	1698.387	0.000	120.631	585.035
45	290.232	357.399	485.473	1590.005	0.000	114.396	545.342
55	311.561	383.309	520.857	1562.197	0.000	120.136	563.407
65	387.382	475.417	646.916	1618.138	0.000	142.365	650.970

Pollutant Name: Sulfur Dioxide Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.003	0.004	0.005	0.016	0.000	0.002	0.006
45	0.003	0.004	0.005	0.015	0.000	0.002	0.005
55	0.003	0.004	0.005	0.015	0.000	0.002	0.005
65	0.004	0.005	0.006	0.015	0.000	0.003	0.006

Pollutant Name: PM30 Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.010	0.017	0.020	0.490	0.000	0.029	0.088
45	0.009	0.014	0.017	0.455	0.000	0.033	0.080
55	0.009	0.014	0.016	0.540	0.000	0.045	0.093
65	0.011	0.018	0.019	0.746	0.000	0.072	0.127

Pollutant Name: PM30 - Tire Wear Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.008	0.008	0.009	0.032	0.000	0.004	0.012
45	0.008	0.008	0.009	0.032	0.000	0.004	0.012
55	0.008	0.008	0.009	0.032	0.000	0.004	0.012
65	0.008	0.008	0.009	0.032	0.000	0.004	0.012

Pollutant Name: PM30 - Brake Wear Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.013	0.013	0.013	0.026	0.000	0.006	0.015
45	0.013	0.013	0.013	0.026	0.000	0.006	0.015
55	0.013	0.013	0.013	0.026	0.000	0.006	0.015
65	0.013	0.013	0.013	0.026	0.000	0.006	0.015

Pollutant Name: Gasoline - mi/gal Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	27.884	22.399	16.756	16.684	0.000	52.534	23.176
45	30.128	24.198	18.193	18.456	0.000	50.582	24.958
55	28.082	22.550	16.770	16.384	0.000	41.278	23.127
65	22.562	18.109	13.139	11.671	0.000	27.396	18.412

Pollutant Name: Diesel - mi/gal Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	28.939	29.088	19.878	5.641	0.000	0.000	9.593
45	28.939	29.088	19.878	6.008	0.000	0.000	9.882
55	28.939	29.088	19.878	6.131	0.000	0.000	9.979
65	28.939	29.088	19.878	5.975	0.000	0.000	9.856

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2009 -- All model years in the range 1965 to 2009 selected
Season : Annual
Area : Mono

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Year: 2009 -- Model Years 1965 to 2009 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 2: Starting Emissions (grams/trip)

Pollutant Name: Methane Temperature: 56F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.016	0.014	0.018	0.147	0.000	0.126	0.030
10	0.023	0.022	0.029	0.163	0.000	0.131	0.040
20	0.037	0.037	0.049	0.198	0.000	0.144	0.058
30	0.049	0.051	0.068	0.233	0.000	0.160	0.075
40	0.060	0.063	0.085	0.268	0.000	0.179	0.090
50	0.071	0.074	0.100	0.305	0.000	0.200	0.105
60	0.079	0.083	0.112	0.328	0.000	0.213	0.116
120	0.083	0.087	0.111	0.235	0.000	0.160	0.108
180	0.066	0.070	0.101	0.252	0.000	0.164	0.096
240	0.070	0.074	0.107	0.270	0.000	0.177	0.102
300	0.074	0.078	0.113	0.287	0.000	0.189	0.108
360	0.078	0.082	0.118	0.304	0.000	0.201	0.114
420	0.082	0.086	0.124	0.321	0.000	0.213	0.120
480	0.085	0.090	0.130	0.337	0.000	0.225	0.125
540	0.089	0.093	0.135	0.354	0.000	0.237	0.131
600	0.092	0.097	0.140	0.370	0.000	0.249	0.136
660	0.096	0.100	0.145	0.386	0.000	0.261	0.141
720	0.099	0.104	0.150	0.402	0.000	0.273	0.146

