FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT 627

John Wayne Airport
General Aviation Improvement Program

Responses to Comments
Volume 2B—Health Risk Assessment Appendices

SCH No. 2017031072

COUNTY OF ORANGE
John Wayne Airport
3160 Airway Avenue
Costa Mesa, California 92626
Contact: Lea Choum

April 2019

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General Aviation Improvement Program
(IP#16-432)
SCH No. 2017031072

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Prepared for:

COUNTY OF ORANGE
John Wayne Airport
3160 Airway Avenue
Costa Mesa, California 92626

Contact: Lea Choum

Prepared by:

Psomas
Landrum & Brown
Austin Transportation Consulting
Ramboll

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Table A-1. Emissions from Aircraft (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

EXISTING (2016) GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Business Jets	01LA1	Startup	-	-	-
Business Jets	01LA1	Climb Taxi	-	-	-
Business Jets	01LA1	Climb Ground	-	-	-
Business Jets	01LA1	Climb Below 1000	-	-	-
Business Jets	01LA1	Climb Below Mixing Height	-	-	-
Business Jets	01LA1	Climb Below 10000	-	-	-
Business Jets	01LA1	Above 10000	-	-	-
Business Jets	01LA1	Descend Below 10000	0.268	0.013	0.038
Business Jets	01LA1	Descend Below Mixing Height	0.213	0.006	0.031
Business Jets	01LA1	Descend Below 1000	0.152	0.004	0.022
Business Jets	01LA1	Descend Ground	0.126	0.002	0.014
Business Jets	01LA1	Descend Taxi	0.123	0.001	0.013
Business Jets	01LA1	Full Flight	0.268	0.013	0.038
Business Jets	01LA2	Startup	-	-	-
Business Jets	01LA2	Climb Taxi	-	-	-
Business Jets	01LA2	Climb Ground	-	-	-
Business Jets	01LA2	Climb Below 1000	-	-	-
Business Jets	01LA2	Climb Below Mixing Height	-	-	-
Business Jets	01LA2	Climb Below 10000	-	-	-
Business Jets	01LA2	Above 10000	-	-	-
Business Jets	01LA2	Descend Below 10000	0.089	0.004	0.013
Business Jets	01LA2	Descend Below Mixing Height	0.071	0.002	0.010
Business Jets	01LA2	Descend Below 1000	0.051	0.001	0.007
Business Jets	01LA2	Descend Ground	0.042	0.001	0.005
Business Jets	01LA2	Descend Taxi	0.041	0.000	0.004
Business Jets	01LA2	Full Flight	0.089	0.004	0.013
Business Jets	01LD1	Startup	0.110	-	-
Business Jets	01LD1	Climb Taxi	0.382	0.004	0.037
Business Jets	01LD1	Climb Ground	0.497	0.007	0.048
Business Jets	01LD1	Climb Below 1000	0.500	0.009	0.055
Business Jets	01LD1	Climb Below Mixing Height	0.509	0.013	0.077
Business Jets	01LD1	Climb Below 10000	0.534	0.064	0.136
Business Jets	01LD1	Above 10000	0.000	0.000	0.000
Business Jets	01LD1	Descend Below 10000	-	-	-
Business Jets	01LD1	Descend Below Mixing Height	-	-	-
Business Jets	01LD1	Descend Below 1000	-	-	-
Business Jets	01LD1	Descend Ground	-	-	-
Business Jets	01LD1	Descend Taxi	-	-	-
Business Jets	01LD1	Full Flight	0.534	0.064	0.136
Business Jets	19RA1	Startup	-	-	-
Business Jets	19RA1	Climb Taxi	-	-	-
Business Jets	19RA1	Climb Ground	-	-	-
Business Jets	19RA1	Climb Below 1000	-	-	-
Business Jets	19RA1	Climb Below Mixing Height	-	-	-
Business Jets	19RA1	Climb Below 10000	-	-	-
Business Jets	19RA1	Above 10000	-	-	-
Business Jets	19RA1	Descend Below 10000	0.817	0.039	0.119
Business Jets	19RA1	Descend Below Mixing Height	0.652	0.017	0.096
Business Jets	19RA1	Descend Below 1000	0.467	0.011	0.067
Business Jets	19RA1	Descend Ground	0.395	0.005	0.043
Business Jets	19RA1	Descend Taxi	0.384	0.004	0.039
Business Jets	19RA1	Full Flight	0.817	0.039	0.119
Business Jets	19RA2	Startup	-	-	-
Business Jets	19RA2	Climb Taxi	-	-	-
Business Jets	19RA2	Climb Ground	-	-	-
Business Jets	19RA2	Climb Below 1000	-	-	-
Business Jets	19RA2	Climb Below Mixing Height	-	-	-
Business Jets	19RA2	Climb Below 10000	-	-	-

Table A-1. Emissions from Aircraft (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

EXISTING (2016) GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Business Jets	19RA2	Above 10000	-	-	-
Business Jets	19RA2	Descend Below 10000	1.090	0.052	0.159
Business Jets	19RA2	Descend Below Mixing Height	0.870	0.023	0.128
Business Jets	19RA2	Descend Below 1000	0.622	0.014	0.089
Business Jets	19RA2	Descend Ground	0.527	0.007	0.058
Business Jets	19RA2	Descend Taxi	0.513	0.006	0.052
Business Jets	19RA2	Full Flight	1.090	0.052	0.159
Business Jets	19RA3	Startup	-	-	-
Business Jets	19RA3	Climb Taxi	-	-	-
Business Jets	19RA3	Climb Ground	-	-	-
Business Jets	19RA3	Climb Below 1000	-	-	-
Business Jets	19RA3	Climb Below Mixing Height	-	-	-
Business Jets	19RA3	Climb Below 10000	-	-	-
Business Jets	19RA3	Above 10000	-	-	-
Business Jets	19RA3	Descend Below 10000	0.817	0.039	0.119
Business Jets	19RA3	Descend Below Mixing Height	0.652	0.017	0.096
Business Jets	19RA3	Descend Below 1000	0.467	0.011	0.067
Business Jets	19RA3	Descend Ground	0.395	0.005	0.043
Business Jets	19RA3	Descend Taxi	0.384	0.004	0.039
Business Jets	19RA3	Full Flight	0.817	0.039	0.119
Business Jets	19RA5	Startup	-	-	-
Business Jets	19RA5	Climb Taxi	-	-	-
Business Jets	19RA5	Climb Ground	-	-	-
Business Jets	19RA5	Climb Below 1000	-	-	-
Business Jets	19RA5	Climb Below Mixing Height	-	-	-
Business Jets	19RA5	Climb Below 10000	-	-	-
Business Jets	19RA5	Above 10000	-	-	-
Business Jets	19RA5	Descend Below 10000	9.538	0.452	1.384
Business Jets	19RA5	Descend Below Mixing Height	7.611	0.201	1.111
Business Jets	19RA5	Descend Below 1000	5.446	0.125	0.778
Business Jets	19RA5	Descend Ground	4.614	0.062	0.506
Business Jets	19RA5	Descend Taxi	4.485	0.050	0.459
Business Jets	19RA5	Full Flight	9.538	0.452	1.384
Business Jets	19RA6	Startup	-	-	-
Business Jets	19RA6	Climb Taxi	-	-	-
Business Jets	19RA6	Climb Ground	-	-	-
Business Jets	19RA6	Climb Below 1000	-	-	-
Business Jets	19RA6	Climb Below Mixing Height	-	-	-
Business Jets	19RA6	Climb Below 10000	-	-	-
Business Jets	19RA6	Above 10000	-	-	-
Business Jets	19RA6	Descend Below 10000	1.363	0.065	0.198
Business Jets	19RA6	Descend Below Mixing Height	1.087	0.029	0.159
Business Jets	19RA6	Descend Below 1000	0.778	0.018	0.111
Business Jets	19RA6	Descend Ground	0.659	0.009	0.072
Business Jets	19RA6	Descend Taxi	0.641	0.007	0.066
Business Jets	19RA6	Full Flight	1.363	0.065	0.198
Business Jets	19RD2	Startup	3.141	-	-
Business Jets	19RD2	Climb Taxi	10.640	0.119	1.092
Business Jets	19RD2	Climb Ground	13.923	0.213	1.455
Business Jets	19RD2	Climb Below 1000	14.015	0.270	1.692
Business Jets	19RD2	Climb Below Mixing Height	14.244	0.390	2.319
Business Jets	19RD2	Climb Below 10000	14.966	1.962	4.140
Business Jets	19RD2	Above 10000	-	-	-
Business Jets	19RD2	Descend Below 10000	-	-	-
Business Jets	19RD2	Descend Below Mixing Height	-	-	-
Business Jets	19RD2	Descend Below 1000	-	-	-
Business Jets	19RD2	Descend Ground	-	-	-
Business Jets	19RD2	Descend Taxi	-	-	-

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AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Business Jets	19RD2	Full Flight	14.966	1.962	4.140
Helicopter	H1A1	Startup	-	-	-
Helicopter	H1A1	Climb Taxi	-	-	-
Helicopter	H1A1	Climb Ground	-	-	-
Helicopter	H1A1	Climb Below 1000	-	-	-
Helicopter	H1A1	Climb Below Mixing Height	-	-	-
Helicopter	H1A1	Climb Below 10000	-	-	-
Helicopter	H1A1	Above 10000	-	-	-
Helicopter	H1A1	Descend Below 10000	0.094	-	0.009
Helicopter	H1A1	Descend Below Mixing Height	0.094	-	0.009
Helicopter	H1A1	Descend Below 1000	0.094	-	0.009
Helicopter	H1A1	Descend Ground	0.008	-	0.001
Helicopter	H1A1	Descend Taxi	-	-	-
Helicopter	H1A1	Full Flight	0.094	-	0.009
Helicopter	H1A2	Startup	-	-	-
Helicopter	H1A2	Climb Taxi	-	-	-
Helicopter	H1A2	Climb Ground	-	-	-
Helicopter	H1A2	Climb Below 1000	-	-	-
Helicopter	H1A2	Climb Below Mixing Height	-	-	-
Helicopter	H1A2	Climb Below 10000	-	-	-
Helicopter	H1A2	Above 10000	-	-	-
Helicopter	H1A2	Descend Below 10000	0.093	-	0.009
Helicopter	H1A2	Descend Below Mixing Height	0.093	-	0.009
Helicopter	H1A2	Descend Below 1000	0.093	-	0.009
Helicopter	H1A2	Descend Ground	0.008	-	0.001
Helicopter	H1A2	Descend Taxi	-	-	-
Helicopter	H1A2	Full Flight	0.093	-	0.009
Helicopter	H1D1	Startup	-	-	-
Helicopter	H1D1	Climb Taxi	-	-	-
Helicopter	H1D1	Climb Ground	0.008	-	0.001
Helicopter	H1D1	Climb Below 1000	0.087	-	0.008
Helicopter	H1D1	Climb Below Mixing Height	0.087	-	0.008
Helicopter	H1D1	Climb Below 10000	0.087	-	0.008
Helicopter	H1D1	Above 10000	-	-	-
Helicopter	H1D1	Descend Below 10000	-	-	-
Helicopter	H1D1	Descend Below Mixing Height	-	-	-
Helicopter	H1D1	Descend Below 1000	-	-	-
Helicopter	H1D1	Descend Ground	-	-	-
Helicopter	H1D1	Descend Taxi	-	-	-
Helicopter	H1D1	Full Flight	0.087	-	0.008
Helicopter	H1D2	Startup	-	-	-
Helicopter	H1D2	Climb Taxi	-	-	-
Helicopter	H1D2	Climb Ground	0.008	-	0.001
Helicopter	H1D2	Climb Below 1000	0.088	-	0.008
Helicopter	H1D2	Climb Below Mixing Height	0.088	-	0.008
Helicopter	H1D2	Climb Below 10000	0.088	-	0.008
Helicopter	H1D2	Above 10000	-	-	-
Helicopter	H1D2	Descend Below 10000	-	-	-
Helicopter	H1D2	Descend Below Mixing Height	-	-	-
Helicopter	H1D2	Descend Below 1000	-	-	-
Helicopter	H1D2	Descend Ground	-	-	-
Helicopter	H1D2	Descend Taxi	-	-	-
Helicopter	H1D2	Full Flight	0.088	-	0.008
Helicopter	H2A1	Startup	-	-	-
Helicopter	H2A1	Climb Taxi	-	-	-
Helicopter	H2A1	Climb Ground	-	-	-
Helicopter	H2A1	Climb Below 1000	-	-	-
Helicopter	H2A1	Climb Below Mixing Height	-	-	-

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AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Helicopter	H2A1	Climb Below 10000	-	-	-
Helicopter	H2A1	Above 10000	-	-	-
Helicopter	H2A1	Descend Below 10000	0.093	-	0.009
Helicopter	H2A1	Descend Below Mixing Height	0.093	-	0.009
Helicopter	H2A1	Descend Below 1000	0.093	-	0.009
Helicopter	H2A1	Descend Ground	0.008	-	0.001
Helicopter	H2A1	Descend Taxi	-	-	-
Helicopter	H2A1	Full Flight	0.093	-	0.009
Helicopter	H2A2	Startup	-	-	-
Helicopter	H2A2	Climb Taxi	-	-	-
Helicopter	H2A2	Climb Ground	-	-	-
Helicopter	H2A2	Climb Below 1000	-	-	-
Helicopter	H2A2	Climb Below Mixing Height	-	-	-
Helicopter	H2A2	Climb Below 10000	-	-	-
Helicopter	H2A2	Above 10000	-	-	-
Helicopter	H2A2	Descend Below 10000	0.094	-	0.009
Helicopter	H2A2	Descend Below Mixing Height	0.094	-	0.009
Helicopter	H2A2	Descend Below 1000	0.094	-	0.009
Helicopter	H2A2	Descend Ground	0.008	-	0.001
Helicopter	H2A2	Descend Taxi	-	-	-
Helicopter	H2A2	Full Flight	0.094	-	0.009
Helicopter	H2D1	Startup	-	-	-
Helicopter	H2D1	Climb Taxi	-	-	-
Helicopter	H2D1	Climb Ground	0.008	-	0.001
Helicopter	H2D1	Climb Below 1000	0.088	-	0.008
Helicopter	H2D1	Climb Below Mixing Height	0.088	-	0.008
Helicopter	H2D1	Climb Below 10000	0.088	-	0.008
Helicopter	H2D1	Above 10000	-	-	-
Helicopter	H2D1	Descend Below 10000	-	-	-
Helicopter	H2D1	Descend Below Mixing Height	-	-	-
Helicopter	H2D1	Descend Below 1000	-	-	-
Helicopter	H2D1	Descend Ground	-	-	-
Helicopter	H2D1	Descend Taxi	-	-	-
Helicopter	H2D1	Full Flight	0.088	-	0.008
Helicopter	H2D2	Startup	-	-	-
Helicopter	H2D2	Climb Taxi	-	-	-
Helicopter	H2D2	Climb Ground	0.008	-	0.001
Helicopter	H2D2	Climb Below 1000	0.087	-	0.008
Helicopter	H2D2	Climb Below Mixing Height	0.087	-	0.008
Helicopter	H2D2	Climb Below 10000	0.087	-	0.008
Helicopter	H2D2	Above 10000	-	-	-
Helicopter	H2D2	Descend Below 10000	-	-	-
Helicopter	H2D2	Descend Below Mixing Height	-	-	-
Helicopter	H2D2	Descend Below 1000	-	-	-
Helicopter	H2D2	Descend Ground	-	-	-
Helicopter	H2D2	Descend Taxi	-	-	-
Helicopter	H2D2	Full Flight	0.087	-	0.008
Helicopter	H4A1	Startup	-	-	-
Helicopter	H4A1	Climb Taxi	-	-	-
Helicopter	H4A1	Climb Ground	-	-	-
Helicopter	H4A1	Climb Below 1000	-	-	-
Helicopter	H4A1	Climb Below Mixing Height	-	-	-
Helicopter	H4A1	Climb Below 10000	-	-	-
Helicopter	H4A1	Above 10000	-	-	-
Helicopter	H4A1	Descend Below 10000	0.001	-	0.005
Helicopter	H4A1	Descend Below Mixing Height	0.001	-	0.005
Helicopter	H4A1	Descend Below 1000	0.001	-	0.005
Helicopter	H4A1	Descend Ground	0.000	-	0.000
Helicopter	H4A1	Descend Taxi	-	-	-

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EXISTING (2016) GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Helicopter	H4A1	Full Flight	0.001	-	0.005
Helicopter	H4A2	Startup	-	-	-
Helicopter	H4A2	Climb Taxi	-	-	-
Helicopter	H4A2	Climb Ground	-	-	-
Helicopter	H4A2	Climb Below 1000	-	-	-
Helicopter	H4A2	Climb Below Mixing Height	-	-	-
Helicopter	H4A2	Climb Below 10000	-	-	-
Helicopter	H4A2	Above 10000	-	-	-
Helicopter	H4A2	Descend Below 10000	0.001	-	0.005
Helicopter	H4A2	Descend Below Mixing Height	0.001	-	0.005
Helicopter	H4A2	Descend Below 1000	0.001	-	0.005
Helicopter	H4A2	Descend Ground	0.000	-	0.000
Helicopter	H4A2	Descend Taxi	-	-	-
Helicopter	H4A2	Full Flight	0.001	-	0.005
Helicopter	H4A3	Startup	-	-	-
Helicopter	H4A3	Climb Taxi	-	-	-
Helicopter	H4A3	Climb Ground	-	-	-
Helicopter	H4A3	Climb Below 1000	-	-	-
Helicopter	H4A3	Climb Below Mixing Height	-	-	-
Helicopter	H4A3	Climb Below 10000	-	-	-
Helicopter	H4A3	Above 10000	-	-	-
Helicopter	H4A3	Descend Below 10000	0.001	-	0.005
Helicopter	H4A3	Descend Below Mixing Height	0.001	-	0.005
Helicopter	H4A3	Descend Below 1000	0.001	-	0.005
Helicopter	H4A3	Descend Ground	0.000	-	0.000
Helicopter	H4A3	Descend Taxi	-	-	-
Helicopter	H4A3	Full Flight	0.001	-	0.005
Helicopter	H4A4	Startup	-	-	-
Helicopter	H4A4	Climb Taxi	-	-	-
Helicopter	H4A4	Climb Ground	-	-	-
Helicopter	H4A4	Climb Below 1000	-	-	-
Helicopter	H4A4	Climb Below Mixing Height	-	-	-
Helicopter	H4A4	Climb Below 10000	-	-	-
Helicopter	H4A4	Above 10000	-	-	-
Helicopter	H4A4	Descend Below 10000	0.001	-	0.005
Helicopter	H4A4	Descend Below Mixing Height	0.001	-	0.005
Helicopter	H4A4	Descend Below 1000	0.001	-	0.005
Helicopter	H4A4	Descend Ground	0.000	-	0.000
Helicopter	H4A4	Descend Taxi	-	-	-
Helicopter	H4A4	Full Flight	0.001	-	0.005
Helicopter	H4D1	Startup	-	-	-
Helicopter	H4D1	Climb Taxi	-	-	-
Helicopter	H4D1	Climb Ground	0.000	-	0.001
Helicopter	H4D1	Climb Below 1000	0.001	-	0.009
Helicopter	H4D1	Climb Below Mixing Height	0.001	-	0.009
Helicopter	H4D1	Climb Below 10000	0.001	-	0.009
Helicopter	H4D1	Above 10000	-	-	-
Helicopter	H4D1	Descend Below 10000	-	-	-
Helicopter	H4D1	Descend Below Mixing Height	-	-	-
Helicopter	H4D1	Descend Below 1000	-	-	-
Helicopter	H4D1	Descend Ground	-	-	-
Helicopter	H4D1	Descend Taxi	-	-	-
Helicopter	H4D1	Full Flight	0.001	-	0.009
Helicopter	H4D2	Startup	-	-	-
Helicopter	H4D2	Climb Taxi	-	-	-
Helicopter	H4D2	Climb Ground	0.000	-	0.001
Helicopter	H4D2	Climb Below 1000	0.001	-	0.009
Helicopter	H4D2	Climb Below Mixing Height	0.001	-	0.009

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AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Helicopter	H4D2	Climb Below 10000	0.001	-	0.009
Helicopter	H4D2	Above 10000	-	-	-
Helicopter	H4D2	Descend Below 10000	-	-	-
Helicopter	H4D2	Descend Below Mixing Height	-	-	-
Helicopter	H4D2	Descend Below 1000	-	-	-
Helicopter	H4D2	Descend Ground	-	-	-
Helicopter	H4D2	Descend Taxi	-	-	-
Helicopter	H4D2	Full Flight	0.001	-	0.009
GA Prop	01LA1	Startup	-	-	-
GA Prop	01LA1	Climb Taxi	-	-	-
GA Prop	01LA1	Climb Ground	-	-	-
GA Prop	01LA1	Climb Below 1000	-	-	-
GA Prop	01LA1	Climb Below Mixing Height	-	-	-
GA Prop	01LA1	Climb Below 10000	-	-	-
GA Prop	01LA1	Above 10000	-	-	-
GA Prop	01LA1	Descend Below 10000	0.022	0.001	0.002
GA Prop	01LA1	Descend Below Mixing Height	0.015	0.001	0.001
GA Prop	01LA1	Descend Below 1000	0.008	0.000	0.001
GA Prop	01LA1	Descend Ground	0.004	0.000	0.000
GA Prop	01LA1	Descend Taxi	0.004	0.000	0.000
GA Prop	01LA1	Full Flight	0.022	0.001	0.002
GA Prop	01LA2	Startup	-	-	-
GA Prop	01LA2	Climb Taxi	-	-	-
GA Prop	01LA2	Climb Ground	-	-	-
GA Prop	01LA2	Climb Below 1000	-	-	-
GA Prop	01LA2	Climb Below Mixing Height	-	-	-
GA Prop	01LA2	Climb Below 10000	-	-	-
GA Prop	01LA2	Above 10000	-	-	-
GA Prop	01LA2	Descend Below 10000	0.007	0.000	0.001
GA Prop	01LA2	Descend Below Mixing Height	0.005	0.000	0.000
GA Prop	01LA2	Descend Below 1000	0.003	0.000	0.000
GA Prop	01LA2	Descend Ground	0.001	0.000	0.000
GA Prop	01LA2	Descend Taxi	0.001	0.000	0.000
GA Prop	01LA2	Full Flight	0.007	0.000	0.001
GA Prop	01LD1	Startup	-	-	-
GA Prop	01LD1	Climb Taxi	0.032	0.000	0.001
GA Prop	01LD1	Climb Ground	0.034	0.000	0.001
GA Prop	01LD1	Climb Below 1000	0.040	0.001	0.001
GA Prop	01LD1	Climb Below Mixing Height	0.053	0.002	0.003
GA Prop	01LD1	Climb Below 10000	0.111	0.008	0.009
GA Prop	01LD1	Above 10000	-	-	-
GA Prop	01LD1	Descend Below 10000	-	-	-
GA Prop	01LD1	Descend Below Mixing Height	-	-	-
GA Prop	01LD1	Descend Below 1000	-	-	-
GA Prop	01LD1	Descend Ground	-	-	-
GA Prop	01LD1	Descend Taxi	-	-	-
GA Prop	01LD1	Full Flight	0.111	0.008	0.009
GA Prop	01RA1	Startup	-	-	-
GA Prop	01RA1	Climb Taxi	-	-	-
GA Prop	01RA1	Climb Ground	-	-	-
GA Prop	01RA1	Climb Below 1000	-	-	-
GA Prop	01RA1	Climb Below Mixing Height	-	-	-
GA Prop	01RA1	Climb Below 10000	-	-	-
GA Prop	01RA1	Above 10000	-	-	-
GA Prop	01RA1	Descend Below 10000	0.034	0.002	0.003
GA Prop	01RA1	Descend Below Mixing Height	0.022	0.001	0.002
GA Prop	01RA1	Descend Below 1000	0.012	0.000	0.001
GA Prop	01RA1	Descend Ground	0.006	0.000	0.000

Table A-1. Emissions from Aircraft (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

EXISTING (2016) GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
GA Prop	01RA1	Descend Taxi	0.006	0.000	0.000
GA Prop	01RA1	Full Flight	0.034	0.002	0.003
GA Prop	01RD1	Startup	-	-	-
GA Prop	01RD1	Climb Taxi	0.007	0.000	0.000
GA Prop	01RD1	Climb Ground	0.007	0.000	0.000
GA Prop	01RD1	Climb Below 1000	0.009	0.000	0.000
GA Prop	01RD1	Climb Below Mixing Height	0.013	0.001	0.001
GA Prop	01RD1	Climb Below 10000	0.028	0.002	0.002
GA Prop	01RD1	Above 10000	-	-	-
GA Prop	01RD1	Descend Below 10000	-	-	-
GA Prop	01RD1	Descend Below Mixing Height	-	-	-
GA Prop	01RD1	Descend Below 1000	-	-	-
GA Prop	01RD1	Descend Ground	-	-	-
GA Prop	01RD1	Descend Taxi	-	-	-
GA Prop	01RD1	Full Flight	0.028	0.002	0.002
GA Prop	19LA1	Startup	-	-	-
GA Prop	19LA1	Climb Taxi	-	-	-
GA Prop	19LA1	Climb Ground	-	-	-
GA Prop	19LA1	Climb Below 1000	-	-	-
GA Prop	19LA1	Climb Below Mixing Height	-	-	-
GA Prop	19LA1	Climb Below 10000	-	-	-
GA Prop	19LA1	Above 10000	-	-	-
GA Prop	19LA1	Descend Below 10000	1.488	0.100	0.138
GA Prop	19LA1	Descend Below Mixing Height	0.992	0.051	0.084
GA Prop	19LA1	Descend Below 1000	0.553	0.020	0.035
GA Prop	19LA1	Descend Ground	0.314	0.003	0.007
GA Prop	19LA1	Descend Taxi	0.303	0.002	0.006
GA Prop	19LA1	Full Flight	1.488	0.100	0.138
GA Prop	19LD1	Startup	-	-	-
GA Prop	19LD1	Climb Taxi	0.252	0.002	0.005
GA Prop	19LD1	Climb Ground	0.265	0.004	0.007
GA Prop	19LD1	Climb Below 1000	0.321	0.011	0.013
GA Prop	19LD1	Climb Below Mixing Height	0.459	0.023	0.029
GA Prop	19LD1	Climb Below 10000	0.994	0.075	0.088
GA Prop	19LD1	Above 10000	-	-	-
GA Prop	19LD1	Descend Below 10000	-	-	-
GA Prop	19LD1	Descend Below Mixing Height	-	-	-
GA Prop	19LD1	Descend Below 1000	-	-	-
GA Prop	19LD1	Descend Ground	-	-	-
GA Prop	19LD1	Descend Taxi	-	-	-
GA Prop	19LD1	Full Flight	0.994	0.075	0.088
GA Prop	19LD2	Startup	-	-	-
GA Prop	19LD2	Climb Taxi	0.252	0.002	0.005
GA Prop	19LD2	Climb Ground	0.265	0.004	0.007
GA Prop	19LD2	Climb Below 1000	0.322	0.011	0.013
GA Prop	19LD2	Climb Below Mixing Height	0.460	0.023	0.029
GA Prop	19LD2	Climb Below 10000	0.994	0.075	0.088
GA Prop	19LD2	Above 10000	-	-	-
GA Prop	19LD2	Descend Below 10000	-	-	-
GA Prop	19LD2	Descend Below Mixing Height	-	-	-
GA Prop	19LD2	Descend Below 1000	-	-	-
GA Prop	19LD2	Descend Ground	-	-	-
GA Prop	19LD2	Descend Taxi	-	-	-
GA Prop	19LD2	Full Flight	0.994	0.075	0.088
GA Prop	19RA1	Startup	-	-	-
GA Prop	19RA1	Climb Taxi	-	-	-
GA Prop	19RA1	Climb Ground	-	-	-
GA Prop	19RA1	Climb Below 1000	-	-	-

Table A-1. Emissions from Aircraft (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

EXISTING (2016) GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
GA Prop	19RA1	Climb Below Mixing Height	-	-	-
GA Prop	19RA1	Climb Below 10000	-	-	-
GA Prop	19RA1	Above 10000	-	-	-
GA Prop	19RA1	Descend Below 10000	0.106	0.007	0.009
GA Prop	19RA1	Descend Below Mixing Height	0.070	0.003	0.006
GA Prop	19RA1	Descend Below 1000	0.039	0.001	0.002
GA Prop	19RA1	Descend Ground	0.022	0.000	0.001
GA Prop	19RA1	Descend Taxi	0.021	0.000	0.000
GA Prop	19RA1	Full Flight	0.106	0.007	0.009
GA Prop	19RA2	Startup	-	-	-
GA Prop	19RA2	Climb Taxi	-	-	-
GA Prop	19RA2	Climb Ground	-	-	-
GA Prop	19RA2	Climb Below 1000	-	-	-
GA Prop	19RA2	Climb Below Mixing Height	-	-	-
GA Prop	19RA2	Climb Below 10000	-	-	-
GA Prop	19RA2	Above 10000	-	-	-
GA Prop	19RA2	Descend Below 10000	0.142	0.009	0.012
GA Prop	19RA2	Descend Below Mixing Height	0.094	0.005	0.008
GA Prop	19RA2	Descend Below 1000	0.052	0.002	0.003
GA Prop	19RA2	Descend Ground	0.029	0.000	0.001
GA Prop	19RA2	Descend Taxi	0.028	0.000	0.001
GA Prop	19RA2	Full Flight	0.142	0.009	0.012
GA Prop	19RA3	Startup	-	-	-
GA Prop	19RA3	Climb Taxi	-	-	-
GA Prop	19RA3	Climb Ground	-	-	-
GA Prop	19RA3	Climb Below 1000	-	-	-
GA Prop	19RA3	Climb Below Mixing Height	-	-	-
GA Prop	19RA3	Climb Below 10000	-	-	-
GA Prop	19RA3	Above 10000	-	-	-
GA Prop	19RA3	Descend Below 10000	0.106	0.007	0.009
GA Prop	19RA3	Descend Below Mixing Height	0.070	0.003	0.006
GA Prop	19RA3	Descend Below 1000	0.039	0.001	0.002
GA Prop	19RA3	Descend Ground	0.022	0.000	0.001
GA Prop	19RA3	Descend Taxi	0.021	0.000	0.000
GA Prop	19RA3	Full Flight	0.106	0.007	0.009
GA Prop	19RA5	Startup	-	-	-
GA Prop	19RA5	Climb Taxi	-	-	-
GA Prop	19RA5	Climb Ground	-	-	-
GA Prop	19RA5	Climb Below 1000	-	-	-
GA Prop	19RA5	Climb Below Mixing Height	-	-	-
GA Prop	19RA5	Climb Below 10000	-	-	-
GA Prop	19RA5	Above 10000	-	-	-
GA Prop	19RA5	Descend Below 10000	1.240	0.079	0.108
GA Prop	19RA5	Descend Below Mixing Height	0.821	0.040	0.066
GA Prop	19RA5	Descend Below 1000	0.456	0.016	0.028
GA Prop	19RA5	Descend Ground	0.257	0.003	0.006
GA Prop	19RA5	Descend Taxi	0.246	0.002	0.005
GA Prop	19RA5	Full Flight	1.240	0.079	0.108
GA Prop	19RA6	Startup	-	-	-
GA Prop	19RA6	Climb Taxi	-	-	-
GA Prop	19RA6	Climb Ground	-	-	-
GA Prop	19RA6	Climb Below 1000	-	-	-
GA Prop	19RA6	Climb Below Mixing Height	-	-	-
GA Prop	19RA6	Climb Below 10000	-	-	-
GA Prop	19RA6	Above 10000	-	-	-
GA Prop	19RA6	Descend Below 10000	0.177	0.011	0.015
GA Prop	19RA6	Descend Below Mixing Height	0.117	0.006	0.009

Table A-1. Emissions from Aircraft (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

EXISTING (2016) GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
GA Prop	19RA6	Descend Below 1000	0.065	0.002	0.004
GA Prop	19RA6	Descend Ground	0.037	0.000	0.001
GA Prop	19RA6	Descend Taxi	0.035	0.000	0.001
GA Prop	19RA6	Full Flight	0.177	0.011	0.015
GA Prop	19RD3	Startup	-	-	-
GA Prop	19RD3	Climb Taxi	0.574	0.005	0.012
GA Prop	19RD3	Climb Ground	0.606	0.009	0.016
GA Prop	19RD3	Climb Below 1000	0.729	0.025	0.030
GA Prop	19RD3	Climb Below Mixing Height	1.028	0.050	0.064
GA Prop	19RD3	Climb Below 10000	2.310	0.174	0.202
GA Prop	19RD3	Above 10000	-	-	-
GA Prop	19RD3	Descend Below 10000	-	-	-
GA Prop	19RD3	Descend Below Mixing Height	-	-	-
GA Prop	19RD3	Descend Below 1000	-	-	-
GA Prop	19RD3	Descend Ground	-	-	-
GA Prop	19RD3	Descend Taxi	-	-	-
GA Prop	19RD3	Full Flight	2.310	0.174	0.202
GA Prop	19LT1	Startup	-	-	-
GA Prop	19LT1	Climb Taxi	-	-	-
GA Prop	19LT1	Climb Ground	0.009	0.001	0.001
GA Prop	19LT1	Climb Below 1000	0.661	0.076	0.084
GA Prop	19LT1	Climb Below Mixing Height	0.661	0.076	0.084
GA Prop	19LT1	Climb Below 10000	0.661	0.076	0.084
GA Prop	19LT1	Above 10000	-	-	-
GA Prop	19LT1	Descend Below 10000	0.707	0.033	0.060
GA Prop	19LT1	Descend Below Mixing Height	0.707	0.033	0.060
GA Prop	19LT1	Descend Below 1000	0.707	0.033	0.060
GA Prop	19LT1	Descend Ground	-	-	-
GA Prop	19LT1	Descend Taxi	0.332	0.003	0.012
GA Prop	19LT1	Full Flight	1.367	0.109	0.145
GA Prop	01RT1	Startup	-	-	-
GA Prop	01RT1	Climb Taxi	-	-	-
GA Prop	01RT1	Climb Ground	0.000	0.000	0.000
GA Prop	01RT1	Climb Below 1000	0.013	0.001	0.002
GA Prop	01RT1	Climb Below Mixing Height	0.013	0.001	0.002
GA Prop	01RT1	Climb Below 10000	0.013	0.001	0.002
GA Prop	01RT1	Above 10000	-	-	-
GA Prop	01RT1	Descend Below 10000	0.014	0.001	0.001
GA Prop	01RT1	Descend Below Mixing Height	0.014	0.001	0.001
GA Prop	01RT1	Descend Below 1000	0.014	0.001	0.001
GA Prop	01RT1	Descend Ground	-	-	-
GA Prop	01RT1	Descend Taxi	0.007	0.000	0.000
GA Prop	01RT1	Full Flight	0.027	0.002	0.003
Commuter Prop	01LA1	Startup	-	-	-
Commuter Prop	01LA1	Climb Taxi	-	-	-
Commuter Prop	01LA1	Climb Ground	-	-	-
Commuter Prop	01LA1	Climb Below 1000	-	-	-
Commuter Prop	01LA1	Climb Below Mixing Height	-	-	-
Commuter Prop	01LA1	Climb Below 10000	-	-	-
Commuter Prop	01LA1	Above 10000	-	-	-
Commuter Prop	01LA1	Descend Below 10000	0.010	0.003	0.007
Commuter Prop	01LA1	Descend Below Mixing Height	0.010	0.001	0.004
Commuter Prop	01LA1	Descend Below 1000	0.010	0.000	0.002
Commuter Prop	01LA1	Descend Ground	0.010	0.000	0.001
Commuter Prop	01LA1	Descend Taxi	0.010	0.000	0.001
Commuter Prop	01LA1	Full Flight	0.010	0.003	0.007
Commuter Prop	01LA2	Startup	-	-	-
Commuter Prop	01LA2	Climb Taxi	-	-	-

Table A-1. Emissions from Aircraft (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

EXISTING (2016) GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Commuter Prop	01LA2	Climb Ground	-	-	-
Commuter Prop	01LA2	Climb Below 1000	-	-	-
Commuter Prop	01LA2	Climb Below Mixing Height	-	-	-
Commuter Prop	01LA2	Climb Below 10000	-	-	-
Commuter Prop	01LA2	Above 10000	-	-	-
Commuter Prop	01LA2	Descend Below 10000	0.003	0.001	0.002
Commuter Prop	01LA2	Descend Below Mixing Height	0.003	0.000	0.001
Commuter Prop	01LA2	Descend Below 1000	0.003	0.000	0.001
Commuter Prop	01LA2	Descend Ground	0.003	0.000	0.000
Commuter Prop	01LA2	Descend Taxi	0.003	0.000	0.000
Commuter Prop	01LA2	Full Flight	0.003	0.001	0.002
Commuter Prop	01LD1	Startup	-	-	-
Commuter Prop	01LD1	Climb Taxi	0.022	0.001	0.003
Commuter Prop	01LD1	Climb Ground	0.022	0.001	0.004
Commuter Prop	01LD1	Climb Below 1000	0.022	0.001	0.005
Commuter Prop	01LD1	Climb Below Mixing Height	0.022	0.002	0.009
Commuter Prop	01LD1	Climb Below 10000	0.022	0.011	0.020
Commuter Prop	01LD1	Above 10000	-	-	-
Commuter Prop	01LD1	Descend Below 10000	-	-	-
Commuter Prop	01LD1	Descend Below Mixing Height	-	-	-
Commuter Prop	01LD1	Descend Below 1000	-	-	-
Commuter Prop	01LD1	Descend Ground	-	-	-
Commuter Prop	01LD1	Descend Taxi	-	-	-
Commuter Prop	01LD1	Full Flight	0.022	0.011	0.020
Commuter Prop	01RA1	Startup	-	-	-
Commuter Prop	01RA1	Climb Taxi	-	-	-
Commuter Prop	01RA1	Climb Ground	-	-	-
Commuter Prop	01RA1	Climb Below 1000	-	-	-
Commuter Prop	01RA1	Climb Below Mixing Height	-	-	-
Commuter Prop	01RA1	Climb Below 10000	-	-	-
Commuter Prop	01RA1	Above 10000	-	-	-
Commuter Prop	01RA1	Descend Below 10000	0.000	0.000	0.001
Commuter Prop	01RA1	Descend Below Mixing Height	0.000	0.000	0.001
Commuter Prop	01RA1	Descend Below 1000	0.000	0.000	0.000
Commuter Prop	01RA1	Descend Ground	0.000	0.000	0.000
Commuter Prop	01RA1	Descend Taxi	0.000	0.000	0.000
Commuter Prop	01RA1	Full Flight	0.000	0.000	0.001
Commuter Prop	01RD1	Startup	-	-	-
Commuter Prop	01RD1	Climb Taxi	0.000	0.000	0.000
Commuter Prop	01RD1	Climb Ground	0.000	0.000	0.000
Commuter Prop	01RD1	Climb Below 1000	0.000	0.000	0.000
Commuter Prop	01RD1	Climb Below Mixing Height	0.000	0.000	0.000
Commuter Prop	01RD1	Climb Below 10000	0.000	0.000	0.001
Commuter Prop	01RD1	Above 10000	-	-	-
Commuter Prop	01RD1	Descend Below 10000	-	-	-
Commuter Prop	01RD1	Descend Below Mixing Height	-	-	-
Commuter Prop	01RD1	Descend Below 1000	-	-	-
Commuter Prop	01RD1	Descend Ground	-	-	-
Commuter Prop	01RD1	Descend Taxi	-	-	-
Commuter Prop	01RD1	Full Flight	0.000	0.000	0.001
Commuter Prop	19LA1	Startup	-	-	-
Commuter Prop	19LA1	Climb Taxi	-	-	-
Commuter Prop	19LA1	Climb Ground	-	-	-
Commuter Prop	19LA1	Climb Below 1000	-	-	-
Commuter Prop	19LA1	Climb Below Mixing Height	-	-	-
Commuter Prop	19LA1	Climb Below 10000	-	-	-
Commuter Prop	19LA1	Above 10000	-	-	-
Commuter Prop	19LA1	Descend Below 10000	0.003	0.004	0.010

Table A-1. Emissions from Aircraft (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

EXISTING (2016) GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Commuter Prop	19LA1	Descend Below Mixing Height	0.002	0.001	0.006
Commuter Prop	19LA1	Descend Below 1000	0.002	0.001	0.003
Commuter Prop	19LA1	Descend Ground	0.002	0.000	0.001
Commuter Prop	19LA1	Descend Taxi	0.002	0.000	0.001
Commuter Prop	19LA1	Full Flight	0.003	0.004	0.010
Commuter Prop	19LD1	Startup	-	-	-
Commuter Prop	19LD1	Climb Taxi	0.002	0.000	0.001
Commuter Prop	19LD1	Climb Ground	0.002	0.000	0.001
Commuter Prop	19LD1	Climb Below 1000	0.002	0.000	0.002
Commuter Prop	19LD1	Climb Below Mixing Height	0.002	0.001	0.003
Commuter Prop	19LD1	Climb Below 10000	0.002	0.004	0.007
Commuter Prop	19LD1	Above 10000	-	-	-
Commuter Prop	19LD1	Descend Below 10000	-	-	-
Commuter Prop	19LD1	Descend Below Mixing Height	-	-	-
Commuter Prop	19LD1	Descend Below 1000	-	-	-
Commuter Prop	19LD1	Descend Ground	-	-	-
Commuter Prop	19LD1	Descend Taxi	-	-	-
Commuter Prop	19LD1	Full Flight	0.002	0.004	0.007
Commuter Prop	19LD2	Startup	-	-	-
Commuter Prop	19LD2	Climb Taxi	0.002	0.000	0.001
Commuter Prop	19LD2	Climb Ground	0.002	0.000	0.001
Commuter Prop	19LD2	Climb Below 1000	0.002	0.000	0.002
Commuter Prop	19LD2	Climb Below Mixing Height	0.002	0.001	0.003
Commuter Prop	19LD2	Climb Below 10000	0.002	0.004	0.007
Commuter Prop	19LD2	Above 10000	-	-	-
Commuter Prop	19LD2	Descend Below 10000	-	-	-
Commuter Prop	19LD2	Descend Below Mixing Height	-	-	-
Commuter Prop	19LD2	Descend Below 1000	-	-	-
Commuter Prop	19LD2	Descend Ground	-	-	-
Commuter Prop	19LD2	Descend Taxi	-	-	-
Commuter Prop	19LD2	Full Flight	0.002	0.004	0.007
Commuter Prop	19RA1	Startup	-	-	-
Commuter Prop	19RA1	Climb Taxi	-	-	-
Commuter Prop	19RA1	Climb Ground	-	-	-
Commuter Prop	19RA1	Climb Below 1000	-	-	-
Commuter Prop	19RA1	Climb Below Mixing Height	-	-	-
Commuter Prop	19RA1	Climb Below 10000	-	-	-
Commuter Prop	19RA1	Above 10000	-	-	-
Commuter Prop	19RA1	Descend Below 10000	0.019	0.009	0.019
Commuter Prop	19RA1	Descend Below Mixing Height	0.019	0.003	0.013
Commuter Prop	19RA1	Descend Below 1000	0.018	0.001	0.006
Commuter Prop	19RA1	Descend Ground	0.018	0.000	0.002
Commuter Prop	19RA1	Descend Taxi	0.018	0.000	0.002
Commuter Prop	19RA1	Full Flight	0.019	0.009	0.019
Commuter Prop	19RA2	Startup	-	-	-
Commuter Prop	19RA2	Climb Taxi	-	-	-
Commuter Prop	19RA2	Climb Ground	-	-	-
Commuter Prop	19RA2	Climb Below 1000	-	-	-
Commuter Prop	19RA2	Climb Below Mixing Height	-	-	-
Commuter Prop	19RA2	Climb Below 10000	-	-	-
Commuter Prop	19RA2	Above 10000	-	-	-
Commuter Prop	19RA2	Descend Below 10000	0.025	0.012	0.026
Commuter Prop	19RA2	Descend Below Mixing Height	0.025	0.003	0.017
Commuter Prop	19RA2	Descend Below 1000	0.024	0.002	0.008
Commuter Prop	19RA2	Descend Ground	0.024	0.001	0.003
Commuter Prop	19RA2	Descend Taxi	0.024	0.001	0.003
Commuter Prop	19RA2	Full Flight	0.025	0.012	0.026
Commuter Prop	19RA3	Startup	-	-	-
Commuter Prop	19RA3	Climb Taxi	-	-	-