Pollutant Name: Carbon Monoxide Temperature: 56F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	2.036	2.275	3.312	18.644	0.000	5.418	4.165
10	3.396	4.072	5.986	23.102	0.000	5.653	6.323
20	5.969	7.464	11.030	31.607	0.000	6.151	10.409
30	8.346	10.586	15.671	39.564	0.000	6.686	14.184
40	10.527	13.439	19.907	46.974	0.000	7.258	17.650
50	12.513	16.023	23.738	53.836	0.000	7.867	20.807
60	14.302	18.337	27.166	60.151	0.000	8.513	23.653
120	17.550	21.075	24.934	43.716	0.000	9.825	23.409
180	12.750	15.798	20.854	50.430	0.000	10.147	19.787
240	13.545	16.643	21.978	56.569	0.000	12.166	21.238
300	14.283	17.436	23.032	62.135	0.000	13.966	22.576
360	14.963	18.178	24.017	67.126	0.000	15.545	23.803
420	15.586	18.869	24.932	71.543	0.000	16.905	24.919
480	16.151	19.508	25.777	75.387	0.000	18.044	25.922
540	16.658	20.096	26.553	78.656	0.000	18.963	26.813
600	17.108	20.632	27.259	81.351	0.000	19.663	27.592
660	17.501	21.118	27.896	83.472	0.000	20.142	28.260
720	17.836	21.552	28.463	85.020	0.000	20.401	28.815

Pollutant Name: Oxides of Nitrogen Temperature: 56F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.361	0.494	1.027	0.891	0.000	0.235	0.627
10	0.427	0.584	1.222	1.260	0.000	0.265	0.763
20	0.544	0.742	1.565	1.909	0.000	0.319	1.003
30	0.640	0.873	1.848	2.439	0.000	0.365	1.201
40	0.716	0.976	2.071	2.850	0.000	0.403	1.356
50	0.772	1.051	2.234	3.143	0.000	0.432	1.469
60	0.808	1.099	2.337	3.318	0.000	0.453	1.539
120	0.845	1.157	2.453	3.384	0.000	0.464	1.607
180	0.881	1.204	2.482	3.364	0.000	0.456	1.640
240	0.874	1.195	2.465	3.337	0.000	0.444	1.628
300	0.864	1.182	2.440	3.300	0.000	0.429	1.611
360	0.851	1.166	2.407	3.255	0.000	0.411	1.588
420	0.835	1.145	2.366	3.202	0.000	0.390	1.560
480	0.816	1.119	2.316	3.140	0.000	0.366	1.527
540	0.793	1.090	2.258	3.069	0.000	0.339	1.488
600	0.768	1.057	2.192	2.990	0.000	0.308	1.444
660	0.739	1.019	2.118	2.903	0.000	0.275	1.395
720	0.707	0.978	2.036	2.807	0.000	0.239	1.340

Pollutant Name: Carbon Dioxide Temperature: 56F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	11.930	13.024	17.248	22.902	0.000	25.292	15.000
10	14.639	16.187	21.685	27.298	0.000	27.908	18.487
20	20.341	22.867	31.033	35.945	0.000	33.007	25.770
30	26.422	30.015	41.014	44.396	0.000	37.928	33.465
40	32.883	37.631	51.628	52.652	0.000	42.671	41.573
50	39.724	45.717	62.876	60.713	0.000	47.236	50.094
60	46.944	54.272	74.757	68.578	0.000	51.624	59.027
120	93.611	109.886	151.288	103.680	0.000	71.912	115.141
180	106.824	125.900	173.689	113.378	0.000	73.785	131.230

240	119.699	141.504	195.491	122.506	0.000	75.550	146.868
300	132.236	156.697	216.695	131.064	0.000	77.208	162.056
360	144.435	171.480	237.299	139.052	0.000	78.758	176.792
420	156.296	185.852	257.304	146.470	0.000	80.200	191.077
480	167.820	199.815	276.711	153.317	0.000	81.534	204.911
540	179.006	213.367	295.519	159.595	0.000	82.761	218.294
600	189.853	226.508	313.727	165.302	0.000	83.880	231.226
660	200.363	239.240	331.337	170.440	0.000	84.892	243.707
720	210.535	251.561	348.348	175.007	0.000	85.796	255.736