Table A-1. Emissions from Aircraft (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

EXISTING (2016) GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Commuter Prop	19RA3	Climb Ground	-	-	-
Commuter Prop	19RA3	Climb Below 1000	-	-	-
Commuter Prop	19RA3	Climb Below Mixing Height	-	-	-
Commuter Prop	19RA3	Climb Below 10000	-	-	-
Commuter Prop	19RA3	Above 10000	-	-	-
Commuter Prop	19RA3	Descend Below 10000	0.019	0.009	0.019
Commuter Prop	19RA3	Descend Below Mixing Height	0.019	0.003	0.013
Commuter Prop	19RA3	Descend Below 1000	0.018	0.001	0.006
Commuter Prop	19RA3	Descend Ground	0.018	0.000	0.002
Commuter Prop	19RA3	Descend Taxi	0.018	0.000	0.002
Commuter Prop	19RA3	Full Flight	0.019	0.009	0.019
Commuter Prop	19RA5	Startup	-	-	-
Commuter Prop	19RA5	Climb Taxi	-	-	-
Commuter Prop	19RA5	Climb Ground	-	-	-
Commuter Prop	19RA5	Climb Below 1000	-	-	-
Commuter Prop	19RA5	Climb Below Mixing Height	-	-	-
Commuter Prop	19RA5	Climb Below 10000	-	-	-
Commuter Prop	19RA5	Above 10000	-	-	-
Commuter Prop	19RA5	Descend Below 10000	0.222	0.103	0.227
Commuter Prop	19RA5	Descend Below Mixing Height	0.217	0.030	0.148
Commuter Prop	19RA5	Descend Below 1000	0.213	0.015	0.074
Commuter Prop	19RA5	Descend Ground	0.210	0.006	0.029
Commuter Prop	19RA5	Descend Taxi	0.210	0.005	0.025
Commuter Prop	19RA5	Full Flight	0.222	0.103	0.227
Commuter Prop	19RA6	Startup	-	-	-
Commuter Prop	19RA6	Climb Taxi	-	-	-
Commuter Prop	19RA6	Climb Ground	-	-	-
Commuter Prop	19RA6	Climb Below 1000	-	-	-
Commuter Prop	19RA6	Climb Below Mixing Height	-	-	-
Commuter Prop	19RA6	Climb Below 10000	-	-	-
Commuter Prop	19RA6	Above 10000	-	-	-
Commuter Prop	19RA6	Descend Below 10000	0.032	0.015	0.032
Commuter Prop	19RA6	Descend Below Mixing Height	0.031	0.004	0.021
Commuter Prop	19RA6	Descend Below 1000	0.030	0.002	0.011
Commuter Prop	19RA6	Descend Ground	0.030	0.001	0.004
Commuter Prop	19RA6	Descend Taxi	0.030	0.001	0.004
Commuter Prop	19RA6	Full Flight	0.032	0.015	0.032
Commuter Prop	19RD2	Startup	-	-	-
Commuter Prop	19RD2	Climb Taxi	0.439	0.005	0.019
Commuter Prop	19RD2	Climb Ground	0.439	0.007	0.024
Commuter Prop	19RD2	Climb Below 1000	0.439	0.010	0.032
Commuter Prop	19RD2	Climb Below Mixing Height	0.439	0.016	0.050
Commuter Prop	19RD2	Climb Below 10000	0.440	0.075	0.118
Commuter Prop	19RD2	Above 10000	-	-	-
Commuter Prop	19RD2	Descend Below 10000	-	-	-
Commuter Prop	19RD2	Descend Below Mixing Height	-	-	-
Commuter Prop	19RD2	Descend Below 1000	-	-	-
Commuter Prop	19RD2	Descend Ground	-	-	-
Commuter Prop	19RD2	Descend Taxi	-	-	-
Commuter Prop	19RD2	Full Flight	0.440	0.075	0.118
Commuter Prop	19RD3	Startup	-	-	-
Commuter Prop	19RD3	Climb Taxi	0.064	0.006	0.039
Commuter Prop	19RD3	Climb Ground	0.065	0.008	0.047
Commuter Prop	19RD3	Climb Below 1000	0.065	0.011	0.061
Commuter Prop	19RD3	Climb Below Mixing Height	0.065	0.020	0.099
Commuter Prop	19RD3	Climb Below 10000	0.067	0.123	0.220
Commuter Prop	19RD3	Above 10000	-	0.000	0.000

Table A-1. Emissions from Aircraft (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

EXISTING (2016) GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Commuter Prop	19RD3	Descend Below 10000	-	-	-
Commuter Prop	19RD3	Descend Below Mixing Height	-	-	-
Commuter Prop	19RD3	Descend Below 1000	-	-	-
Commuter Prop	19RD3	Descend Ground	-	-	-
Commuter Prop	19RD3	Descend Taxi	-	-	-
Commuter Prop	19RD3	Full Flight	0.067	0.123	0.221

Note:

[1] Emissions for each flight mode represent cumulative totals that include emissions from all modes below it. For example, Emissions for "Descend Below 10000" includes emissions from Descend Taxi, Descend Ground, descend Below 1000, Descend Below Mixing Height in addition to emissions between the mixing height and 10,000ft.

Abbreviations:
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
SO_X - oxides of sulfur
VOC - volatile organic compound
yr - year

Table A-2. Emissions from Aircraft (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

PROPOSED PROJECT - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Business Jets	01LA1	Startup	-	-	-
Business Jets	01LA1	Climb Taxi	-	-	-
Business Jets	01LA1	Climb Ground	-	-	-
Business Jets	01LA1	Climb Below 1000	-	-	-
Business Jets	01LA1	Climb Below Mixing Height	-	-	-
Business Jets	01LA1	Climb Below 10000	-	-	-
Business Jets	01LA1	Above 10000	-	-	-
Business Jets	01LA1	Descend Below 10000	0.341	0.016	0.049
Business Jets	01LA1	Descend Below Mixing Height	0.272	0.007	0.039
Business Jets	01LA1	Descend Below 1000	0.194	0.004	0.028
Business Jets	01LA1	Descend Ground	0.161	0.002	0.018
Business Jets	01LA1	Descend Taxi	0.156	0.002	0.017
Business Jets	01LA1	Full Flight	0.341	0.016	0.049
Business Jets	01LA2	Startup	-	-	-
Business Jets	01LA2	Climb Taxi	-	-	-
Business Jets	01LA2	Climb Ground	-	-	-
Business Jets	01LA2	Climb Below 1000	-	-	-
Business Jets	01LA2	Climb Below Mixing Height	-	-	-
Business Jets	01LA2	Climb Below 10000	-	-	-
Business Jets	01LA2	Above 10000	-	-	-
Business Jets	01LA2	Descend Below 10000	0.113	0.005	0.016
Business Jets	01LA2	Descend Below Mixing Height	0.090	0.002	0.013
Business Jets	01LA2	Descend Below 1000	0.064	0.002	0.009
Business Jets	01LA2	Descend Ground	0.054	0.001	0.006
Business Jets	01LA2	Descend Taxi	0.052	0.001	0.006
Business Jets	01LA2	Full Flight	0.113	0.005	0.016
Business Jets	01LD1	Startup	0.140	-	-
Business Jets	01LD1	Climb Taxi	0.487	0.005	0.047
Business Jets	01LD1	Climb Ground	0.633	0.009	0.061
Business Jets	01LD1	Climb Below 1000	0.637	0.011	0.070
Business Jets	01LD1	Climb Below Mixing Height	0.648	0.017	0.098
Business Jets	01LD1	Climb Below 10000	0.681	0.081	0.173
Business Jets	01LD1	Above 10000	0.000	0.000	0.000
Business Jets	01LD1	Descend Below 10000	-	-	-
Business Jets	01LD1	Descend Below Mixing Height	-	-	-
Business Jets	01LD1	Descend Below 1000	-	-	-
Business Jets	01LD1	Descend Ground	-	-	-
Business Jets	01LD1	Descend Taxi	-	-	-
Business Jets	01LD1	Full Flight	0.681	0.081	0.173
Business Jets	19RA1	Startup	-	-	-
Business Jets	19RA1	Climb Taxi	-	-	-
Business Jets	19RA1	Climb Ground	-	-	-
Business Jets	19RA1	Climb Below 1000	-	-	-
Business Jets	19RA1	Climb Below Mixing Height	-	-	-
Business Jets	19RA1	Climb Below 10000	-	-	-
Business Jets	19RA1	Above 10000	-	-	-
Business Jets	19RA1	Descend Below 10000	1.041	0.050	0.152
Business Jets	19RA1	Descend Below Mixing Height	0.831	0.022	0.122
Business Jets	19RA1	Descend Below 1000	0.595	0.014	0.085
Business Jets	19RA1	Descend Ground	0.504	0.007	0.055
Business Jets	19RA1	Descend Taxi	0.490	0.005	0.050
Business Jets	19RA1	Full Flight	1.041	0.050	0.152
Business Jets	19RA2	Startup	-	-	-
Business Jets	19RA2	Climb Taxi	-	-	-
Business Jets	19RA2	Climb Ground	-	-	-
Business Jets	19RA2	Climb Below 1000	-	-	-
Business Jets	19RA2	Climb Below Mixing Height	-	-	-

Table A-2. Emissions from Aircraft (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

PROPOSED PROJECT - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Business Jets	19RA2	Climb Below 10000	-	-	-
Business Jets	19RA2	Above 10000	-	-	-
Business Jets	19RA2	Descend Below 10000	1.389	0.066	0.203
Business Jets	19RA2	Descend Below Mixing Height	1.109	0.030	0.163
Business Jets	19RA2	Descend Below 1000	0.793	0.018	0.113
Business Jets	19RA2	Descend Ground	0.672	0.009	0.074
Business Jets	19RA2	Descend Taxi	0.653	0.007	0.067
Business Jets	19RA2	Full Flight	1.389	0.066	0.203
Business Jets	19RA3	Startup	-	-	-
Business Jets	19RA3	Climb Taxi	-	-	-
Business Jets	19RA3	Climb Ground	-	-	-
Business Jets	19RA3	Climb Below 1000	-	-	-
Business Jets	19RA3	Climb Below Mixing Height	-	-	-
Business Jets	19RA3	Climb Below 10000	-	-	-
Business Jets	19RA3	Above 10000	-	-	-
Business Jets	19RA3	Descend Below 10000	1.041	0.049	0.152
Business Jets	19RA3	Descend Below Mixing Height	0.831	0.022	0.122
Business Jets	19RA3	Descend Below 1000	0.595	0.014	0.085
Business Jets	19RA3	Descend Ground	0.504	0.007	0.055
Business Jets	19RA3	Descend Taxi	0.490	0.005	0.050
Business Jets	19RA3	Full Flight	1.041	0.049	0.152
Business Jets	19RA5	Startup	-	-	-
Business Jets	19RA5	Climb Taxi	-	-	-
Business Jets	19RA5	Climb Ground	-	-	-
Business Jets	19RA5	Climb Below 1000	-	-	-
Business Jets	19RA5	Climb Below Mixing Height	-	-	-
Business Jets	19RA5	Climb Below 10000	-	-	-
Business Jets	19RA5	Above 10000	-	-	-
Business Jets	19RA5	Descend Below 10000	12.151	0.575	1.764
Business Jets	19RA5	Descend Below Mixing Height	9.696	0.257	1.415
Business Jets	19RA5	Descend Below 1000	6.939	0.159	0.991
Business Jets	19RA5	Descend Ground	5.878	0.079	0.645
Business Jets	19RA5	Descend Taxi	5.713	0.064	0.585
Business Jets	19RA5	Full Flight	12.151	0.575	1.764
Business Jets	19RA6	Startup	-	-	-
Business Jets	19RA6	Climb Taxi	-	-	-
Business Jets	19RA6	Climb Ground	-	-	-
Business Jets	19RA6	Climb Below 1000	-	-	-
Business Jets	19RA6	Climb Below Mixing Height	-	-	-
Business Jets	19RA6	Climb Below 10000	-	-	-
Business Jets	19RA6	Above 10000	-	-	-
Business Jets	19RA6	Descend Below 10000	1.736	0.082	0.252
Business Jets	19RA6	Descend Below Mixing Height	1.385	0.037	0.202
Business Jets	19RA6	Descend Below 1000	0.991	0.023	0.142
Business Jets	19RA6	Descend Ground	0.840	0.011	0.092
Business Jets	19RA6	Descend Taxi	0.816	0.009	0.084
Business Jets	19RA6	Full Flight	1.736	0.082	0.252
Business Jets	19RD2	Startup	4.001	-	-
Business Jets	19RD2	Climb Taxi	13.555	0.152	1.391
Business Jets	19RD2	Climb Ground	17.737	0.272	1.854
Business Jets	19RD2	Climb Below 1000	17.855	0.344	2.156
Business Jets	19RD2	Climb Below Mixing Height	18.147	0.496	2.955
Business Jets	19RD2	Climb Below 10000	19.067	2.500	5.275
Business Jets	19RD2	Above 10000	-	-	-
Business Jets	19RD2	Descend Below 10000	-	-	-
Business Jets	19RD2	Descend Below Mixing Height	-	-	-
Business Jets	19RD2	Descend Below 1000	-	-	-

Table A-2. Emissions from Aircraft (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

PROPOSED PROJECT - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Business Jets	19RD2	Descend Ground	-	-	-
Business Jets	19RD2	Descend Taxi	-	-	-
Business Jets	19RD2	Full Flight	19.067	2.500	5.275
Helicopter	H1A1	Startup	-	-	-
Helicopter	H1A1	Climb Taxi	-	-	-
Helicopter	H1A1	Climb Ground	-	-	-
Helicopter	H1A1	Climb Below 1000	-	-	-
Helicopter	H1A1	Climb Below Mixing Height	-	-	-
Helicopter	H1A1	Climb Below 10000	-	-	-
Helicopter	H1A1	Above 10000	-	-	-
Helicopter	H1A1	Descend Below 10000	0.116	-	0.011
Helicopter	H1A1	Descend Below Mixing Height	0.116	-	0.011
Helicopter	H1A1	Descend Below 1000	0.116	-	0.011
Helicopter	H1A1	Descend Ground	0.010	-	0.001
Helicopter	H1A1	Descend Taxi	-	-	-
Helicopter	H1A1	Full Flight	0.116	-	0.011
Helicopter	H1A2	Startup	-	-	-
Helicopter	H1A2	Climb Taxi	-	-	-
Helicopter	H1A2	Climb Ground	-	-	-
Helicopter	H1A2	Climb Below 1000	-	-	-
Helicopter	H1A2	Climb Below Mixing Height	-	-	-
Helicopter	H1A2	Climb Below 10000	-	-	-
Helicopter	H1A2	Above 10000	-	-	-
Helicopter	H1A2	Descend Below 10000	0.116	-	0.011
Helicopter	H1A2	Descend Below Mixing Height	0.116	-	0.011
Helicopter	H1A2	Descend Below 1000	0.116	-	0.011
Helicopter	H1A2	Descend Ground	0.010	-	0.001
Helicopter	H1A2	Descend Taxi	-	-	-
Helicopter	H1A2	Full Flight	0.116	-	0.011
Helicopter	H1D1	Startup	-	-	-
Helicopter	H1D1	Climb Taxi	-	-	-
Helicopter	H1D1	Climb Ground	0.010	-	0.001
Helicopter	H1D1	Climb Below 1000	0.108	-	0.010
Helicopter	H1D1	Climb Below Mixing Height	0.108	-	0.010
Helicopter	H1D1	Climb Below 10000	0.108	-	0.010
Helicopter	H1D1	Above 10000	-	-	-
Helicopter	H1D1	Descend Below 10000	-	-	-
Helicopter	H1D1	Descend Below Mixing Height	-	-	-
Helicopter	H1D1	Descend Below 1000	-	-	-
Helicopter	H1D1	Descend Ground	-	-	-
Helicopter	H1D1	Descend Taxi	-	-	-
Helicopter	H1D1	Full Flight	0.108	-	0.010
Helicopter	H1D2	Startup	-	-	-
Helicopter	H1D2	Climb Taxi	-	-	-
Helicopter	H1D2	Climb Ground	0.010	-	0.001
Helicopter	H1D2	Climb Below 1000	0.109	-	0.010
Helicopter	H1D2	Climb Below Mixing Height	0.109	-	0.010
Helicopter	H1D2	Climb Below 10000	0.109	-	0.010
Helicopter	H1D2	Above 10000	-	-	-
Helicopter	H1D2	Descend Below 10000	-	-	-
Helicopter	H1D2	Descend Below Mixing Height	-	-	-
Helicopter	H1D2	Descend Below 1000	-	-	-
Helicopter	H1D2	Descend Ground	-	-	-
Helicopter	H1D2	Descend Taxi	-	-	-
Helicopter	H1D2	Full Flight	0.109	-	0.010
Helicopter	H2A1	Startup	-	-	-
Helicopter	H2A1	Climb Taxi	-	-	-

Table A-2. Emissions from Aircraft (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

PROPOSED PROJECT - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Helicopter	H2A1	Climb Ground	-	-	-
Helicopter	H2A1	Climb Below 1000	-	-	-
Helicopter	H2A1	Climb Below Mixing Height	-	-	-
Helicopter	H2A1	Climb Below 10000	-	-	-
Helicopter	H2A1	Above 10000	-	-	-
Helicopter	H2A1	Descend Below 10000	0.116	-	0.011
Helicopter	H2A1	Descend Below Mixing Height	0.116	-	0.011
Helicopter	H2A1	Descend Below 1000	0.116	-	0.011
Helicopter	H2A1	Descend Ground	0.010	-	0.001
Helicopter	H2A1	Descend Taxi	-	-	-
Helicopter	H2A1	Full Flight	0.116	-	0.011
Helicopter	H2A2	Startup	-	-	-
Helicopter	H2A2	Climb Taxi	-	-	-
Helicopter	H2A2	Climb Ground	-	-	-
Helicopter	H2A2	Climb Below 1000	-	-	-
Helicopter	H2A2	Climb Below Mixing Height	-	-	-
Helicopter	H2A2	Climb Below 10000	-	-	-
Helicopter	H2A2	Above 10000	-	-	-
Helicopter	H2A2	Descend Below 10000	0.117	-	0.011
Helicopter	H2A2	Descend Below Mixing Height	0.117	-	0.011
Helicopter	H2A2	Descend Below 1000	0.117	-	0.011
Helicopter	H2A2	Descend Ground	0.010	-	0.001
Helicopter	H2A2	Descend Taxi	-	-	-
Helicopter	H2A2	Full Flight	0.117	-	0.011
Helicopter	H2D1	Startup	-	-	-
Helicopter	H2D1	Climb Taxi	-	-	-
Helicopter	H2D1	Climb Ground	0.010	-	0.001
Helicopter	H2D1	Climb Below 1000	0.109	-	0.010
Helicopter	H2D1	Climb Below Mixing Height	0.109	-	0.010
Helicopter	H2D1	Climb Below 10000	0.109	-	0.010
Helicopter	H2D1	Above 10000	-	-	-
Helicopter	H2D1	Descend Below 10000	-	-	-
Helicopter	H2D1	Descend Below Mixing Height	-	-	-
Helicopter	H2D1	Descend Below 1000	-	-	-
Helicopter	H2D1	Descend Ground	-	-	-
Helicopter	H2D1	Descend Taxi	-	-	-
Helicopter	H2D1	Full Flight	0.109	-	0.010
Helicopter	H2D2	Startup	-	-	-
Helicopter	H2D2	Climb Taxi	-	-	-
Helicopter	H2D2	Climb Ground	0.010	-	0.001
Helicopter	H2D2	Climb Below 1000	0.108	-	0.010
Helicopter	H2D2	Climb Below Mixing Height	0.108	-	0.010
Helicopter	H2D2	Climb Below 10000	0.108	-	0.010
Helicopter	H2D2	Above 10000	-	-	-
Helicopter	H2D2	Descend Below 10000	-	-	-
Helicopter	H2D2	Descend Below Mixing Height	-	-	-
Helicopter	H2D2	Descend Below 1000	-	-	-
Helicopter	H2D2	Descend Ground	-	-	-
Helicopter	H2D2	Descend Taxi	-	-	-
Helicopter	H2D2	Full Flight	0.108	-	0.010
Helicopter	H4A1	Startup	-	-	-
Helicopter	H4A1	Climb Taxi	-	-	-
Helicopter	H4A1	Climb Ground	-	-	-
Helicopter	H4A1	Climb Below 1000	-	-	-
Helicopter	H4A1	Climb Below Mixing Height	-	-	-
Helicopter	H4A1	Climb Below 10000	-	-	-
Helicopter	H4A1	Above 10000	-	-	-

Table A-2. Emissions from Aircraft (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

PROPOSED PROJECT - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Helicopter	H4A1	Descend Below 10000	0.001	-	0.006
Helicopter	H4A1	Descend Below Mixing Height	0.001	-	0.006
Helicopter	H4A1	Descend Below 1000	0.001	-	0.006
Helicopter	H4A1	Descend Ground	0.000	-	0.001
Helicopter	H4A1	Descend Taxi	-	-	-
Helicopter	H4A1	Full Flight	0.001	-	0.006
Helicopter	H4A2	Startup	-	-	-
Helicopter	H4A2	Climb Taxi	-	-	-
Helicopter	H4A2	Climb Ground	-	-	-
Helicopter	H4A2	Climb Below 1000	-	-	-
Helicopter	H4A2	Climb Below Mixing Height	-	-	-
Helicopter	H4A2	Climb Below 10000	-	-	-
Helicopter	H4A2	Above 10000	-	-	-
Helicopter	H4A2	Descend Below 10000	0.001	-	0.006
Helicopter	H4A2	Descend Below Mixing Height	0.001	-	0.006
Helicopter	H4A2	Descend Below 1000	0.001	-	0.006
Helicopter	H4A2	Descend Ground	0.000	-	0.001
Helicopter	H4A2	Descend Taxi	-	-	-
Helicopter	H4A2	Full Flight	0.001	-	0.006
Helicopter	H4A3	Startup	-	-	-
Helicopter	H4A3	Climb Taxi	-	-	-
Helicopter	H4A3	Climb Ground	-	-	-
Helicopter	H4A3	Climb Below 1000	-	-	-
Helicopter	H4A3	Climb Below Mixing Height	-	-	-
Helicopter	H4A3	Climb Below 10000	-	-	-
Helicopter	H4A3	Above 10000	-	-	-
Helicopter	H4A3	Descend Below 10000	0.001	-	0.006
Helicopter	H4A3	Descend Below Mixing Height	0.001	-	0.006
Helicopter	H4A3	Descend Below 1000	0.001	-	0.006
Helicopter	H4A3	Descend Ground	0.000	-	0.001
Helicopter	H4A3	Descend Taxi	-	-	-
Helicopter	H4A3	Full Flight	0.001	-	0.006
Helicopter	H4A4	Startup	-	-	-
Helicopter	H4A4	Climb Taxi	-	-	-
Helicopter	H4A4	Climb Ground	-	-	-
Helicopter	H4A4	Climb Below 1000	-	-	-
Helicopter	H4A4	Climb Below Mixing Height	-	-	-
Helicopter	H4A4	Climb Below 10000	-	-	-
Helicopter	H4A4	Above 10000	-	-	-
Helicopter	H4A4	Descend Below 10000	0.001	-	0.006
Helicopter	H4A4	Descend Below Mixing Height	0.001	-	0.006
Helicopter	H4A4	Descend Below 1000	0.001	-	0.006
Helicopter	H4A4	Descend Ground	0.000	-	0.001
Helicopter	H4A4	Descend Taxi	-	-	-
Helicopter	H4A4	Full Flight	0.001	-	0.006
Helicopter	H4D1	Startup	-	-	-
Helicopter	H4D1	Climb Taxi	-	-	-
Helicopter	H4D1	Climb Ground	0.000	-	0.001
Helicopter	H4D1	Climb Below 1000	0.001	-	0.011
Helicopter	H4D1	Climb Below Mixing Height	0.001	-	0.011
Helicopter	H4D1	Climb Below 10000	0.001	-	0.011
Helicopter	H4D1	Above 10000	-	-	-
Helicopter	H4D1	Descend Below 10000	-	-	-
Helicopter	H4D1	Descend Below Mixing Height	-	-	-
Helicopter	H4D1	Descend Below 1000	-	-	-
Helicopter	H4D1	Descend Ground	-	-	-
Helicopter	H4D1	Descend Taxi	-	-	-

Table A-2. Emissions from Aircraft (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

PROPOSED PROJECT - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Helicopter	H4D1	Full Flight	0.001	-	0.011
Helicopter	H4D2	Startup	-	-	-
Helicopter	H4D2	Climb Taxi	-	-	-
Helicopter	H4D2	Climb Ground	0.000	-	0.001
Helicopter	H4D2	Climb Below 1000	0.001	-	0.011
Helicopter	H4D2	Climb Below Mixing Height	0.001	-	0.011
Helicopter	H4D2	Climb Below 10000	0.001	-	0.011
Helicopter	H4D2	Above 10000	-	-	-
Helicopter	H4D2	Descend Below 10000	-	-	-
Helicopter	H4D2	Descend Below Mixing Height	-	-	-
Helicopter	H4D2	Descend Below 1000	-	-	-
Helicopter	H4D2	Descend Ground	-	-	-
Helicopter	H4D2	Descend Taxi	-	-	-
Helicopter	H4D2	Full Flight	0.001	-	0.011
GA Prop	01LA1	Startup	-	-	-
GA Prop	01LA1	Climb Taxi	-	-	-
GA Prop	01LA1	Climb Ground	-	-	-
GA Prop	01LA1	Climb Below 1000	-	-	-
GA Prop	01LA1	Climb Below Mixing Height	-	-	-
GA Prop	01LA1	Climb Below 10000	-	-	-
GA Prop	01LA1	Above 10000	-	-	-
GA Prop	01LA1	Descend Below 10000	0.017	0.001	0.001
GA Prop	01LA1	Descend Below Mixing Height	0.011	0.001	0.001
GA Prop	01LA1	Descend Below 1000	0.006	0.000	0.000
GA Prop	01LA1	Descend Ground	0.003	0.000	0.000
GA Prop	01LA1	Descend Taxi	0.003	0.000	0.000
GA Prop	01LA1	Full Flight	0.017	0.001	0.001
GA Prop	01LA2	Startup	-	-	-
GA Prop	01LA2	Climb Taxi	-	-	-
GA Prop	01LA2	Climb Ground	-	-	-
GA Prop	01LA2	Climb Below 1000	-	-	-
GA Prop	01LA2	Climb Below Mixing Height	-	-	-
GA Prop	01LA2	Climb Below 10000	-	-	-
GA Prop	01LA2	Above 10000	-	-	-
GA Prop	01LA2	Descend Below 10000	0.006	0.000	0.000
GA Prop	01LA2	Descend Below Mixing Height	0.004	0.000	0.000
GA Prop	01LA2	Descend Below 1000	0.002	0.000	0.000
GA Prop	01LA2	Descend Ground	0.001	0.000	0.000
GA Prop	01LA2	Descend Taxi	0.001	0.000	0.000
GA Prop	01LA2	Full Flight	0.006	0.000	0.000
GA Prop	01LD1	Startup	-	-	-
GA Prop	01LD1	Climb Taxi	0.024	0.000	0.000
GA Prop	01LD1	Climb Ground	0.025	0.000	0.001
GA Prop	01LD1	Climb Below 1000	0.030	0.001	0.001
GA Prop	01LD1	Climb Below Mixing Height	0.040	0.002	0.002
GA Prop	01LD1	Climb Below 10000	0.084	0.006	0.007
GA Prop	01LD1	Above 10000	-	-	-
GA Prop	01LD1	Descend Below 10000	-	-	-
GA Prop	01LD1	Descend Below Mixing Height	-	-	-
GA Prop	01LD1	Descend Below 1000	-	-	-
GA Prop	01LD1	Descend Ground	-	-	-
GA Prop	01LD1	Descend Taxi	-	-	-
GA Prop	01LD1	Full Flight	0.084	0.006	0.007
GA Prop	01RA1	Startup	-	-	-
GA Prop	01RA1	Climb Taxi	-	-	-
GA Prop	01RA1	Climb Ground	-	-	-
GA Prop	01RA1	Climb Below 1000	-	-	-

Table A-2. Emissions from Aircraft (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

PROPOSED PROJECT - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
GA Prop	01RA1	Climb Below Mixing Height	-	-	-
GA Prop	01RA1	Climb Below 10000	-	-	-
GA Prop	01RA1	Above 10000	-	-	-
GA Prop	01RA1	Descend Below 10000	0.025	0.002	0.002
GA Prop	01RA1	Descend Below Mixing Height	0.017	0.001	0.001
GA Prop	01RA1	Descend Below 1000	0.009	0.000	0.001
GA Prop	01RA1	Descend Ground	0.005	0.000	0.000
GA Prop	01RA1	Descend Taxi	0.005	0.000	0.000
GA Prop	01RA1	Full Flight	0.025	0.002	0.002
GA Prop	01RD1	Startup	-	-	-
GA Prop	01RD1	Climb Taxi	0.005	0.000	0.000
GA Prop	01RD1	Climb Ground	0.006	0.000	0.000
GA Prop	01RD1	Climb Below 1000	0.007	0.000	0.000
GA Prop	01RD1	Climb Below Mixing Height	0.010	0.000	0.001
GA Prop	01RD1	Climb Below 10000	0.021	0.002	0.002
GA Prop	01RD1	Above 10000	-	-	-
GA Prop	01RD1	Descend Below 10000	-	-	-
GA Prop	01RD1	Descend Below Mixing Height	-	-	-
GA Prop	01RD1	Descend Below 1000	-	-	-
GA Prop	01RD1	Descend Ground	-	-	-
GA Prop	01RD1	Descend Taxi	-	-	-
GA Prop	01RD1	Full Flight	0.021	0.002	0.002
GA Prop	19LA1	Startup	-	-	-
GA Prop	19LA1	Climb Taxi	-	-	-
GA Prop	19LA1	Climb Ground	-	-	-
GA Prop	19LA1	Climb Below 1000	-	-	-
GA Prop	19LA1	Climb Below Mixing Height	-	-	-
GA Prop	19LA1	Climb Below 10000	-	-	-
GA Prop	19LA1	Above 10000	-	-	-
GA Prop	19LA1	Descend Below 10000	1.121	0.075	0.104
GA Prop	19LA1	Descend Below Mixing Height	0.747	0.038	0.064
GA Prop	19LA1	Descend Below 1000	0.417	0.015	0.026
GA Prop	19LA1	Descend Ground	0.236	0.002	0.006
GA Prop	19LA1	Descend Taxi	0.228	0.002	0.005
GA Prop	19LA1	Full Flight	1.121	0.075	0.104
GA Prop	19LD1	Startup	-	-	-
GA Prop	19LD1	Climb Taxi	0.190	0.001	0.004
GA Prop	19LD1	Climb Ground	0.200	0.003	0.005
GA Prop	19LD1	Climb Below 1000	0.242	0.008	0.010
GA Prop	19LD1	Climb Below Mixing Height	0.346	0.017	0.022
GA Prop	19LD1	Climb Below 10000	0.749	0.056	0.066
GA Prop	19LD1	Above 10000	-	-	-
GA Prop	19LD1	Descend Below 10000	-	-	-
GA Prop	19LD1	Descend Below Mixing Height	-	-	-
GA Prop	19LD1	Descend Below 1000	-	-	-
GA Prop	19LD1	Descend Ground	-	-	-
GA Prop	19LD1	Descend Taxi	-	-	-
GA Prop	19LD1	Full Flight	0.749	0.056	0.066
GA Prop	19LD2	Startup	-	-	-
GA Prop	19LD2	Climb Taxi	0.190	0.001	0.004
GA Prop	19LD2	Climb Ground	0.200	0.003	0.005
GA Prop	19LD2	Climb Below 1000	0.242	0.008	0.010
GA Prop	19LD2	Climb Below Mixing Height	0.346	0.017	0.022
GA Prop	19LD2	Climb Below 10000	0.749	0.056	0.066
GA Prop	19LD2	Above 10000	-	-	-
GA Prop	19LD2	Descend Below 10000	-	-	-
GA Prop	19LD2	Descend Below Mixing Height	-	-	-

Table A-2. Emissions from Aircraft (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

PROPOSED PROJECT - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
GA Prop	19LD2	Descend Below 1000	-	-	-
GA Prop	19LD2	Descend Ground	-	-	-
GA Prop	19LD2	Descend Taxi	-	-	-
GA Prop	19LD2	Full Flight	0.749	0.056	0.066
GA Prop	19RA1	Startup	-	-	-
GA Prop	19RA1	Climb Taxi	-	-	-
GA Prop	19RA1	Climb Ground	-	-	-
GA Prop	19RA1	Climb Below 1000	-	-	-
GA Prop	19RA1	Climb Below Mixing Height	-	-	-
GA Prop	19RA1	Climb Below 10000	-	-	-
GA Prop	19RA1	Above 10000	-	-	-
GA Prop	19RA1	Descend Below 10000	0.080	0.005	0.007
GA Prop	19RA1	Descend Below Mixing Height	0.053	0.003	0.004
GA Prop	19RA1	Descend Below 1000	0.029	0.001	0.002
GA Prop	19RA1	Descend Ground	0.017	0.000	0.000
GA Prop	19RA1	Descend Taxi	0.016	0.000	0.000
GA Prop	19RA1	Full Flight	0.080	0.005	0.007
GA Prop	19RA2	Startup	-	-	-
GA Prop	19RA2	Climb Taxi	-	-	-
GA Prop	19RA2	Climb Ground	-	-	-
GA Prop	19RA2	Climb Below 1000	-	-	-
GA Prop	19RA2	Climb Below Mixing Height	-	-	-
GA Prop	19RA2	Climb Below 10000	-	-	-
GA Prop	19RA2	Above 10000	-	-	-
GA Prop	19RA2	Descend Below 10000	0.107	0.007	0.009
GA Prop	19RA2	Descend Below Mixing Height	0.071	0.003	0.006
GA Prop	19RA2	Descend Below 1000	0.039	0.001	0.002
GA Prop	19RA2	Descend Ground	0.022	0.000	0.001
GA Prop	19RA2	Descend Taxi	0.021	0.000	0.000
GA Prop	19RA2	Full Flight	0.107	0.007	0.009
GA Prop	19RA3	Startup	-	-	-
GA Prop	19RA3	Climb Taxi	-	-	-
GA Prop	19RA3	Climb Ground	-	-	-
GA Prop	19RA3	Climb Below 1000	-	-	-
GA Prop	19RA3	Climb Below Mixing Height	-	-	-
GA Prop	19RA3	Climb Below 10000	-	-	-
GA Prop	19RA3	Above 10000	-	-	-
GA Prop	19RA3	Descend Below 10000	0.080	0.005	0.007
GA Prop	19RA3	Descend Below Mixing Height	0.053	0.003	0.004
GA Prop	19RA3	Descend Below 1000	0.029	0.001	0.002
GA Prop	19RA3	Descend Ground	0.017	0.000	0.000
GA Prop	19RA3	Descend Taxi	0.016	0.000	0.000
GA Prop	19RA3	Full Flight	0.080	0.005	0.007
GA Prop	19RA5	Startup	-	-	-
GA Prop	19RA5	Climb Taxi	-	-	-
GA Prop	19RA5	Climb Ground	-	-	-
GA Prop	19RA5	Climb Below 1000	-	-	-
GA Prop	19RA5	Climb Below Mixing Height	-	-	-
GA Prop	19RA5	Climb Below 10000	-	-	-
GA Prop	19RA5	Above 10000	-	-	-
GA Prop	19RA5	Descend Below 10000	0.934	0.059	0.081
GA Prop	19RA5	Descend Below Mixing Height	0.618	0.030	0.050
GA Prop	19RA5	Descend Below 1000	0.344	0.012	0.021
GA Prop	19RA5	Descend Ground	0.194	0.002	0.005
GA Prop	19RA5	Descend Taxi	0.185	0.001	0.004
GA Prop	19RA5	Full Flight	0.934	0.059	0.081
GA Prop	19RA6	Startup	-	-	-

Table A-2. Emissions from Aircraft (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

PROPOSED PROJECT - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
GA Prop	19RA6	Climb Taxi	-	-	-
GA Prop	19RA6	Climb Ground	-	-	-
GA Prop	19RA6	Climb Below 1000	-	-	-
GA Prop	19RA6	Climb Below Mixing Height	-	-	-
GA Prop	19RA6	Climb Below 10000	-	-	-
GA Prop	19RA6	Above 10000	-	-	-
GA Prop	19RA6	Descend Below 10000	0.133	0.008	0.012
GA Prop	19RA6	Descend Below Mixing Height	0.088	0.004	0.007
GA Prop	19RA6	Descend Below 1000	0.049	0.002	0.003
GA Prop	19RA6	Descend Ground	0.028	0.000	0.001
GA Prop	19RA6	Descend Taxi	0.026	0.000	0.001
GA Prop	19RA6	Full Flight	0.133	0.008	0.012
GA Prop	19RD3	Startup	-	-	-
GA Prop	19RD3	Climb Taxi	0.432	0.003	0.009
GA Prop	19RD3	Climb Ground	0.456	0.006	0.012
GA Prop	19RD3	Climb Below 1000	0.549	0.019	0.023
GA Prop	19RD3	Climb Below Mixing Height	0.774	0.038	0.048
GA Prop	19RD3	Climb Below 10000	1.740	0.131	0.152
GA Prop	19RD3	Above 10000	-	-	-
GA Prop	19RD3	Descend Below 10000	-	-	-
GA Prop	19RD3	Descend Below Mixing Height	-	-	-
GA Prop	19RD3	Descend Below 1000	-	-	-
GA Prop	19RD3	Descend Ground	-	-	-
GA Prop	19RD3	Descend Taxi	-	-	-
GA Prop	19RD3	Full Flight	1.740	0.131	0.152
GA Prop	19LT1	Startup	-	-	-
GA Prop	19LT1	Climb Taxi	-	-	-
GA Prop	19LT1	Climb Ground	0.007	0.001	0.001
GA Prop	19LT1	Climb Below 1000	0.498	0.058	0.064
GA Prop	19LT1	Climb Below Mixing Height	0.498	0.058	0.064
GA Prop	19LT1	Climb Below 10000	0.498	0.058	0.064
GA Prop	19LT1	Above 10000	-	-	-
GA Prop	19LT1	Descend Below 10000	0.532	0.025	0.045
GA Prop	19LT1	Descend Below Mixing Height	0.532	0.025	0.045
GA Prop	19LT1	Descend Below 1000	0.532	0.025	0.045
GA Prop	19LT1	Descend Ground	-	-	-
GA Prop	19LT1	Descend Taxi	0.250	0.002	0.009
GA Prop	19LT1	Full Flight	1.030	0.082	0.109
GA Prop	01RT1	Startup	-	-	-
GA Prop	01RT1	Climb Taxi	-	-	-
GA Prop	01RT1	Climb Ground	0.000	0.000	0.000
GA Prop	01RT1	Climb Below 1000	0.010	0.001	0.001
GA Prop	01RT1	Climb Below Mixing Height	0.010	0.001	0.001
GA Prop	01RT1	Climb Below 10000	0.010	0.001	0.001
GA Prop	01RT1	Above 10000	-	-	-
GA Prop	01RT1	Descend Below 10000	0.011	0.001	0.001
GA Prop	01RT1	Descend Below Mixing Height	0.011	0.001	0.001
GA Prop	01RT1	Descend Below 1000	0.011	0.001	0.001
GA Prop	01RT1	Descend Ground	-	-	-
GA Prop	01RT1	Descend Taxi	0.005	0.000	0.000
GA Prop	01RT1	Full Flight	0.020	0.002	0.002
Commuter Prop	01LA1	Startup	-	-	-
Commuter Prop	01LA1	Climb Taxi	-	-	-
Commuter Prop	01LA1	Climb Ground	-	-	-
Commuter Prop	01LA1	Climb Below 1000	-	-	-
Commuter Prop	01LA1	Climb Below Mixing Height	-	-	-
Commuter Prop	01LA1	Climb Below 10000	-	-	-

Table A-2. Emissions from Aircraft (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