Pollutant Name: Sulfur Dioxide Temperature: 56F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.000	0.000	0.000	0.001	0.000	0.000	0.000
10	0.000	0.000	0.000	0.001	0.000	0.000	0.000
20	0.000	0.000	0.000	0.001	0.000	0.000	0.000
30	0.000	0.000	0.001	0.001	0.000	0.001	0.001
40	0.001	0.001	0.001	0.001	0.000	0.001	0.001
50	0.001	0.001	0.001	0.002	0.000	0.001	0.001
60	0.001	0.001	0.001	0.002	0.000	0.001	0.001
120	0.001	0.001	0.002	0.002	0.000	0.001	0.002
180	0.001	0.001	0.002	0.002	0.000	0.001	0.002
240	0.001	0.002	0.002	0.002	0.000	0.001	0.002
300	0.002	0.002	0.002	0.002	0.000	0.001	0.002
360	0.002	0.002	0.003	0.002	0.000	0.001	0.002
420	0.002	0.002	0.003	0.003	0.000	0.001	0.002
480	0.002	0.002	0.003	0.003	0.000	0.001	0.002
540	0.002	0.002	0.003	0.003	0.000	0.001	0.003
600	0.002	0.003	0.003	0.003	0.000	0.001	0.003
660	0.002	0.003	0.004	0.003	0.000	0.001	0.003
720	0.002	0.003	0.004	0.003	0.000	0.001	0.003

Pollutant Name: PM30 Temperature: 56F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.001	0.001	0.001	0.002	0.000	0.016	0.002
10	0.002	0.003	0.002	0.002	0.000	0.014	0.002
20	0.003	0.005	0.003	0.003	0.000	0.011	0.004
30	0.005	0.007	0.005	0.003	0.000	0.008	0.006
40	0.006	0.009	0.006	0.003	0.000	0.006	0.007
50	0.007	0.010	0.007	0.004	0.000	0.005	0.008
60	0.008	0.012	0.009	0.004	0.000	0.004	0.010
120	0.012	0.017	0.013	0.006	0.000	0.011	0.014
180	0.013	0.018	0.013	0.007	0.000	0.017	0.015
240	0.013	0.019	0.014	0.008	0.000	0.022	0.016
300	0.014	0.020	0.015	0.008	0.000	0.026	0.017
360	0.015	0.021	0.015	0.009	0.000	0.030	0.018
420	0.015	0.022	0.016	0.009	0.000	0.034	0.018
480	0.016	0.023	0.016	0.010	0.000	0.036	0.019
540	0.016	0.024	0.017	0.010	0.000	0.039	0.020
600	0.017	0.024	0.017	0.010	0.000	0.040	0.020
660	0.017	0.025	0.018	0.011	0.000	0.041	0.021
720	0.017	0.025	0.018	0.011	0.000	0.041	0.021

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
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Scen Year: 2009 -- All model years in the range 1965 to 2009 selected
Season : Annual
Area : Mono
****

Year: 2009 -- Model Years 1965 to 2009 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 4: Hot Soak Emissions (grams/trip)

Pollutant Name: Methane Temperature: 56F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Hot soak results are scaled to reflect zero emissions for trip lengths of less than 5 minutes (about 25% of in-use trips).

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2009 -- All model years in the range 1965 to 2009 selected
Season : Annual
Area : Mono
****

Year: 2009 -- Model Years 1965 to 2009 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 5a: Partial Day Diurnal Loss Emissions (grams/hour)

Pollutant Name: Methane Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2009 -- All model years in the range 1965 to 2009 selected
Season : Annual
Area : Mono
****

Year: 2009 -- Model Years 1965 to 2009 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 5b: Multi-Day Diurnal Loss Emissions (grams/hour)

Pollutant Name: Methane Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2009 -- All model years in the range 1965 to 2009 selected
Season : Annual
Area : Mono
****

Year: 2009 -- Model Years 1965 to 2009 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 6a: Partial Day Resting Loss Emissions (grams/hour)

Pollutant Name: Methane Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2009 -- All model years in the range 1965 to 2009 selected
Season : Annual
Area : Mono
****

Year: 2009 -- Model Years 1965 to 2009 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 6b: Multi-Day Resting Loss Emissions (grams/hour)

Pollutant Name: Methane Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2009 -- All model years in the range 1965 to 2009 selected
Season : Annual
Area : Mono
****

Year: 2009 -- Model Years 1965 to 2009 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 7: Estimated Travel Fractions

Pollutant Name: Temperature: ALL Relative Humidity: ALL

	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
%VMT	0.184	0.511	0.142	0.150	0.000	0.013	1.000
%TRIP	0.172	0.484	0.226	0.100	0.000	0.018	1.000
%VEH	0.193	0.541	0.137	0.068	0.000	0.062	1.000

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2009 -- All model years in the range 1965 to 2009 selected
Season : Annual
Area : Mono

****

Year: 2009 -- Model Years 1965 to 2009 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 8: Evaporative Running Loss Emissions (grams/minute)

Pollutant Name: Methane Temperature: 56F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2015 -- All model years in the range 1971 to 2015 selected
Season : Annual
Area : Mono

****

Year: 2015 -- Model Years 1971 to 2015 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Methane Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.015	0.025	0.026	0.027	0.000	0.188	0.026
45	0.013	0.023	0.023	0.022	0.000	0.197	0.023
55	0.013	0.023	0.023	0.023	0.000	0.229	0.024
65	0.016	0.027	0.026	0.030	0.000	0.307	0.029

Pollutant Name: Carbon Monoxide Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	1.549	3.117	2.482	3.274	0.000	18.724	2.956
45	1.368	2.809	2.214	2.791	0.000	23.059	2.714
55	1.278	2.757	2.157	2.829	0.000	35.041	2.825
65	1.307	3.082	2.398	3.460	0.000	66.795	3.539

Pollutant Name: Oxides of Nitrogen Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.184	0.447	0.829	8.663	0.000	1.281	1.631
45	0.179	0.440	0.855	8.384	0.000	1.351	1.591
55	0.188	0.470	0.978	8.586	0.000	1.455	1.655
65	0.215	0.549	1.255	9.346	0.000	1.603	1.849

Pollutant Name: Carbon Dioxide Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	306.141	384.659	520.217	1685.262	0.000	134.296	570.059
45	283.683	356.660	483.969	1580.029	0.000	135.716	531.385
55	304.720	382.888	520.459	1553.507	0.000	156.269	550.398
65	379.505	476.123	650.470	1609.067	0.000	208.131	639.123

Pollutant Name: Sulfur Dioxide Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.003	0.004	0.005	0.016	0.000	0.002	0.006
45	0.003	0.003	0.005	0.015	0.000	0.002	0.005
55	0.003	0.004	0.005	0.015	0.000	0.002	0.005
65	0.004	0.005	0.006	0.015	0.000	0.003	0.006

Pollutant Name: PM30 Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.009	0.016	0.020	0.265	0.000	0.020	0.051
45	0.008	0.014	0.017	0.266	0.000	0.022	0.049
55	0.008	0.014	0.017	0.332	0.000	0.030	0.059
65	0.010	0.017	0.020	0.462	0.000	0.048	0.080

Pollutant Name: PM30 - Tire Wear Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.008	0.008	0.009	0.031	0.000	0.004	0.011
45	0.008	0.008	0.009	0.031	0.000	0.004	0.011
55	0.008	0.008	0.009	0.031	0.000	0.004	0.011
65	0.008	0.008	0.009	0.031	0.000	0.004	0.011