PROPOSED PROJECT - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Commuter Prop	01LA1	Above 10000	-	-	-
Commuter Prop	01LA1	Descend Below 10000	0.013	0.004	0.008
Commuter Prop	01LA1	Descend Below Mixing Height	0.012	0.001	0.005
Commuter Prop	01LA1	Descend Below 1000	0.012	0.001	0.003
Commuter Prop	01LA1	Descend Ground	0.012	0.000	0.001
Commuter Prop	01LA1	Descend Taxi	0.012	0.000	0.001
Commuter Prop	01LA1	Full Flight	0.013	0.004	0.008
Commuter Prop	01LA2	Startup	-	-	-
Commuter Prop	01LA2	Climb Taxi	-	-	-
Commuter Prop	01LA2	Climb Ground	-	-	-
Commuter Prop	01LA2	Climb Below 1000	-	-	-
Commuter Prop	01LA2	Climb Below Mixing Height	-	-	-
Commuter Prop	01LA2	Climb Below 10000	-	-	-
Commuter Prop	01LA2	Above 10000	-	-	-
Commuter Prop	01LA2	Descend Below 10000	0.004	0.001	0.003
Commuter Prop	01LA2	Descend Below Mixing Height	0.004	0.000	0.002
Commuter Prop	01LA2	Descend Below 1000	0.004	0.000	0.001
Commuter Prop	01LA2	Descend Ground	0.004	0.000	0.000
Commuter Prop	01LA2	Descend Taxi	0.004	0.000	0.000
Commuter Prop	01LA2	Full Flight	0.004	0.001	0.003
Commuter Prop	01LD1	Startup	-	-	-
Commuter Prop	01LD1	Climb Taxi	0.026	0.001	0.004
Commuter Prop	01LD1	Climb Ground	0.026	0.001	0.005
Commuter Prop	01LD1	Climb Below 1000	0.026	0.001	0.006
Commuter Prop	01LD1	Climb Below Mixing Height	0.027	0.002	0.010
Commuter Prop	01LD1	Climb Below 10000	0.027	0.013	0.024
Commuter Prop	01LD1	Above 10000	-	-	-
Commuter Prop	01LD1	Descend Below 10000	-	-	-
Commuter Prop	01LD1	Descend Below Mixing Height	-	-	-
Commuter Prop	01LD1	Descend Below 1000	-	-	-
Commuter Prop	01LD1	Descend Ground	-	-	-
Commuter Prop	01LD1	Descend Taxi	-	-	-
Commuter Prop	01LD1	Full Flight	0.027	0.013	0.024
Commuter Prop	01RA1	Startup	-	-	-
Commuter Prop	01RA1	Climb Taxi	-	-	-
Commuter Prop	01RA1	Climb Ground	-	-	-
Commuter Prop	01RA1	Climb Below 1000	-	-	-
Commuter Prop	01RA1	Climb Below Mixing Height	-	-	-
Commuter Prop	01RA1	Climb Below 10000	-	-	-
Commuter Prop	01RA1	Above 10000	-	-	-
Commuter Prop	01RA1	Descend Below 10000	0.000	0.000	0.001
Commuter Prop	01RA1	Descend Below Mixing Height	0.000	0.000	0.001
Commuter Prop	01RA1	Descend Below 1000	0.000	0.000	0.000
Commuter Prop	01RA1	Descend Ground	0.000	0.000	0.000
Commuter Prop	01RA1	Descend Taxi	0.000	0.000	0.000
Commuter Prop	01RA1	Full Flight	0.000	0.000	0.001
Commuter Prop	01RD1	Startup	-	-	-
Commuter Prop	01RD1	Climb Taxi	0.000	0.000	0.000
Commuter Prop	01RD1	Climb Ground	0.000	0.000	0.000
Commuter Prop	01RD1	Climb Below 1000	0.000	0.000	0.000
Commuter Prop	01RD1	Climb Below Mixing Height	0.000	0.000	0.000
Commuter Prop	01RD1	Climb Below 10000	0.000	0.000	0.001
Commuter Prop	01RD1	Above 10000	-	-	-
Commuter Prop	01RD1	Descend Below 10000	-	-	-
Commuter Prop	01RD1	Descend Below Mixing Height	-	-	-
Commuter Prop	01RD1	Descend Below 1000	-	-	-
Commuter Prop	01RD1	Descend Ground	-	-	-

Table A-2. Emissions from Aircraft (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

PROPOSED PROJECT - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Commuter Prop	01RD1	Descend Taxi	-	-	-
Commuter Prop	01RD1	Full Flight	0.000	0.000	0.001
Commuter Prop	19LA1	Startup	-	-	-
Commuter Prop	19LA1	Climb Taxi	-	-	-
Commuter Prop	19LA1	Climb Ground	-	-	-
Commuter Prop	19LA1	Climb Below 1000	-	-	-
Commuter Prop	19LA1	Climb Below Mixing Height	-	-	-
Commuter Prop	19LA1	Climb Below 10000	-	-	-
Commuter Prop	19LA1	Above 10000	-	-	-
Commuter Prop	19LA1	Descend Below 10000	0.003	0.005	0.012
Commuter Prop	19LA1	Descend Below Mixing Height	0.003	0.001	0.008
Commuter Prop	19LA1	Descend Below 1000	0.003	0.001	0.004
Commuter Prop	19LA1	Descend Ground	0.003	0.000	0.001
Commuter Prop	19LA1	Descend Taxi	0.003	0.000	0.001
Commuter Prop	19LA1	Full Flight	0.003	0.005	0.012
Commuter Prop	19LD1	Startup	-	-	-
Commuter Prop	19LD1	Climb Taxi	0.003	0.000	0.001
Commuter Prop	19LD1	Climb Ground	0.003	0.000	0.001
Commuter Prop	19LD1	Climb Below 1000	0.003	0.000	0.002
Commuter Prop	19LD1	Climb Below Mixing Height	0.003	0.001	0.003
Commuter Prop	19LD1	Climb Below 10000	0.003	0.005	0.008
Commuter Prop	19LD1	Above 10000	-	-	-
Commuter Prop	19LD1	Descend Below 10000	-	-	-
Commuter Prop	19LD1	Descend Below Mixing Height	-	-	-
Commuter Prop	19LD1	Descend Below 1000	-	-	-
Commuter Prop	19LD1	Descend Ground	-	-	-
Commuter Prop	19LD1	Descend Taxi	-	-	-
Commuter Prop	19LD1	Full Flight	0.003	0.005	0.008
Commuter Prop	19LD2	Startup	-	-	-
Commuter Prop	19LD2	Climb Taxi	0.003	0.000	0.001
Commuter Prop	19LD2	Climb Ground	0.003	0.000	0.001
Commuter Prop	19LD2	Climb Below 1000	0.003	0.000	0.002
Commuter Prop	19LD2	Climb Below Mixing Height	0.003	0.001	0.004
Commuter Prop	19LD2	Climb Below 10000	0.003	0.005	0.008
Commuter Prop	19LD2	Above 10000	-	-	-
Commuter Prop	19LD2	Descend Below 10000	-	-	-
Commuter Prop	19LD2	Descend Below Mixing Height	-	-	-
Commuter Prop	19LD2	Descend Below 1000	-	-	-
Commuter Prop	19LD2	Descend Ground	-	-	-
Commuter Prop	19LD2	Descend Taxi	-	-	-
Commuter Prop	19LD2	Full Flight	0.003	0.005	0.008
Commuter Prop	19RA1	Startup	-	-	-
Commuter Prop	19RA1	Climb Taxi	-	-	-
Commuter Prop	19RA1	Climb Ground	-	-	-
Commuter Prop	19RA1	Climb Below 1000	-	-	-
Commuter Prop	19RA1	Climb Below Mixing Height	-	-	-
Commuter Prop	19RA1	Climb Below 10000	-	-	-
Commuter Prop	19RA1	Above 10000	-	-	-
Commuter Prop	19RA1	Descend Below 10000	0.023	0.011	0.023
Commuter Prop	19RA1	Descend Below Mixing Height	0.022	0.003	0.015
Commuter Prop	19RA1	Descend Below 1000	0.022	0.002	0.008
Commuter Prop	19RA1	Descend Ground	0.022	0.001	0.003
Commuter Prop	19RA1	Descend Taxi	0.021	0.000	0.003
Commuter Prop	19RA1	Full Flight	0.023	0.011	0.023
Commuter Prop	19RA2	Startup	-	-	-
Commuter Prop	19RA2	Climb Taxi	-	-	-
Commuter Prop	19RA2	Climb Ground	-	-	-

Table A-2. Emissions from Aircraft (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

PROPOSED PROJECT - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Commuter Prop	19RA2	Climb Below 1000	-	-	-
Commuter Prop	19RA2	Climb Below Mixing Height	-	-	-
Commuter Prop	19RA2	Climb Below 10000	-	-	-
Commuter Prop	19RA2	Above 10000	-	-	-
Commuter Prop	19RA2	Descend Below 10000	0.030	0.014	0.031
Commuter Prop	19RA2	Descend Below Mixing Height	0.030	0.004	0.020
Commuter Prop	19RA2	Descend Below 1000	0.029	0.002	0.010
Commuter Prop	19RA2	Descend Ground	0.029	0.001	0.004
Commuter Prop	19RA2	Descend Taxi	0.029	0.001	0.003
Commuter Prop	19RA2	Full Flight	0.030	0.014	0.031
Commuter Prop	19RA3	Startup	-	-	-
Commuter Prop	19RA3	Climb Taxi	-	-	-
Commuter Prop	19RA3	Climb Ground	-	-	-
Commuter Prop	19RA3	Climb Below 1000	-	-	-
Commuter Prop	19RA3	Climb Below Mixing Height	-	-	-
Commuter Prop	19RA3	Climb Below 10000	-	-	-
Commuter Prop	19RA3	Above 10000	-	-	-
Commuter Prop	19RA3	Descend Below 10000	0.023	0.011	0.023
Commuter Prop	19RA3	Descend Below Mixing Height	0.022	0.003	0.015
Commuter Prop	19RA3	Descend Below 1000	0.022	0.002	0.008
Commuter Prop	19RA3	Descend Ground	0.022	0.001	0.003
Commuter Prop	19RA3	Descend Taxi	0.021	0.000	0.003
Commuter Prop	19RA3	Full Flight	0.023	0.011	0.023
Commuter Prop	19RA5	Startup	-	-	-
Commuter Prop	19RA5	Climb Taxi	-	-	-
Commuter Prop	19RA5	Climb Ground	-	-	-
Commuter Prop	19RA5	Climb Below 1000	-	-	-
Commuter Prop	19RA5	Climb Below Mixing Height	-	-	-
Commuter Prop	19RA5	Climb Below 10000	-	-	-
Commuter Prop	19RA5	Above 10000	-	-	-
Commuter Prop	19RA5	Descend Below 10000	0.265	0.123	0.271
Commuter Prop	19RA5	Descend Below Mixing Height	0.260	0.036	0.176
Commuter Prop	19RA5	Descend Below 1000	0.254	0.018	0.088
Commuter Prop	19RA5	Descend Ground	0.251	0.007	0.034
Commuter Prop	19RA5	Descend Taxi	0.251	0.006	0.030
Commuter Prop	19RA5	Full Flight	0.265	0.123	0.271
Commuter Prop	19RA6	Startup	-	-	-
Commuter Prop	19RA6	Climb Taxi	-	-	-
Commuter Prop	19RA6	Climb Ground	-	-	-
Commuter Prop	19RA6	Climb Below 1000	-	-	-
Commuter Prop	19RA6	Climb Below Mixing Height	-	-	-
Commuter Prop	19RA6	Climb Below 10000	-	-	-
Commuter Prop	19RA6	Above 10000	-	-	-
Commuter Prop	19RA6	Descend Below 10000	0.038	0.018	0.039
Commuter Prop	19RA6	Descend Below Mixing Height	0.037	0.005	0.025
Commuter Prop	19RA6	Descend Below 1000	0.036	0.003	0.013
Commuter Prop	19RA6	Descend Ground	0.036	0.001	0.005
Commuter Prop	19RA6	Descend Taxi	0.036	0.001	0.004
Commuter Prop	19RA6	Full Flight	0.038	0.018	0.039
Commuter Prop	19RD2	Startup	-	-	-
Commuter Prop	19RD2	Climb Taxi	0.524	0.006	0.023
Commuter Prop	19RD2	Climb Ground	0.524	0.008	0.028
Commuter Prop	19RD2	Climb Below 1000	0.524	0.012	0.038
Commuter Prop	19RD2	Climb Below Mixing Height	0.525	0.019	0.060
Commuter Prop	19RD2	Climb Below 10000	0.526	0.090	0.141
Commuter Prop	19RD2	Above 10000	-	-	-
Commuter Prop	19RD2	Descend Below 10000	-	-	-
Commuter Prop	19RD2	Descend Below Mixing Height	-	-	-

Table A-2. Emissions from Aircraft (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

PROPOSED PROJECT - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Commuter Prop	19RD2	Descend Below 1000	-	-	-
Commuter Prop	19RD2	Descend Ground	-	-	-
Commuter Prop	19RD2	Descend Taxi	-	-	-
Commuter Prop	19RD2	Full Flight	0.526	0.090	0.141
Commuter Prop	19RD3	Startup	-	-	-
Commuter Prop	19RD3	Climb Taxi	0.077	0.007	0.046
Commuter Prop	19RD3	Climb Ground	0.077	0.009	0.056
Commuter Prop	19RD3	Climb Below 1000	0.077	0.013	0.073
Commuter Prop	19RD3	Climb Below Mixing Height	0.078	0.024	0.119
Commuter Prop	19RD3	Climb Below 10000	0.080	0.147	0.263
Commuter Prop	19RD3	Above 10000	-	0.000	0.000
Commuter Prop	19RD3	Descend Below 10000	-	-	-
Commuter Prop	19RD3	Descend Below Mixing Height	-	-	-
Commuter Prop	19RD3	Descend Below 1000	-	-	-
Commuter Prop	19RD3	Descend Ground	-	-	-
Commuter Prop	19RD3	Descend Taxi	-	-	-
Commuter Prop	19RD3	Full Flight	0.080	0.147	0.263

Note:

[1] Emissions for each flight mode represent cumulative totals that include emissions from all modes below it. For example, Emissions for "Descend Below 10000" includes emissions from Descend Taxi, Descend Ground, descend Below 1000, Descend Below Mixing Height in addition to emissions between the mixing height and 10,000ft.

Abbreviations:

$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter

SO_X - oxides of sulfur

VOC - volatile organic compound

yr - year

Table A-3. Emissions from Aircraft (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

ALTERNATIVE 1 - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Business Jets	01LA1	Startup	-	-	-
Business Jets	01LA1	Climb Taxi	-	-	-
Business Jets	01LA1	Climb Ground	-	-	-
Business Jets	01LA1	Climb Below 1000	-	-	-
Business Jets	01LA1	Climb Below Mixing Height	-	-	-
Business Jets	01LA1	Climb Below 10000	-	-	-
Business Jets	01LA1	Above 10000	-	-	-
Business Jets	01LA1	Descend Below 10000	0.349	0.016	0.050
Business Jets	01LA1	Descend Below Mixing Height	0.278	0.007	0.040
Business Jets	01LA1	Descend Below 1000	0.198	0.005	0.028
Business Jets	01LA1	Descend Ground	0.165	0.002	0.019
Business Jets	01LA1	Descend Taxi	0.160	0.002	0.017
Business Jets	01LA1	Full Flight	0.349	0.016	0.050
Business Jets	01LA2	Startup	-	-	-
Business Jets	01LA2	Climb Taxi	-	-	-
Business Jets	01LA2	Climb Ground	-	-	-
Business Jets	01LA2	Climb Below 1000	-	-	-
Business Jets	01LA2	Climb Below Mixing Height	-	-	-
Business Jets	01LA2	Climb Below 10000	-	-	-
Business Jets	01LA2	Above 10000	-	-	-
Business Jets	01LA2	Descend Below 10000	0.116	0.006	0.017
Business Jets	01LA2	Descend Below Mixing Height	0.093	0.003	0.013
Business Jets	01LA2	Descend Below 1000	0.066	0.002	0.009
Business Jets	01LA2	Descend Ground	0.055	0.001	0.006
Business Jets	01LA2	Descend Taxi	0.053	0.001	0.006
Business Jets	01LA2	Full Flight	0.116	0.006	0.017
Business Jets	01LD1	Startup	0.144	-	-
Business Jets	01LD1	Climb Taxi	0.499	0.005	0.048
Business Jets	01LD1	Climb Ground	0.649	0.009	0.063
Business Jets	01LD1	Climb Below 1000	0.652	0.012	0.071
Business Jets	01LD1	Climb Below Mixing Height	0.664	0.017	0.100
Business Jets	01LD1	Climb Below 10000	0.698	0.083	0.177
Business Jets	01LD1	Above 10000	0.000	0.000	0.000
Business Jets	01LD1	Descend Below 10000	-	-	-
Business Jets	01LD1	Descend Below Mixing Height	-	-	-
Business Jets	01LD1	Descend Below 1000	-	-	-
Business Jets	01LD1	Descend Ground	-	-	-
Business Jets	01LD1	Descend Taxi	-	-	-
Business Jets	01LD1	Full Flight	0.698	0.083	0.178
Business Jets	19RA1	Startup	-	-	-
Business Jets	19RA1	Climb Taxi	-	-	-
Business Jets	19RA1	Climb Ground	-	-	-
Business Jets	19RA1	Climb Below 1000	-	-	-
Business Jets	19RA1	Climb Below Mixing Height	-	-	-
Business Jets	19RA1	Climb Below 10000	-	-	-
Business Jets	19RA1	Above 10000	-	-	-
Business Jets	19RA1	Descend Below 10000	1.067	0.051	0.156
Business Jets	19RA1	Descend Below Mixing Height	0.851	0.023	0.125
Business Jets	19RA1	Descend Below 1000	0.609	0.014	0.087
Business Jets	19RA1	Descend Ground	0.516	0.007	0.057
Business Jets	19RA1	Descend Taxi	0.502	0.006	0.051
Business Jets	19RA1	Full Flight	1.067	0.051	0.156
Business Jets	19RA2	Startup	-	-	-
Business Jets	19RA2	Climb Taxi	-	-	-
Business Jets	19RA2	Climb Ground	-	-	-
Business Jets	19RA2	Climb Below 1000	-	-	-
Business Jets	19RA2	Climb Below Mixing Height	-	-	-
Business Jets	19RA2	Climb Below 10000	-	-	-
Business Jets	19RA2	Above 10000	-	-	-
Business Jets	19RA2	Descend Below 10000	1.423	0.068	0.208
Business Jets	19RA2	Descend Below Mixing Height	1.136	0.030	0.167
Business Jets	19RA2	Descend Below 1000	0.813	0.019	0.116
Business Jets	19RA2	Descend Ground	0.688	0.009	0.076
Business Jets	19RA2	Descend Taxi	0.669	0.007	0.068
Business Jets	19RA2	Full Flight	1.423	0.068	0.208
Business Jets	19RA3	Startup	-	-	-
Business Jets	19RA3	Climb Taxi	-	-	-
Business Jets	19RA3	Climb Ground	-	-	-
Business Jets	19RA3	Climb Below 1000	-	-	-
Business Jets	19RA3	Climb Below Mixing Height	-	-	-
Business Jets	19RA3	Climb Below 10000	-	-	-

Table A-3. Emissions from Aircraft (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