Pollutant Name: PM30 - Brake Wear Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	0.013	0.013	0.013	0.026	0.000	0.006	0.015
45	0.013	0.013	0.013	0.026	0.000	0.006	0.015
55	0.013	0.013	0.013	0.026	0.000	0.006	0.015
65	0.013	0.013	0.013	0.026	0.000	0.006	0.015

Pollutant Name: Gasoline - mi/gal Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	28.734	22.693	16.870	17.309	0.000	51.970	23.624
45	31.039	24.515	18.322	19.137	0.000	49.364	25.434
55	28.912	22.838	16.877	16.980	0.000	40.015	23.562
65	23.212	18.337	13.204	12.091	0.000	26.895	18.767

Pollutant Name: Diesel - mi/gal Temperature: 56F Relative Humidity: 40%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
35	29.048	29.118	19.823	5.670	0.000	0.000	8.478
45	29.048	29.118	19.823	6.027	0.000	0.000	8.779
55	29.048	29.118	19.823	6.147	0.000	0.000	8.880
65	29.048	29.118	19.823	5.995	0.000	0.000	8.752

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
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Scen Year: 2015 -- All model years in the range 1971 to 2015 selected
Season : Annual
Area : Mono

****

Year: 2015 -- Model Years 1971 to 2015 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 2: Starting Emissions (grams/trip)

Pollutant Name: Methane Temperature: 56F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.005	0.006	0.009	0.054	0.000	0.088	0.012
10	0.008	0.011	0.016	0.067	0.000	0.097	0.018
20	0.014	0.019	0.028	0.092	0.000	0.115	0.029
30	0.020	0.027	0.040	0.115	0.000	0.135	0.039
40	0.025	0.034	0.051	0.137	0.000	0.155	0.048
50	0.029	0.040	0.060	0.158	0.000	0.175	0.056
60	0.033	0.045	0.069	0.173	0.000	0.189	0.063
120	0.038	0.050	0.081	0.126	0.000	0.165	0.065
180	0.029	0.040	0.070	0.135	0.000	0.154	0.056
240	0.030	0.042	0.074	0.144	0.000	0.165	0.059
300	0.032	0.044	0.078	0.152	0.000	0.175	0.062
360	0.034	0.046	0.082	0.160	0.000	0.186	0.066
420	0.035	0.049	0.087	0.168	0.000	0.196	0.069
480	0.037	0.051	0.090	0.176	0.000	0.206	0.072
540	0.038	0.053	0.094	0.184	0.000	0.216	0.075
600	0.040	0.055	0.098	0.192	0.000	0.226	0.078
660	0.041	0.057	0.102	0.199	0.000	0.236	0.081
720	0.043	0.059	0.106	0.206	0.000	0.245	0.084

Pollutant Name: Carbon Monoxide Temperature: 56F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.830	1.253	1.841	9.217	0.000	4.261	2.118
10	1.552	2.351	3.466	13.111	0.000	5.046	3.530
20	2.920	4.429	6.552	20.463	0.000	6.555	6.203
30	4.190	6.352	9.419	27.232	0.000	7.983	8.677
40	5.361	8.118	12.068	33.418	0.000	9.328	10.952
50	6.433	9.728	14.498	39.020	0.000	10.591	13.027
60	7.406	11.183	16.710	44.039	0.000	11.773	14.902
120	9.568	13.655	18.911	30.338	0.000	14.782	15.746
180	6.669	9.865	14.121	33.227	0.000	11.395	12.516
240	7.079	10.431	15.033	35.919	0.000	12.875	13.351
300	7.455	10.954	15.864	38.413	0.000	14.213	14.120
360	7.797	11.435	16.614	40.709	0.000	15.409	14.822
420	8.105	11.873	17.283	42.807	0.000	16.463	15.458
480	8.379	12.269	17.872	44.708	0.000	17.375	16.028
540	8.619	12.623	18.380	46.410	0.000	18.144	16.532
600	8.826	12.934	18.806	47.916	0.000	18.772	16.970

660	8.998	13.202	19.152	49.223	0.000	19.257	17.341
720	9.136	13.428	19.418	50.332	0.000	19.601	17.646