ALTERNATIVE 1 - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Business Jets	19RA3	Above 10000	-	-	-
Business Jets	19RA3	Descend Below 10000	1.067	0.051	0.155
Business Jets	19RA3	Descend Below Mixing Height	0.851	0.023	0.125
Business Jets	19RA3	Descend Below 1000	0.609	0.014	0.087
Business Jets	19RA3	Descend Ground	0.516	0.007	0.057
Business Jets	19RA3	Descend Taxi	0.502	0.006	0.051
Business Jets	19RA3	Full Flight	1.067	0.051	0.155
Business Jets	19RA5	Startup	-	-	-
Business Jets	19RA5	Climb Taxi	-	-	-
Business Jets	19RA5	Climb Ground	-	-	-
Business Jets	19RA5	Climb Below 1000	-	-	-
Business Jets	19RA5	Climb Below Mixing Height	-	-	-
Business Jets	19RA5	Climb Below 10000	-	-	-
Business Jets	19RA5	Above 10000	-	-	-
Business Jets	19RA5	Descend Below 10000	12.452	0.590	1.807
Business Jets	19RA5	Descend Below Mixing Height	9.936	0.263	1.450
Business Jets	19RA5	Descend Below 1000	7.110	0.163	1.016
Business Jets	19RA5	Descend Ground	6.023	0.081	0.661
Business Jets	19RA5	Descend Taxi	5.855	0.066	0.599
Business Jets	19RA5	Full Flight	12.452	0.590	1.807
Business Jets	19RA6	Startup	-	-	-
Business Jets	19RA6	Climb Taxi	-	-	-
Business Jets	19RA6	Climb Ground	-	-	-
Business Jets	19RA6	Climb Below 1000	-	-	-
Business Jets	19RA6	Climb Below Mixing Height	-	-	-
Business Jets	19RA6	Climb Below 10000	-	-	-
Business Jets	19RA6	Above 10000	-	-	-
Business Jets	19RA6	Descend Below 10000	1.779	0.084	0.258
Business Jets	19RA6	Descend Below Mixing Height	1.419	0.038	0.207
Business Jets	19RA6	Descend Below 1000	1.015	0.023	0.145
Business Jets	19RA6	Descend Ground	0.860	0.012	0.094
Business Jets	19RA6	Descend Taxi	0.836	0.009	0.086
Business Jets	19RA6	Full Flight	1.779	0.084	0.258
Business Jets	19RD2	Startup	4.101	-	-
Business Jets	19RD2	Climb Taxi	13.891	0.156	1.426
Business Jets	19RD2	Climb Ground	18.176	0.278	1.899
Business Jets	19RD2	Climb Below 1000	18.297	0.352	2.209
Business Jets	19RD2	Climb Below Mixing Height	18.596	0.509	3.028
Business Jets	19RD2	Climb Below 10000	19.539	2.562	5.405
Business Jets	19RD2	Above 10000	-	-	-
Business Jets	19RD2	Descend Below 10000	-	-	-
Business Jets	19RD2	Descend Below Mixing Height	-	-	-
Business Jets	19RD2	Descend Below 1000	-	-	-
Business Jets	19RD2	Descend Ground	-	-	-
Business Jets	19RD2	Descend Taxi	-	-	-
Business Jets	19RD2	Full Flight	19.539	2.562	5.405
Helicopter	H1A1	Startup	-	-	-
Helicopter	H1A1	Climb Taxi	-	-	-
Helicopter	H1A1	Climb Ground	-	-	-
Helicopter	H1A1	Climb Below 1000	-	-	-
Helicopter	H1A1	Climb Below Mixing Height	-	-	-
Helicopter	H1A1	Climb Below 10000	-	-	-
Helicopter	H1A1	Above 10000	-	-	-
Helicopter	H1A1	Descend Below 10000	0.116	-	0.011
Helicopter	H1A1	Descend Below Mixing Height	0.116	-	0.011
Helicopter	H1A1	Descend Below 1000	0.116	-	0.011
Helicopter	H1A1	Descend Ground	0.010	-	0.001
Helicopter	H1A1	Descend Taxi	-	-	-
Helicopter	H1A1	Full Flight	0.116	-	0.011
Helicopter	H1A2	Startup	-	-	-
Helicopter	H1A2	Climb Taxi	-	-	-
Helicopter	H1A2	Climb Ground	-	-	-
Helicopter	H1A2	Climb Below 1000	-	-	-
Helicopter	H1A2	Climb Below Mixing Height	-	-	-
Helicopter	H1A2	Climb Below 10000	-	-	-
Helicopter	H1A2	Above 10000	-	-	-
Helicopter	H1A2	Descend Below 10000	0.116	-	0.011
Helicopter	H1A2	Descend Below Mixing Height	0.116	-	0.011
Helicopter	H1A2	Descend Below 1000	0.116	-	0.011
Helicopter	H1A2	Descend Ground	0.010	-	0.001
Helicopter	H1A2	Descend Taxi	-	-	-

Table A-3. Emissions from Aircraft (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

ALTERNATIVE 1 - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Helicopter	H1A2	Full Flight	0.116	-	0.011
Helicopter	H1D1	Startup	-	-	-
Helicopter	H1D1	Climb Taxi	-	-	-
Helicopter	H1D1	Climb Ground	0.010	-	0.001
Helicopter	H1D1	Climb Below 1000	0.108	-	0.010
Helicopter	H1D1	Climb Below Mixing Height	0.108	-	0.010
Helicopter	H1D1	Climb Below 10000	0.108	-	0.010
Helicopter	H1D1	Above 10000	-	-	-
Helicopter	H1D1	Descend Below 10000	-	-	-
Helicopter	H1D1	Descend Below Mixing Height	-	-	-
Helicopter	H1D1	Descend Below 1000	-	-	-
Helicopter	H1D1	Descend Ground	-	-	-
Helicopter	H1D1	Descend Taxi	-	-	-
Helicopter	H1D1	Full Flight	0.108	-	0.010
Helicopter	H1D2	Startup	-	-	-
Helicopter	H1D2	Climb Taxi	-	-	-
Helicopter	H1D2	Climb Ground	0.010	-	0.001
Helicopter	H1D2	Climb Below 1000	0.109	-	0.010
Helicopter	H1D2	Climb Below Mixing Height	0.109	-	0.010
Helicopter	H1D2	Climb Below 10000	0.109	-	0.010
Helicopter	H1D2	Above 10000	-	-	-
Helicopter	H1D2	Descend Below 10000	-	-	-
Helicopter	H1D2	Descend Below Mixing Height	-	-	-
Helicopter	H1D2	Descend Below 1000	-	-	-
Helicopter	H1D2	Descend Ground	-	-	-
Helicopter	H1D2	Descend Taxi	-	-	-
Helicopter	H1D2	Full Flight	0.109	-	0.010
Helicopter	H2A1	Startup	-	-	-
Helicopter	H2A1	Climb Taxi	-	-	-
Helicopter	H2A1	Climb Ground	-	-	-
Helicopter	H2A1	Climb Below 1000	-	-	-
Helicopter	H2A1	Climb Below Mixing Height	-	-	-
Helicopter	H2A1	Climb Below 10000	-	-	-
Helicopter	H2A1	Above 10000	-	-	-
Helicopter	H2A1	Descend Below 10000	0.116	-	0.011
Helicopter	H2A1	Descend Below Mixing Height	0.116	-	0.011
Helicopter	H2A1	Descend Below 1000	0.116	-	0.011
Helicopter	H2A1	Descend Ground	0.010	-	0.001
Helicopter	H2A1	Descend Taxi	-	-	-
Helicopter	H2A1	Full Flight	0.116	-	0.011
Helicopter	H2A2	Startup	-	-	-
Helicopter	H2A2	Climb Taxi	-	-	-
Helicopter	H2A2	Climb Ground	-	-	-
Helicopter	H2A2	Climb Below 1000	-	-	-
Helicopter	H2A2	Climb Below Mixing Height	-	-	-
Helicopter	H2A2	Climb Below 10000	-	-	-
Helicopter	H2A2	Above 10000	-	-	-
Helicopter	H2A2	Descend Below 10000	0.117	-	0.011
Helicopter	H2A2	Descend Below Mixing Height	0.117	-	0.011
Helicopter	H2A2	Descend Below 1000	0.117	-	0.011
Helicopter	H2A2	Descend Ground	0.010	-	0.001
Helicopter	H2A2	Descend Taxi	-	-	-
Helicopter	H2A2	Full Flight	0.117	-	0.011
Helicopter	H2D1	Startup	-	-	-
Helicopter	H2D1	Climb Taxi	-	-	-
Helicopter	H2D1	Climb Ground	0.010	-	0.001
Helicopter	H2D1	Climb Below 1000	0.109	-	0.010
Helicopter	H2D1	Climb Below Mixing Height	0.109	-	0.010
Helicopter	H2D1	Climb Below 10000	0.109	-	0.010
Helicopter	H2D1	Above 10000	-	-	-
Helicopter	H2D1	Descend Below 10000	-	-	-
Helicopter	H2D1	Descend Below Mixing Height	-	-	-
Helicopter	H2D1	Descend Below 1000	-	-	-
Helicopter	H2D1	Descend Ground	-	-	-
Helicopter	H2D1	Descend Taxi	-	-	-
Helicopter	H2D1	Full Flight	0.109	-	0.010
Helicopter	H2D2	Startup	-	-	-
Helicopter	H2D2	Climb Taxi	-	-	-
Helicopter	H2D2	Climb Ground	0.010	-	0.001
Helicopter	H2D2	Climb Below 1000	0.108	-	0.010

Table A-3. Emissions from Aircraft (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

ALTERNATIVE 1 - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Helicopter	H2D2	Climb Below Mixing Height	0.108	-	0.010
Helicopter	H2D2	Climb Below 10000	0.108	-	0.010
Helicopter	H2D2	Above 10000	-	-	-
Helicopter	H2D2	Descend Below 10000	-	-	-
Helicopter	H2D2	Descend Below Mixing Height	-	-	-
Helicopter	H2D2	Descend Below 1000	-	-	-
Helicopter	H2D2	Descend Ground	-	-	-
Helicopter	H2D2	Descend Taxi	-	-	-
Helicopter	H2D2	Full Flight	0.108	-	0.010
Helicopter	H4A1	Startup	-	-	-
Helicopter	H4A1	Climb Taxi	-	-	-
Helicopter	H4A1	Climb Ground	-	-	-
Helicopter	H4A1	Climb Below 1000	-	-	-
Helicopter	H4A1	Climb Below Mixing Height	-	-	-
Helicopter	H4A1	Climb Below 10000	-	-	-
Helicopter	H4A1	Above 10000	-	-	-
Helicopter	H4A1	Descend Below 10000	0.001	-	0.006
Helicopter	H4A1	Descend Below Mixing Height	0.001	-	0.006
Helicopter	H4A1	Descend Below 1000	0.001	-	0.006
Helicopter	H4A1	Descend Ground	0.000	-	0.001
Helicopter	H4A1	Descend Taxi	-	-	-
Helicopter	H4A1	Full Flight	0.001	-	0.006
Helicopter	H4A2	Startup	-	-	-
Helicopter	H4A2	Climb Taxi	-	-	-
Helicopter	H4A2	Climb Ground	-	-	-
Helicopter	H4A2	Climb Below 1000	-	-	-
Helicopter	H4A2	Climb Below Mixing Height	-	-	-
Helicopter	H4A2	Climb Below 10000	-	-	-
Helicopter	H4A2	Above 10000	-	-	-
Helicopter	H4A2	Descend Below 10000	0.001	-	0.006
Helicopter	H4A2	Descend Below Mixing Height	0.001	-	0.006
Helicopter	H4A2	Descend Below 1000	0.001	-	0.006
Helicopter	H4A2	Descend Ground	0.000	-	0.001
Helicopter	H4A2	Descend Taxi	-	-	-
Helicopter	H4A2	Full Flight	0.001	-	0.006
Helicopter	H4A3	Startup	-	-	-
Helicopter	H4A3	Climb Taxi	-	-	-
Helicopter	H4A3	Climb Ground	-	-	-
Helicopter	H4A3	Climb Below 1000	-	-	-
Helicopter	H4A3	Climb Below Mixing Height	-	-	-
Helicopter	H4A3	Climb Below 10000	-	-	-
Helicopter	H4A3	Above 10000	-	-	-
Helicopter	H4A3	Descend Below 10000	0.001	-	0.006
Helicopter	H4A3	Descend Below Mixing Height	0.001	-	0.006
Helicopter	H4A3	Descend Below 1000	0.001	-	0.006
Helicopter	H4A3	Descend Ground	0.000	-	0.001
Helicopter	H4A3	Descend Taxi	-	-	-
Helicopter	H4A3	Full Flight	0.001	-	0.006
Helicopter	H4A4	Startup	-	-	-
Helicopter	H4A4	Climb Taxi	-	-	-
Helicopter	H4A4	Climb Ground	-	-	-
Helicopter	H4A4	Climb Below 1000	-	-	-
Helicopter	H4A4	Climb Below Mixing Height	-	-	-
Helicopter	H4A4	Climb Below 10000	-	-	-
Helicopter	H4A4	Above 10000	-	-	-
Helicopter	H4A4	Descend Below 10000	0.001	-	0.006
Helicopter	H4A4	Descend Below Mixing Height	0.001	-	0.006
Helicopter	H4A4	Descend Below 1000	0.001	-	0.006
Helicopter	H4A4	Descend Ground	0.000	-	0.001
Helicopter	H4A4	Descend Taxi	-	-	-
Helicopter	H4A4	Full Flight	0.001	-	0.006
Helicopter	H4D1	Startup	-	-	-
Helicopter	H4D1	Climb Taxi	-	-	-
Helicopter	H4D1	Climb Ground	0.000	-	0.001
Helicopter	H4D1	Climb Below 1000	0.001	-	0.011
Helicopter	H4D1	Climb Below Mixing Height	0.001	-	0.011
Helicopter	H4D1	Climb Below 10000	0.001	-	0.011
Helicopter	H4D1	Above 10000	-	-	-
Helicopter	H4D1	Descend Below 10000	-	-	-
Helicopter	H4D1	Descend Below Mixing Height	-	-	-

Table A-3. Emissions from Aircraft (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

ALTERNATIVE 1 - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Helicopter	H4D1	Descend Below 1000	-	-	-
Helicopter	H4D1	Descend Ground	-	-	-
Helicopter	H4D1	Descend Taxi	-	-	-
Helicopter	H4D1	Full Flight	0.001	-	0.011
Helicopter	H4D2	Startup	-	-	-
Helicopter	H4D2	Climb Taxi	-	-	-
Helicopter	H4D2	Climb Ground	0.000	-	0.001
Helicopter	H4D2	Climb Below 1000	0.001	-	0.011
Helicopter	H4D2	Climb Below Mixing Height	0.001	-	0.011
Helicopter	H4D2	Climb Below 10000	0.001	-	0.011
Helicopter	H4D2	Above 10000	-	-	-
Helicopter	H4D2	Descend Below 10000	-	-	-
Helicopter	H4D2	Descend Below Mixing Height	-	-	-
Helicopter	H4D2	Descend Below 1000	-	-	-
Helicopter	H4D2	Descend Ground	-	-	-
Helicopter	H4D2	Descend Taxi	-	-	-
Helicopter	H4D2	Full Flight	0.001	-	0.011
GA Prop	01LA1	Startup	-	-	-
GA Prop	01LA1	Climb Taxi	-	-	-
GA Prop	01LA1	Climb Ground	-	-	-
GA Prop	01LA1	Climb Below 1000	-	-	-
GA Prop	01LA1	Climb Below Mixing Height	-	-	-
GA Prop	01LA1	Climb Below 10000	-	-	-
GA Prop	01LA1	Above 10000	-	-	-
GA Prop	01LA1	Descend Below 10000	0.017	0.001	0.001
GA Prop	01LA1	Descend Below Mixing Height	0.011	0.001	0.001
GA Prop	01LA1	Descend Below 1000	0.006	0.000	0.000
GA Prop	01LA1	Descend Ground	0.003	0.000	0.000
GA Prop	01LA1	Descend Taxi	0.003	0.000	0.000
GA Prop	01LA1	Full Flight	0.017	0.001	0.001
GA Prop	01LA2	Startup	-	-	-
GA Prop	01LA2	Climb Taxi	-	-	-
GA Prop	01LA2	Climb Ground	-	-	-
GA Prop	01LA2	Climb Below 1000	-	-	-
GA Prop	01LA2	Climb Below Mixing Height	-	-	-
GA Prop	01LA2	Climb Below 10000	-	-	-
GA Prop	01LA2	Above 10000	-	-	-
GA Prop	01LA2	Descend Below 10000	0.006	0.000	0.000
GA Prop	01LA2	Descend Below Mixing Height	0.004	0.000	0.000
GA Prop	01LA2	Descend Below 1000	0.002	0.000	0.000
GA Prop	01LA2	Descend Ground	0.001	0.000	0.000
GA Prop	01LA2	Descend Taxi	0.001	0.000	0.000
GA Prop	01LA2	Full Flight	0.006	0.000	0.000
GA Prop	01LD1	Startup	-	-	-
GA Prop	01LD1	Climb Taxi	0.024	0.000	0.000
GA Prop	01LD1	Climb Ground	0.025	0.000	0.001
GA Prop	01LD1	Climb Below 1000	0.030	0.001	0.001
GA Prop	01LD1	Climb Below Mixing Height	0.040	0.002	0.002
GA Prop	01LD1	Climb Below 10000	0.084	0.006	0.007
GA Prop	01LD1	Above 10000	-	-	-
GA Prop	01LD1	Descend Below 10000	-	-	-
GA Prop	01LD1	Descend Below Mixing Height	-	-	-
GA Prop	01LD1	Descend Below 1000	-	-	-
GA Prop	01LD1	Descend Ground	-	-	-
GA Prop	01LD1	Descend Taxi	-	-	-
GA Prop	01LD1	Full Flight	0.084	0.006	0.007
GA Prop	01RA1	Startup	-	-	-
GA Prop	01RA1	Climb Taxi	-	-	-
GA Prop	01RA1	Climb Ground	-	-	-
GA Prop	01RA1	Climb Below 1000	-	-	-
GA Prop	01RA1	Climb Below Mixing Height	-	-	-
GA Prop	01RA1	Climb Below 10000	-	-	-
GA Prop	01RA1	Above 10000	-	-	-
GA Prop	01RA1	Descend Below 10000	0.025	0.002	0.002
GA Prop	01RA1	Descend Below Mixing Height	0.017	0.001	0.001
GA Prop	01RA1	Descend Below 1000	0.009	0.000	0.001
GA Prop	01RA1	Descend Ground	0.005	0.000	0.000
GA Prop	01RA1	Descend Taxi	0.005	0.000	0.000
GA Prop	01RA1	Full Flight	0.025	0.002	0.002
GA Prop	01RD1	Startup	-	-	-

Table A-3. Emissions from Aircraft (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

ALTERNATIVE 1 - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
GA Prop	01RD1	Climb Taxi	0.005	0.000	0.000
GA Prop	01RD1	Climb Ground	0.006	0.000	0.000
GA Prop	01RD1	Climb Below 1000	0.007	0.000	0.000
GA Prop	01RD1	Climb Below Mixing Height	0.010	0.000	0.001
GA Prop	01RD1	Climb Below 10000	0.021	0.002	0.002
GA Prop	01RD1	Above 10000	-	-	-
GA Prop	01RD1	Descend Below 10000	-	-	-
GA Prop	01RD1	Descend Below Mixing Height	-	-	-
GA Prop	01RD1	Descend Below 1000	-	-	-
GA Prop	01RD1	Descend Ground	-	-	-
GA Prop	01RD1	Descend Taxi	-	-	-
GA Prop	01RD1	Full Flight	0.021	0.002	0.002
GA Prop	19LA1	Startup	-	-	-
GA Prop	19LA1	Climb Taxi	-	-	-
GA Prop	19LA1	Climb Ground	-	-	-
GA Prop	19LA1	Climb Below 1000	-	-	-
GA Prop	19LA1	Climb Below Mixing Height	-	-	-
GA Prop	19LA1	Climb Below 10000	-	-	-
GA Prop	19LA1	Above 10000	-	-	-
GA Prop	19LA1	Descend Below 10000	1.127	0.076	0.105
GA Prop	19LA1	Descend Below Mixing Height	0.751	0.038	0.064
GA Prop	19LA1	Descend Below 1000	0.419	0.015	0.026
GA Prop	19LA1	Descend Ground	0.238	0.002	0.006
GA Prop	19LA1	Descend Taxi	0.229	0.002	0.005
GA Prop	19LA1	Full Flight	1.127	0.076	0.105
GA Prop	19LD1	Startup	-	-	-
GA Prop	19LD1	Climb Taxi	0.191	0.002	0.004
GA Prop	19LD1	Climb Ground	0.201	0.003	0.005
GA Prop	19LD1	Climb Below 1000	0.243	0.008	0.010
GA Prop	19LD1	Climb Below Mixing Height	0.348	0.017	0.022
GA Prop	19LD1	Climb Below 10000	0.753	0.057	0.067
GA Prop	19LD1	Above 10000	-	-	-
GA Prop	19LD1	Descend Below 10000	-	-	-
GA Prop	19LD1	Descend Below Mixing Height	-	-	-
GA Prop	19LD1	Descend Below 1000	-	-	-
GA Prop	19LD1	Descend Ground	-	-	-
GA Prop	19LD1	Descend Taxi	-	-	-
GA Prop	19LD1	Full Flight	0.753	0.057	0.067
GA Prop	19LD2	Startup	-	-	-
GA Prop	19LD2	Climb Taxi	0.191	0.002	0.004
GA Prop	19LD2	Climb Ground	0.201	0.003	0.005
GA Prop	19LD2	Climb Below 1000	0.244	0.008	0.010
GA Prop	19LD2	Climb Below Mixing Height	0.348	0.017	0.022
GA Prop	19LD2	Climb Below 10000	0.753	0.057	0.067
GA Prop	19LD2	Above 10000	-	-	-
GA Prop	19LD2	Descend Below 10000	-	-	-
GA Prop	19LD2	Descend Below Mixing Height	-	-	-
GA Prop	19LD2	Descend Below 1000	-	-	-
GA Prop	19LD2	Descend Ground	-	-	-
GA Prop	19LD2	Descend Taxi	-	-	-
GA Prop	19LD2	Full Flight	0.753	0.057	0.067
GA Prop	19RA1	Startup	-	-	-
GA Prop	19RA1	Climb Taxi	-	-	-
GA Prop	19RA1	Climb Ground	-	-	-
GA Prop	19RA1	Climb Below 1000	-	-	-
GA Prop	19RA1	Climb Below Mixing Height	-	-	-
GA Prop	19RA1	Climb Below 10000	-	-	-
GA Prop	19RA1	Above 10000	-	-	-
GA Prop	19RA1	Descend Below 10000	0.080	0.005	0.007
GA Prop	19RA1	Descend Below Mixing Height	0.053	0.003	0.004
GA Prop	19RA1	Descend Below 1000	0.030	0.001	0.002
GA Prop	19RA1	Descend Ground	0.017	0.000	0.000
GA Prop	19RA1	Descend Taxi	0.016	0.000	0.000
GA Prop	19RA1	Full Flight	0.080	0.005	0.007
GA Prop	19RA2	Startup	-	-	-
GA Prop	19RA2	Climb Taxi	-	-	-
GA Prop	19RA2	Climb Ground	-	-	-
GA Prop	19RA2	Climb Below 1000	-	-	-
GA Prop	19RA2	Climb Below Mixing Height	-	-	-
GA Prop	19RA2	Climb Below 10000	-	-	-

Table A-3. Emissions from Aircraft (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

ALTERNATIVE 1 - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
GA Prop	19RA2	Above 10000	-	-	-
GA Prop	19RA2	Descend Below 10000	0.107	0.007	0.009
GA Prop	19RA2	Descend Below Mixing Height	0.071	0.003	0.006
GA Prop	19RA2	Descend Below 1000	0.040	0.001	0.002
GA Prop	19RA2	Descend Ground	0.022	0.000	0.001
GA Prop	19RA2	Descend Taxi	0.021	0.000	0.000
GA Prop	19RA2	Full Flight	0.107	0.007	0.009
GA Prop	19RA3	Startup	-	-	-
GA Prop	19RA3	Climb Taxi	-	-	-
GA Prop	19RA3	Climb Ground	-	-	-
GA Prop	19RA3	Climb Below 1000	-	-	-
GA Prop	19RA3	Climb Below Mixing Height	-	-	-
GA Prop	19RA3	Climb Below 10000	-	-	-
GA Prop	19RA3	Above 10000	-	-	-
GA Prop	19RA3	Descend Below 10000	0.080	0.005	0.007
GA Prop	19RA3	Descend Below Mixing Height	0.053	0.003	0.004
GA Prop	19RA3	Descend Below 1000	0.030	0.001	0.002
GA Prop	19RA3	Descend Ground	0.017	0.000	0.000
GA Prop	19RA3	Descend Taxi	0.016	0.000	0.000
GA Prop	19RA3	Full Flight	0.080	0.005	0.007
GA Prop	19RA5	Startup	-	-	-
GA Prop	19RA5	Climb Taxi	-	-	-
GA Prop	19RA5	Climb Ground	-	-	-
GA Prop	19RA5	Climb Below 1000	-	-	-
GA Prop	19RA5	Climb Below Mixing Height	-	-	-
GA Prop	19RA5	Climb Below 10000	-	-	-
GA Prop	19RA5	Above 10000	-	-	-
GA Prop	19RA5	Descend Below 10000	0.939	0.060	0.082
GA Prop	19RA5	Descend Below Mixing Height	0.622	0.030	0.050
GA Prop	19RA5	Descend Below 1000	0.346	0.012	0.021
GA Prop	19RA5	Descend Ground	0.195	0.002	0.005
GA Prop	19RA5	Descend Taxi	0.186	0.001	0.004
GA Prop	19RA5	Full Flight	0.939	0.060	0.082
GA Prop	19RA6	Startup	-	-	-
GA Prop	19RA6	Climb Taxi	-	-	-
GA Prop	19RA6	Climb Ground	-	-	-
GA Prop	19RA6	Climb Below 1000	-	-	-
GA Prop	19RA6	Climb Below Mixing Height	-	-	-
GA Prop	19RA6	Climb Below 10000	-	-	-
GA Prop	19RA6	Above 10000	-	-	-
GA Prop	19RA6	Descend Below 10000	0.134	0.009	0.012
GA Prop	19RA6	Descend Below Mixing Height	0.089	0.004	0.007
GA Prop	19RA6	Descend Below 1000	0.049	0.002	0.003
GA Prop	19RA6	Descend Ground	0.028	0.000	0.001
GA Prop	19RA6	Descend Taxi	0.027	0.000	0.001
GA Prop	19RA6	Full Flight	0.134	0.009	0.012
GA Prop	19RD3	Startup	-	-	-
GA Prop	19RD3	Climb Taxi	0.434	0.003	0.009
GA Prop	19RD3	Climb Ground	0.459	0.006	0.012
GA Prop	19RD3	Climb Below 1000	0.552	0.019	0.023
GA Prop	19RD3	Climb Below Mixing Height	0.779	0.038	0.048
GA Prop	19RD3	Climb Below 10000	1.750	0.132	0.153
GA Prop	19RD3	Above 10000	-	-	-
GA Prop	19RD3	Descend Below 10000	-	-	-
GA Prop	19RD3	Descend Below Mixing Height	-	-	-
GA Prop	19RD3	Descend Below 1000	-	-	-
GA Prop	19RD3	Descend Ground	-	-	-
GA Prop	19RD3	Descend Taxi	-	-	-
GA Prop	19RD3	Full Flight	1.750	0.132	0.153
GA Prop	19LT1	Startup	-	-	-
GA Prop	19LT1	Climb Taxi	-	-	-
GA Prop	19LT1	Climb Ground	0.007	0.001	0.001
GA Prop	19LT1	Climb Below 1000	0.500	0.058	0.064
GA Prop	19LT1	Climb Below Mixing Height	0.500	0.058	0.064
GA Prop	19LT1	Climb Below 10000	0.500	0.058	0.064
GA Prop	19LT1	Above 10000	-	-	-

Table A-3. Emissions from Aircraft (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

ALTERNATIVE 1 - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
GA Prop	19LT1	Descend Below 10000	0.535	0.025	0.046
GA Prop	19LT1	Descend Below Mixing Height	0.535	0.025	0.046
GA Prop	19LT1	Descend Below 1000	0.535	0.025	0.046
GA Prop	19LT1	Descend Ground	-	-	-
GA Prop	19LT1	Descend Taxi	0.251	0.002	0.009
GA Prop	19LT1	Full Flight	1.036	0.083	0.110
GA Prop	01RT1	Startup	-	-	-
GA Prop	01RT1	Climb Taxi	-	-	-
GA Prop	01RT1	Climb Ground	0.000	0.000	0.000
GA Prop	01RT1	Climb Below 1000	0.010	0.001	0.001
GA Prop	01RT1	Climb Below Mixing Height	0.010	0.001	0.001
GA Prop	01RT1	Climb Below 10000	0.010	0.001	0.001
GA Prop	01RT1	Above 10000	-	-	-
GA Prop	01RT1	Descend Below 10000	0.011	0.001	0.001
GA Prop	01RT1	Descend Below Mixing Height	0.011	0.001	0.001
GA Prop	01RT1	Descend Below 1000	0.011	0.001	0.001
GA Prop	01RT1	Descend Ground	-	-	-
GA Prop	01RT1	Descend Taxi	0.005	0.000	0.000
GA Prop	01RT1	Full Flight	0.021	0.002	0.002
Commuter Prop	01LA1	Startup	-	-	-
Commuter Prop	01LA1	Climb Taxi	-	-	-
Commuter Prop	01LA1	Climb Ground	-	-	-
Commuter Prop	01LA1	Climb Below 1000	-	-	-
Commuter Prop	01LA1	Climb Below Mixing Height	-	-	-
Commuter Prop	01LA1	Climb Below 10000	-	-	-
Commuter Prop	01LA1	Above 10000	-	-	-
Commuter Prop	01LA1	Descend Below 10000	0.012	0.003	0.007
Commuter Prop	01LA1	Descend Below Mixing Height	0.011	0.001	0.005
Commuter Prop	01LA1	Descend Below 1000	0.011	0.001	0.002
Commuter Prop	01LA1	Descend Ground	0.011	0.000	0.001
Commuter Prop	01LA1	Descend Taxi	0.011	0.000	0.001
Commuter Prop	01LA1	Full Flight	0.012	0.003	0.007
Commuter Prop	01LA2	Startup	-	-	-
Commuter Prop	01LA2	Climb Taxi	-	-	-
Commuter Prop	01LA2	Climb Ground	-	-	-
Commuter Prop	01LA2	Climb Below 1000	-	-	-
Commuter Prop	01LA2	Climb Below Mixing Height	-	-	-
Commuter Prop	01LA2	Climb Below 10000	-	-	-
Commuter Prop	01LA2	Above 10000	-	-	-
Commuter Prop	01LA2	Descend Below 10000	0.004	0.001	0.002
Commuter Prop	01LA2	Descend Below Mixing Height	0.004	0.000	0.002
Commuter Prop	01LA2	Descend Below 1000	0.004	0.000	0.001
Commuter Prop	01LA2	Descend Ground	0.004	0.000	0.000
Commuter Prop	01LA2	Descend Taxi	0.004	0.000	0.000
Commuter Prop	01LA2	Full Flight	0.004	0.001	0.002
Commuter Prop	01LD1	Startup	-	-	-
Commuter Prop	01LD1	Climb Taxi	0.024	0.001	0.004
Commuter Prop	01LD1	Climb Ground	0.024	0.001	0.005
Commuter Prop	01LD1	Climb Below 1000	0.024	0.001	0.006
Commuter Prop	01LD1	Climb Below Mixing Height	0.024	0.002	0.010
Commuter Prop	01LD1	Climb Below 10000	0.025	0.012	0.022
Commuter Prop	01LD1	Above 10000	-	-	-
Commuter Prop	01LD1	Descend Below 10000	-	-	-
Commuter Prop	01LD1	Descend Below Mixing Height	-	-	-
Commuter Prop	01LD1	Descend Below 1000	-	-	-
Commuter Prop	01LD1	Descend Ground	-	-	-
Commuter Prop	01LD1	Descend Taxi	-	-	-
Commuter Prop	01LD1	Full Flight	0.025	0.012	0.022
Commuter Prop	01RA1	Startup	-	-	-
Commuter Prop	01RA1	Climb Taxi	-	-	-
Commuter Prop	01RA1	Climb Ground	-	-	-
Commuter Prop	01RA1	Climb Below 1000	-	-	-
Commuter Prop	01RA1	Climb Below Mixing Height	-	-	-
Commuter Prop	01RA1	Climb Below 10000	-	-	-
Commuter Prop	01RA1	Above 10000	-	-	-
Commuter Prop	01RA1	Descend Below 10000	0.000	0.000	0.001
Commuter Prop	01RA1	Descend Below Mixing Height	0.000	0.000	0.001
Commuter Prop	01RA1	Descend Below 1000	0.000	0.000	0.000
Commuter Prop	01RA1	Descend Ground	0.000	0.000	0.000

Table A-3. Emissions from Aircraft (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

ALTERNATIVE 1 - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Commuter Prop	01RA1	Descend Taxi	0.000	0.000	0.000
Commuter Prop	01RA1	Full Flight	0.000	0.000	0.001
Commuter Prop	01RD1	Startup	-	-	-
Commuter Prop	01RD1	Climb Taxi	0.000	0.000	0.000
Commuter Prop	01RD1	Climb Ground	0.000	0.000	0.000
Commuter Prop	01RD1	Climb Below 1000	0.000	0.000	0.000
Commuter Prop	01RD1	Climb Below Mixing Height	0.000	0.000	0.000
Commuter Prop	01RD1	Climb Below 10000	0.000	0.000	0.001
Commuter Prop	01RD1	Above 10000	-	-	-
Commuter Prop	01RD1	Descend Below 10000	-	-	-
Commuter Prop	01RD1	Descend Below Mixing Height	-	-	-
Commuter Prop	01RD1	Descend Below 1000	-	-	-
Commuter Prop	01RD1	Descend Ground	-	-	-
Commuter Prop	01RD1	Descend Taxi	-	-	-
Commuter Prop	01RD1	Full Flight	0.000	0.000	0.001
Commuter Prop	19LA1	Startup	-	-	-
Commuter Prop	19LA1	Climb Taxi	-	-	-
Commuter Prop	19LA1	Climb Ground	-	-	-
Commuter Prop	19LA1	Climb Below 1000	-	-	-
Commuter Prop	19LA1	Climb Below Mixing Height	-	-	-
Commuter Prop	19LA1	Climb Below 10000	-	-	-
Commuter Prop	19LA1	Above 10000	-	-	-
Commuter Prop	19LA1	Descend Below 10000	0.003	0.005	0.011
Commuter Prop	19LA1	Descend Below Mixing Height	0.003	0.001	0.007
Commuter Prop	19LA1	Descend Below 1000	0.003	0.001	0.003
Commuter Prop	19LA1	Descend Ground	0.003	0.000	0.001
Commuter Prop	19LA1	Descend Taxi	0.003	0.000	0.001
Commuter Prop	19LA1	Full Flight	0.003	0.005	0.011
Commuter Prop	19LD1	Startup	-	-	-
Commuter Prop	19LD1	Climb Taxi	0.002	0.000	0.001
Commuter Prop	19LD1	Climb Ground	0.002	0.000	0.001
Commuter Prop	19LD1	Climb Below 1000	0.002	0.000	0.002
Commuter Prop	19LD1	Climb Below Mixing Height	0.002	0.001	0.003
Commuter Prop	19LD1	Climb Below 10000	0.002	0.004	0.008
Commuter Prop	19LD1	Above 10000	-	-	-
Commuter Prop	19LD1	Descend Below 10000	-	-	-
Commuter Prop	19LD1	Descend Below Mixing Height	-	-	-
Commuter Prop	19LD1	Descend Below 1000	-	-	-
Commuter Prop	19LD1	Descend Ground	-	-	-
Commuter Prop	19LD1	Descend Taxi	-	-	-
Commuter Prop	19LD1	Full Flight	0.002	0.004	0.008
Commuter Prop	19LD2	Startup	-	-	-
Commuter Prop	19LD2	Climb Taxi	0.002	0.000	0.001
Commuter Prop	19LD2	Climb Ground	0.002	0.000	0.001
Commuter Prop	19LD2	Climb Below 1000	0.002	0.000	0.002
Commuter Prop	19LD2	Climb Below Mixing Height	0.002	0.001	0.003
Commuter Prop	19LD2	Climb Below 10000	0.002	0.004	0.008
Commuter Prop	19LD2	Above 10000	-	-	-
Commuter Prop	19LD2	Descend Below 10000	-	-	-
Commuter Prop	19LD2	Descend Below Mixing Height	-	-	-
Commuter Prop	19LD2	Descend Below 1000	-	-	-
Commuter Prop	19LD2	Descend Ground	-	-	-
Commuter Prop	19LD2	Descend Taxi	-	-	-
Commuter Prop	19LD2	Full Flight	0.002	0.004	0.008
Commuter Prop	19RA1	Startup	-	-	-
Commuter Prop	19RA1	Climb Taxi	-	-	-
Commuter Prop	19RA1	Climb Ground	-	-	-
Commuter Prop	19RA1	Climb Below 1000	-	-	-
Commuter Prop	19RA1	Climb Below Mixing Height	-	-	-
Commuter Prop	19RA1	Climb Below 10000	-	-	-
Commuter Prop	19RA1	Above 10000	-	-	-
Commuter Prop	19RA1	Descend Below 10000	0.021	0.010	0.021
Commuter Prop	19RA1	Descend Below Mixing Height	0.021	0.003	0.014
Commuter Prop	19RA1	Descend Below 1000	0.020	0.001	0.007
Commuter Prop	19RA1	Descend Ground	0.020	0.001	0.003
Commuter Prop	19RA1	Descend Taxi	0.020	0.000	0.002
Commuter Prop	19RA1	Full Flight	0.021	0.010	0.021
Commuter Prop	19RA2	Startup	-	-	-
Commuter Prop	19RA2	Climb Taxi	-	-	-

Table A-3. Emissions from Aircraft (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

ALTERNATIVE 1 - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Commuter Prop	19RA2	Climb Ground	-	-	-
Commuter Prop	19RA2	Climb Below 1000	-	-	-
Commuter Prop	19RA2	Climb Below Mixing Height	-	-	-
Commuter Prop	19RA2	Climb Below 10000	-	-	-
Commuter Prop	19RA2	Above 10000	-	-	-
Commuter Prop	19RA2	Descend Below 10000	0.028	0.013	0.029
Commuter Prop	19RA2	Descend Below Mixing Height	0.027	0.004	0.019
Commuter Prop	19RA2	Descend Below 1000	0.027	0.002	0.009
Commuter Prop	19RA2	Descend Ground	0.026	0.001	0.004
Commuter Prop	19RA2	Descend Taxi	0.026	0.001	0.003
Commuter Prop	19RA2	Full Flight	0.028	0.013	0.029
Commuter Prop	19RA3	Startup	-	-	-
Commuter Prop	19RA3	Climb Taxi	-	-	-
Commuter Prop	19RA3	Climb Ground	-	-	-
Commuter Prop	19RA3	Climb Below 1000	-	-	-
Commuter Prop	19RA3	Climb Below Mixing Height	-	-	-
Commuter Prop	19RA3	Climb Below 10000	-	-	-
Commuter Prop	19RA3	Above 10000	-	-	-
Commuter Prop	19RA3	Descend Below 10000	0.021	0.010	0.021
Commuter Prop	19RA3	Descend Below Mixing Height	0.021	0.003	0.014
Commuter Prop	19RA3	Descend Below 1000	0.020	0.001	0.007
Commuter Prop	19RA3	Descend Ground	0.020	0.001	0.003
Commuter Prop	19RA3	Descend Taxi	0.020	0.000	0.002
Commuter Prop	19RA3	Full Flight	0.021	0.010	0.021
Commuter Prop	19RA5	Startup	-	-	-
Commuter Prop	19RA5	Climb Taxi	-	-	-
Commuter Prop	19RA5	Climb Ground	-	-	-
Commuter Prop	19RA5	Climb Below 1000	-	-	-
Commuter Prop	19RA5	Climb Below Mixing Height	-	-	-
Commuter Prop	19RA5	Climb Below 10000	-	-	-
Commuter Prop	19RA5	Above 10000	-	-	-
Commuter Prop	19RA5	Descend Below 10000	0.245	0.113	0.250
Commuter Prop	19RA5	Descend Below Mixing Height	0.240	0.034	0.163
Commuter Prop	19RA5	Descend Below 1000	0.235	0.016	0.081
Commuter Prop	19RA5	Descend Ground	0.232	0.006	0.032
Commuter Prop	19RA5	Descend Taxi	0.231	0.005	0.028
Commuter Prop	19RA5	Full Flight	0.245	0.113	0.250
Commuter Prop	19RA6	Startup	-	-	-
Commuter Prop	19RA6	Climb Taxi	-	-	-
Commuter Prop	19RA6	Climb Ground	-	-	-
Commuter Prop	19RA6	Climb Below 1000	-	-	-
Commuter Prop	19RA6	Climb Below Mixing Height	-	-	-
Commuter Prop	19RA6	Climb Below 10000	-	-	-
Commuter Prop	19RA6	Above 10000	-	-	-
Commuter Prop	19RA6	Descend Below 10000	0.035	0.016	0.036
Commuter Prop	19RA6	Descend Below Mixing Height	0.034	0.005	0.023
Commuter Prop	19RA6	Descend Below 1000	0.034	0.002	0.012
Commuter Prop	19RA6	Descend Ground	0.033	0.001	0.005
Commuter Prop	19RA6	Descend Taxi	0.033	0.001	0.004
Commuter Prop	19RA6	Full Flight	0.035	0.016	0.036
Commuter Prop	19RD2	Startup	-	-	-
Commuter Prop	19RD2	Climb Taxi	0.484	0.006	0.021
Commuter Prop	19RD2	Climb Ground	0.484	0.008	0.026
Commuter Prop	19RD2	Climb Below 1000	0.484	0.011	0.035
Commuter Prop	19RD2	Climb Below Mixing Height	0.484	0.018	0.055
Commuter Prop	19RD2	Climb Below 10000	0.485	0.083	0.130
Commuter Prop	19RD2	Above 10000	-	-	-
Commuter Prop	19RD2	Descend Below 10000	-	-	-
Commuter Prop	19RD2	Descend Below Mixing Height	-	-	-
Commuter Prop	19RD2	Descend Below 1000	-	-	-
Commuter Prop	19RD2	Descend Ground	-	-	-
Commuter Prop	19RD2	Descend Taxi	-	-	-
Commuter Prop	19RD2	Full Flight	0.485	0.083	0.130
Commuter Prop	19RD3	Startup	-	-	-
Commuter Prop	19RD3	Climb Taxi	0.071	0.006	0.043
Commuter Prop	19RD3	Climb Ground	0.071	0.008	0.051
Commuter Prop	19RD3	Climb Below 1000	0.071	0.012	0.067
Commuter Prop	19RD3	Climb Below Mixing Height	0.072	0.022	0.110
Commuter Prop	19RD3	Climb Below 10000	0.074	0.136	0.243
Commuter Prop	19RD3	Above 10000	-	0.000	0.000

Table A-3. Emissions from Aircraft (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

ALTERNATIVE 1 - GA ONLY EMISSIONS BY AIRCRAFT TYPE, TRACK ID, AND AIRCRAFT MODE [1]

AIRCRAFT TYPE	TRACK ID	AIRCRAFT MODE	VOC (ton/yr)	$PM_{2.5}$ (ton/yr)	SO_X (ton/yr)
Commuter Prop	19RD3	Descend Below 10000	-	-	-
Commuter Prop	19RD3	Descend Below Mixing Height	-	-	-
Commuter Prop	19RD3	Descend Below 1000	-	-	-
Commuter Prop	19RD3	Descend Ground	-	-	-
Commuter Prop	19RD3	Descend Taxi	-	-	-
Commuter Prop	19RD3	Full Flight	0.074	0.136	0.243

Note:

[1] Emissions for each flight mode represent cumulative totals that include emissions from all modes below it. For example, Emissions for "Descend Below 10000" includes emissions from Descend Taxi, Descend Ground, descend Below 1000, Descend Below Mixing Height in addition to emissions between the mixing height and 10,000ft.