Pollutant Name: Oxides of Nitrogen Temperature: 56F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.224	0.374	1.082	0.643	0.000	0.195	0.534
10	0.252	0.424	1.197	0.939	0.000	0.233	0.617
20	0.303	0.512	1.402	1.458	0.000	0.299	0.766
30	0.346	0.585	1.573	1.882	0.000	0.355	0.889
40	0.379	0.643	1.710	2.210	0.000	0.399	0.986
50	0.405	0.686	1.815	2.443	0.000	0.433	1.058
60	0.421	0.715	1.885	2.580	0.000	0.455	1.105
120	0.447	0.761	2.018	2.629	0.000	0.463	1.167
180	0.469	0.795	2.047	2.617	0.000	0.459	1.192
240	0.465	0.789	2.032	2.599	0.000	0.450	1.184
300	0.460	0.780	2.009	2.575	0.000	0.438	1.171
360	0.453	0.768	1.978	2.546	0.000	0.424	1.154
420	0.444	0.754	1.938	2.510	0.000	0.408	1.132
480	0.433	0.736	1.890	2.469	0.000	0.390	1.106
540	0.421	0.715	1.833	2.422	0.000	0.369	1.076
600	0.407	0.691	1.768	2.369	0.000	0.345	1.042
660	0.391	0.664	1.695	2.310	0.000	0.320	1.003
720	0.373	0.634	1.613	2.246	0.000	0.292	0.960

Pollutant Name: Carbon Dioxide Temperature: 56F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	11.464	13.820	19.237	8.654	0.000	18.097	14.250
10	13.364	16.308	22.732	11.877	0.000	20.467	16.935
20	17.585	21.776	30.413	18.248	0.000	25.105	22.767
30	22.365	27.899	39.014	24.519	0.000	29.607	29.213
40	27.705	34.677	48.535	30.690	0.000	33.974	36.273
50	33.605	42.111	58.976	36.760	0.000	38.205	43.948
60	40.064	50.200	70.337	42.730	0.000	42.301	52.237
120	88.447	109.346	153.357	68.882	0.000	60.928	111.186
180	100.811	124.817	175.129	78.710	0.000	64.233	126.820
240	113.034	140.071	196.594	87.959	0.000	67.346	142.197
300	125.118	155.109	217.751	96.628	0.000	70.266	157.316
360	137.062	169.930	238.600	104.718	0.000	72.992	172.177
420	148.865	184.536	259.142	112.229	0.000	75.525	186.780
480	160.530	198.925	279.377	119.160	0.000	77.866	201.125
540	172.054	213.097	299.303	125.512	0.000	80.013	215.213
600	183.438	227.054	318.923	131.284	0.000	81.967	229.043
660	194.682	240.794	338.234	136.477	0.000	83.727	242.614
720	205.787	254.317	357.238	141.090	0.000	85.295	255.929

Pollutant Name: Sulfur Dioxide Temperature: 56F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000

10	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.001	0.000	0.000	0.000
30	0.000	0.000	0.001	0.001	0.000	0.000	0.000
40	0.000	0.000	0.001	0.001	0.000	0.001	0.001
50	0.000	0.001	0.001	0.001	0.000	0.001	0.001
60	0.001	0.001	0.001	0.001	0.000	0.001	0.001
120	0.001	0.001	0.002	0.001	0.000	0.001	0.001
180	0.001	0.001	0.002	0.001	0.000	0.001	0.001
240	0.001	0.002	0.002	0.001	0.000	0.001	0.002
300	0.001	0.002	0.002	0.002	0.000	0.001	0.002
360	0.001	0.002	0.003	0.002	0.000	0.001	0.002
420	0.002	0.002	0.003	0.002	0.000	0.001	0.002
480	0.002	0.002	0.003	0.002	0.000	0.001	0.002
540	0.002	0.002	0.003	0.002	0.000	0.001	0.002
600	0.002	0.002	0.003	0.002	0.000	0.001	0.002
660	0.002	0.003	0.004	0.002	0.000	0.001	0.003
720	0.002	0.003	0.004	0.002	0.000	0.001	0.003

Pollutant Name: PM30 Temperature: 56F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.001	0.001	0.001	0.001	0.000	0.011	0.001
10	0.001	0.002	0.002	0.001	0.000	0.010	0.002
20	0.003	0.004	0.003	0.002	0.000	0.008	0.004
30	0.004	0.006	0.005	0.002	0.000	0.006	0.005
40	0.005	0.008	0.006	0.003	0.000	0.005	0.006
50	0.006	0.010	0.008	0.003	0.000	0.004	0.008
60	0.007	0.011	0.009	0.004	0.000	0.003	0.009
120	0.010	0.017	0.014	0.005	0.000	0.008	0.014
180	0.011	0.018	0.015	0.006	0.000	0.012	0.015
240	0.012	0.020	0.016	0.006	0.000	0.016	0.016
300	0.013	0.021	0.017	0.006	0.000	0.019	0.017
360	0.014	0.022	0.018	0.006	0.000	0.021	0.018
420	0.014	0.023	0.019	0.007	0.000	0.024	0.019
480	0.015	0.024	0.019	0.007	0.000	0.026	0.020
540	0.015	0.024	0.020	0.007	0.000	0.027	0.020
600	0.015	0.025	0.020	0.007	0.000	0.028	0.021
660	0.016	0.025	0.021	0.008	0.000	0.029	0.021
720	0.016	0.026	0.021	0.008	0.000	0.029	0.021

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2015 -- All model years in the range 1971 to 2015 selected
Season : Annual
Area : Mono
****

Year: 2015 -- Model Years 1971 to 2015 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 4: Hot Soak Emissions (grams/trip)

Pollutant Name: Methane Temperature: 56F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Hot soak results are scaled to reflect zero emissions for trip lengths of less than 5 minutes (about 25% of in-use trips).

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2015 -- All model years in the range 1971 to 2015 selected
Season : Annual
Area : Mono

****

Year: 2015 -- Model Years 1971 to 2015 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 5a: Partial Day Diurnal Loss Emissions (grams/hour)

Pollutant Name: Methane Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2015 -- All model years in the range 1971 to 2015 selected
Season : Annual
Area : Mono

****

Year: 2015 -- Model Years 1971 to 2015 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County

Average

Table 5b: Multi-Day Diurnal Loss Emissions (grams/hour)

Pollutant Name: Methane Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2015 -- All model years in the range 1971 to 2015 selected
Season : Annual
Area : Mono

****

Year: 2015 -- Model Years 1971 to 2015 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 6a: Partial Day Resting Loss Emissions (grams/hour)

Pollutant Name: Methane Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2015 -- All model years in the range 1971 to 2015 selected
Season : Annual
Area : Mono

****

Year: 2015 -- Model Years 1971 to 2015 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 6b: Multi-Day Resting Loss Emissions (grams/hour)

Pollutant Name: Methane Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
56	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2015 -- All model years in the range 1971 to 2015 selected
Season : Annual
Area : Mono

****

Year: 2015 -- Model Years 1971 to 2015 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 7: Estimated Travel Fractions

Pollutant Name: Temperature: ALL Relative Humidity: ALL

	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
%VMT	0.193	0.516	0.135	0.143	0.000	0.013	1.000
%TRIP	0.174	0.483	0.231	0.094	0.000	0.018	1.000
%VEH	0.193	0.542	0.137	0.066	0.000	0.062	1.000

Title : Mono County Subarea Annual CYrs 2009 and 2015 Default Title
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/02/15 11:39:10
Scen Year: 2015 -- All model years in the range 1971 to 2015 selected
Season : Annual
Area : Mono

****

Year: 2015 -- Model Years 1971 to 2015 Inclusive -- Annual
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Mono County Average

Table 8: Evaporative Running Loss Emissions (grams/minute)

Pollutant Name: Methane Temperature: 56F Relative

Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000
55	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000	0.000	0.000	0.000