Abbreviations:
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
SO_X - oxides of sulfur
VOC - volatile organic compound
yr - year

Table A-4. GSE Operating Hours
John Wayne Airport General Aviation Improvement Program
Orange County, California

		Annual Operating Hours			
AEDT GSE TYPE	**FUEL TYPE**	**General Aviation GSE – Existing (2016) Conditions**	**General Aviation GSE – Existing Plus No Project**	**General Aviation GSE – Existing Plus Proposed Project**	**General Aviation GSE – Existing Plus Alternative 1**
Aircraft Tractor	Diesel	3,935	4,102	3,427	3,441
Aircraft Tractor	Electric	4,260	4,441	3,710	3,725
Aircraft Tractor	Gasoline	749	781	652	655
Cart	Electric	125	130	109	109
Fork Lift	Propane	200	209	174	175
Fuel Truck	Diesel	4,400	4,587	3,832	3,848
GPU	Diesel	6,000	6,255	5,225	5,247
Hydrant Truck	Electric	100	104	87	87
Lavatory Truck	Electric	728	759	634	637
Service Truck	Electric	1,675	1,746	1,459	1,465

		Daily Operating Hours			
AEDT GSE TYPE	**FUEL TYPE**	**General Aviation GSE – Existing (2016) Conditions**	**General Aviation GSE – Existing Plus No Project**	**General Aviation GSE – Existing Plus Proposed Project**	**General Aviation GSE – Existing Plus Alternative 1**
Aircraft Tractor	Diesel	10.8	11.2	9.4	9.4
Aircraft Tractor	Electric	11.7	12.2	10.2	10.2
Aircraft Tractor	Gasoline	2.1	2.1	1.8	1.8
Cart	Electric	0.3	0.4	0.3	0.3
Fork Lift	Propane	0.5	0.6	0.5	0.5
Fuel Truck	Diesel	12.1	12.6	10.5	10.5
GPU	Diesel	16.4	17.1	14.3	14.4
Hydrant Truck	Electric	0.3	0.3	0.2	0.2
Lavatory Truck	Electric	2.0	2.1	1.7	1.7
Service Truck	Electric	4.6	4.8	4.0	4.0

Abbreviations:
GSE - ground support equipment
GPU - ground power unit

APPENDIX B
AIR DISPERSION MODEL FILES (ELECTRONIC)

The computer output files are available electronically upon request from John Wayne Airport.

Please contact:

Lea Choum
Email: LChoum@OCAir.com
Phone: 949-252-5123

APPENDIX C
SPECIATED CHEMICALS OF POTENTIAL CONCERN)

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
AVGAS	110543	Hexane	--	--
AVGAS	71432	Benzene	--	--
AVGAS	108883	Toluene	--	--
AVGAS	100414	Ethyl Benzene	--	--
AVGAS	1330207	Xylenes	--	--
AVGAS	95636	1,2,4TriMeBenze	--	--
AVGAS	110827	Cyclohexane	--	--
AVGAS_R	110543	Hexane	--	--
AVGAS_R	71432	Benzene	--	--
AVGAS_R	108883	Toluene	--	--
AVGAS_R	100414	Ethyl Benzene	--	--
AVGAS_R	1330207	Xylenes	--	--
AVGAS_R	95636	1,2,4TriMeBenze	--	--
AVGAS_R	110827	Cyclohexane	--	--
AVGAS_S	110543	Hexane	--	--
AVGAS_S	71432	Benzene	--	--
AVGAS_S	108883	Toluene	--	--
AVGAS_S	100414	Ethyl Benzene	--	--
AVGAS_S	1330207	Xylenes	--	--
AVGAS_S	95636	1,2,4TriMeBenze	--	--
AVGAS_S	110827	Cyclohexane	--	--
GSE_APU	9901	DieselExhPM	3.02E+02	6.50E-02
GSE_APU	75070	Acetaldehyde	2.90E+02	3.99E-02
GSE_APU	107028	Acrolein	1.66E+02	2.29E-02
GSE_APU	71432	Benzene	1.14E+02	1.57E-02
GSE_APU	100414	Ethyl Benzene	1.18E+01	1.63E-03
GSE_APU	50000	Formaldehyde	8.35E+02	1.15E-01
GSE_APU	106990	1,3-Butadiene	1.14E+02	1.58E-02
GSE_APU	1330207	Xylenes	1.91E+01	2.64E-03
GSE_APU	67561	Methanol	1.22E+02	1.69E-02
GSE_APU	91203	Naphthalene	3.67E+01	5.06E-03
GSE_APU	95476	o-Xylene	1.13E+01	1.55E-03
GSE_APU	108952	Phenol	4.92E+01	6.79E-03
GSE_APU	115071	Propylene	3.07E+02	4.24E-02
GSE_APU	100425	Styrene	2.10E+01	2.89E-03
GSE_APU	108883	Toluene	4.35E+01	6.00E-03
GSE_APU	7782505	Chlorine	2.28E-01	1.92E-04
GSE_APU	7440508	Copper	6.85E-01	5.77E-04
GSE_APU	7439965	Manganese	5.81E-02	4.89E-05
GSE_APU	7440020	Nickel	1.17E-01	9.82E-05
GSE_APU	9960	SULFATES	7.31E+01	6.15E-02
Taxiway	75070	Acetaldehyde	1.80E+03	2.06E-01
Taxiway	107028	Acrolein	1.01E+03	1.16E-01
Taxiway	71432	Benzene	7.15E+02	8.16E-02
Taxiway	100414	Ethyl Benzene	7.22E+01	8.24E-03
Taxiway	50000	Formaldehyde	5.28E+03	6.03E-01

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
Taxiway	106990	1,3-Butadiene	7.06E+02	8.06E-02
Taxiway	1330207	Xylenes	1.18E+02	1.35E-02
Taxiway	67561	Methanol	6.72E+02	7.67E-02
Taxiway	91203	Naphthalene	2.27E+02	2.59E-02
Taxiway	95476	o-Xylene	7.07E+01	8.07E-03
Taxiway	108952	Phenol	2.81E+02	3.21E-02
Taxiway	115071	Propylene	1.92E+03	2.19E-01
Taxiway	100425	Styrene	1.33E+02	1.52E-02
Taxiway	108883	Toluene	2.63E+02	3.01E-02
Taxiway	7782505	Chlorine	3.00E-01	3.43E-05
Taxiway	7440508	Copper	9.01E-01	1.03E-04
Taxiway	7439965	Manganese	7.64E-02	8.73E-06
Taxiway	7440020	Nickel	1.53E-01	1.75E-05
Taxiway	9960	SULFATES	9.61E+01	1.10E-02
Taxiway	7439921	Lead	3.43E+01	3.92E-03
B45L	106990	1,3-Butadiene	1.65E-01	1.88E-05
B45L	75070	Acetaldehyde	4.18E-01	4.77E-05
B45L	107028	Acrolein	2.39E-01	2.73E-05
B45L	71432	Benzene	1.64E-01	1.88E-05
B45L	7440508	Copper	1.87E-03	2.14E-07
B45L	100414	Ethyl Benzene	1.70E-02	1.94E-06
B45L	50000	Formaldehyde	1.20E+00	1.37E-04
B45L	7782505	Chlorine	6.24E-04	7.13E-08
B45L	1330207	Xylenes	2.76E-02	3.15E-06
B45L	7439965	Manganese	1.59E-04	1.81E-08
B45L	67561	Methanol	1.76E-01	2.01E-05
B45L	91203	Naphthalene	5.29E-02	6.04E-06
B45L	7440020	Nickel	3.19E-04	3.64E-08
B45L	95476	o-Xylene	1.62E-02	1.85E-06
B45L	108952	Phenol	7.10E-02	8.10E-06
B45L	115071	Propylene	4.43E-01	5.06E-05
B45L	100425	Styrene	3.02E-02	3.45E-06
B45L	9960	SULFATES	2.00E-01	2.28E-05
B45L	108883	Toluene	6.27E-02	7.16E-06
B46L	106990	1,3-Butadiene	6.29E+00	7.18E-04
B46L	75070	Acetaldehyde	1.59E+01	1.82E-03
B46L	107028	Acrolein	9.13E+00	1.04E-03
B46L	71432	Benzene	6.27E+00	7.15E-04
B46L	7440508	Copper	7.09E-02	8.10E-06
B46L	100414	Ethyl Benzene	6.49E-01	7.40E-05
B46L	50000	Formaldehyde	4.59E+01	5.24E-03
B46L	7782505	Chlorine	2.36E-02	2.70E-06
B46L	1330207	Xylenes	1.05E+00	1.20E-04
B46L	7439965	Manganese	6.02E-03	6.87E-07
B46L	67561	Methanol	6.73E+00	7.68E-04
B46L	91203	Naphthalene	2.02E+00	2.30E-04

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
B46L	7440020	Nickel	1.21E-02	1.38E-06
B46L	95476	o-Xylene	6.19E-01	7.06E-05
B46L	108952	Phenol	2.71E+00	3.09E-04
B46L	115071	Propylene	1.69E+01	1.93E-03
B46L	100425	Styrene	1.15E+00	1.31E-04
B46L	9960	SULFATES	7.57E+00	8.64E-04
B46L	108883	Toluene	2.39E+00	2.73E-04
G45L	106990	1,3-Butadiene	9.68E-03	1.11E-06
G45L	75070	Acetaldehyde	2.66E-02	3.04E-06
G45L	107028	Acrolein	1.27E-02	1.45E-06
G45L	71432	Benzene	1.10E-02	1.26E-06
G45L	7440508	Copper	0.00E+00	0.00E+00
G45L	100414	Ethyl Benzene	9.25E-04	1.06E-07
G45L	50000	Formaldehyde	8.72E-02	9.96E-06
G45L	7782505	Chlorine	0.00E+00	0.00E+00
G45L	1330207	Xylenes	1.60E-03	1.83E-07
G45L	7439965	Manganese	0.00E+00	0.00E+00
G45L	67561	Methanol	0.00E+00	0.00E+00
G45L	91203	Naphthalene	3.15E-03	3.59E-07
G45L	7440020	Nickel	0.00E+00	0.00E+00
G45L	95476	o-Xylene	1.11E-03	1.27E-07
G45L	108952	Phenol	1.36E-03	1.55E-07
G45L	115071	Propylene	2.83E-02	3.23E-06
G45L	100425	Styrene	2.28E-03	2.61E-07
G45L	9960	SULFATES	0.00E+00	0.00E+00
G45L	108883	Toluene	3.02E-03	3.45E-07
G47L	106990	1,3-Butadiene	9.23E-03	1.05E-06
G47L	75070	Acetaldehyde	2.54E-02	2.90E-06
G47L	107028	Acrolein	1.21E-02	1.38E-06
G47L	71432	Benzene	1.05E-02	1.20E-06
G47L	7440508	Copper	0.00E+00	0.00E+00
G47L	100414	Ethyl Benzene	8.82E-04	1.01E-07
G47L	50000	Formaldehyde	8.31E-02	9.49E-06
G47L	7782505	Chlorine	0.00E+00	0.00E+00
G47L	1330207	Xylenes	1.53E-03	1.74E-07
G47L	7439965	Manganese	0.00E+00	0.00E+00
G47L	67561	Methanol	0.00E+00	0.00E+00
G47L	91203	Naphthalene	3.00E-03	3.42E-07
G47L	7440020	Nickel	0.00E+00	0.00E+00
G47L	95476	o-Xylene	1.06E-03	1.21E-07
G47L	108952	Phenol	1.29E-03	1.48E-07
G47L	115071	Propylene	2.70E-02	3.08E-06
G47L	100425	Styrene	2.18E-03	2.48E-07
G47L	9960	SULFATES	0.00E+00	0.00E+00
G47L	108883	Toluene	2.88E-03	3.29E-07
G48L	106990	1,3-Butadiene	4.18E-01	4.77E-05

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
G48L	75070	Acetaldehyde	1.15E+00	1.31E-04
G48L	107028	Acrolein	5.48E-01	6.25E-05
G48L	71432	Benzene	4.76E-01	5.43E-05
G48L	7440508	Copper	0.00E+00	0.00E+00
G48L	100414	Ethyl Benzene	3.99E-02	4.55E-06
G48L	50000	Formaldehyde	3.76E+00	4.29E-04
G48L	7782505	Chlorine	0.00E+00	0.00E+00
G48L	1330207	Xylenes	6.91E-02	7.89E-06
G48L	7439965	Manganese	0.00E+00	0.00E+00
G48L	67561	Methanol	0.00E+00	0.00E+00
G48L	91203	Naphthalene	1.36E-01	1.55E-05
G48L	7440020	Nickel	0.00E+00	0.00E+00
G48L	95476	o-Xylene	4.79E-02	5.46E-06
G48L	108952	Phenol	5.85E-02	6.68E-06
G48L	115071	Propylene	1.22E+00	1.39E-04
G48L	100425	Styrene	9.84E-02	1.12E-05
G48L	9960	SULFATES	0.00E+00	0.00E+00
G48L	108883	Toluene	1.30E-01	1.49E-05
G46L	106990	1,3-Butadiene	6.06E-01	6.92E-05
G46L	75070	Acetaldehyde	1.67E+00	1.90E-04
G46L	107028	Acrolein	7.96E-01	9.08E-05
G46L	71432	Benzene	6.91E-01	7.89E-05
G46L	7440508	Copper	0.00E+00	0.00E+00
G46L	100414	Ethyl Benzene	5.79E-02	6.61E-06
G46L	50000	Formaldehyde	5.46E+00	6.23E-04
G46L	7782505	Chlorine	0.00E+00	0.00E+00
G46L	1330207	Xylenes	1.00E-01	1.15E-05
G46L	7439965	Manganese	0.00E+00	0.00E+00
G46L	67561	Methanol	0.00E+00	0.00E+00
G46L	91203	Naphthalene	1.97E-01	2.25E-05
G46L	7440020	Nickel	0.00E+00	0.00E+00
G46L	95476	o-Xylene	6.95E-02	7.94E-06
G46L	108952	Phenol	8.50E-02	9.70E-06
G46L	115071	Propylene	1.77E+00	2.02E-04
G46L	100425	Styrene	1.43E-01	1.63E-05
G46L	9960	SULFATES	0.00E+00	0.00E+00
G46L	108883	Toluene	1.89E-01	2.16E-05
C45L	106990	1,3-Butadiene	4.59E-04	5.24E-08
C45L	75070	Acetaldehyde	1.16E-03	1.33E-07
C45L	107028	Acrolein	6.66E-04	7.61E-08
C45L	71432	Benzene	4.57E-04	5.22E-08
C45L	7440508	Copper	1.39E-04	1.59E-08
C45L	100414	Ethyl Benzene	4.74E-05	5.41E-09
C45L	50000	Formaldehyde	3.35E-03	3.82E-07
C45L	7782505	Chlorine	4.64E-05	5.29E-09
C45L	1330207	Xylenes	7.67E-05	8.76E-09

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
C45L	7439965	Manganese	1.18E-05	1.35E-09
C45L	67561	Methanol	4.91E-04	5.61E-08
C45L	91203	Naphthalene	1.47E-04	1.68E-08
C45L	7440020	Nickel	2.37E-05	2.70E-09
C45L	95476	o-Xylene	4.52E-05	5.16E-09
C45L	108952	Phenol	1.98E-04	2.26E-08
C45L	115071	Propylene	1.23E-03	1.41E-07
C45L	100425	Styrene	8.41E-05	9.60E-09
C45L	9960	SULFATES	1.48E-02	1.69E-06
C45L	108883	Toluene	1.75E-04	1.99E-08
C47L	106990	1,3-Butadiene	4.91E-06	5.61E-10
C47L	75070	Acetaldehyde	1.24E-05	1.42E-09
C47L	107028	Acrolein	7.13E-06	8.14E-10
C47L	71432	Benzene	4.89E-06	5.59E-10
C47L	7440508	Copper	7.55E-06	8.62E-10
C47L	100414	Ethyl Benzene	5.06E-07	5.78E-11
C47L	50000	Formaldehyde	3.58E-05	4.09E-09
C47L	7782505	Chlorine	2.52E-06	2.87E-10
C47L	1330207	Xylenes	8.21E-07	9.37E-11
C47L	7439965	Manganese	6.41E-07	7.32E-11
C47L	67561	Methanol	5.25E-06	6.00E-10
C47L	91203	Naphthalene	1.57E-06	1.80E-10
C47L	7440020	Nickel	1.29E-06	1.47E-10
C47L	95476	o-Xylene	4.83E-07	5.52E-11
C47L	108952	Phenol	2.11E-06	2.41E-10
C47L	115071	Propylene	1.32E-05	1.51E-09
C47L	100425	Styrene	8.99E-07	1.03E-10
C47L	9960	SULFATES	8.06E-04	9.20E-08
C47L	108883	Toluene	1.87E-06	2.13E-10
C48L	106990	1,3-Butadiene	1.01E-04	1.15E-08
C48L	75070	Acetaldehyde	2.55E-04	2.91E-08
C48L	107028	Acrolein	1.46E-04	1.67E-08
C48L	71432	Benzene	1.00E-04	1.15E-08
C48L	7440508	Copper	1.03E-04	1.17E-08
C48L	100414	Ethyl Benzene	1.04E-05	1.19E-09
C48L	50000	Formaldehyde	7.35E-04	8.39E-08
C48L	7782505	Chlorine	3.43E-05	3.91E-09
C48L	1330207	Xylenes	1.68E-05	1.92E-09
C48L	7439965	Manganese	8.73E-06	9.97E-10
C48L	67561	Methanol	1.08E-04	1.23E-08
C48L	91203	Naphthalene	3.23E-05	3.69E-09
C48L	7440020	Nickel	1.75E-05	2.00E-09
C48L	95476	o-Xylene	9.91E-06	1.13E-09
C48L	108952	Phenol	4.33E-05	4.95E-09
C48L	115071	Propylene	2.71E-04	3.09E-08
C48L	100425	Styrene	1.84E-05	2.10E-09

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
C48L	9960	SULFATES	1.10E-02	1.25E-06
C48L	108883	Toluene	3.83E-05	4.37E-09
C46L	106990	1,3-Butadiene	1.13E-02	1.29E-06
C46L	75070	Acetaldehyde	2.85E-02	3.26E-06
C46L	107028	Acrolein	1.64E-02	1.87E-06
C46L	71432	Benzene	1.12E-02	1.28E-06
C46L	7440508	Copper	5.12E-03	5.84E-07
C46L	100414	Ethyl Benzene	1.16E-03	1.33E-07
C46L	50000	Formaldehyde	8.22E-02	9.38E-06
C46L	7782505	Chlorine	1.71E-03	1.95E-07
C46L	1330207	Xylenes	1.88E-03	2.15E-07
C46L	7439965	Manganese	4.34E-04	4.96E-08
C46L	67561	Methanol	1.21E-02	1.38E-06
C46L	91203	Naphthalene	3.61E-03	4.12E-07
C46L	7440020	Nickel	8.71E-04	9.94E-08
C46L	95476	o-Xylene	1.11E-03	1.27E-07
C46L	108952	Phenol	4.85E-03	5.53E-07
C46L	115071	Propylene	3.03E-02	3.46E-06
C46L	100425	Styrene	2.06E-03	2.36E-07
C46L	9960	SULFATES	5.46E-01	6.23E-05
C46L	108883	Toluene	4.29E-03	4.89E-07
B45D	106990	1,3-Butadiene	1.66E-01	1.90E-05
B45D	75070	Acetaldehyde	4.21E-01	4.81E-05
B45D	107028	Acrolein	2.42E-01	2.76E-05
B45D	71432	Benzene	1.66E-01	1.89E-05
B45D	7440508	Copper	1.23E-02	1.41E-06
B45D	100414	Ethyl Benzene	1.72E-02	1.96E-06
B45D	50000	Formaldehyde	1.21E+00	1.39E-04
B45D	7782505	Chlorine	4.11E-03	4.70E-07
B45D	1330207	Xylenes	2.78E-02	3.17E-06
B45D	7439965	Manganese	1.05E-03	1.20E-07
B45D	67561	Methanol	1.78E-01	2.03E-05
B45D	91203	Naphthalene	5.34E-02	6.09E-06
B45D	7440020	Nickel	2.10E-03	2.40E-07
B45D	95476	o-Xylene	1.64E-02	1.87E-06
B45D	108952	Phenol	7.16E-02	8.17E-06
B45D	115071	Propylene	4.47E-01	5.10E-05
B45D	100425	Styrene	3.05E-02	3.48E-06
B45D	9960	SULFATES	1.32E+00	1.50E-04
B45D	108883	Toluene	6.33E-02	7.23E-06
B46D	106990	1,3-Butadiene	4.83E+00	5.51E-04
B46D	75070	Acetaldehyde	1.22E+01	1.40E-03
B46D	107028	Acrolein	7.01E+00	8.00E-04
B46D	71432	Benzene	4.81E+00	5.49E-04
B46D	7440508	Copper	3.91E-01	4.47E-05
B46D	100414	Ethyl Benzene	4.98E-01	5.68E-05

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
B46D	50000	Formaldehyde	3.52E+01	4.02E-03
B46D	7782505	Chlorine	1.30E-01	1.49E-05
B46D	1330207	Xylenes	8.07E-01	9.21E-05
B46D	7439965	Manganese	3.32E-02	3.79E-06
B46D	67561	Methanol	5.17E+00	5.90E-04
B46D	91203	Naphthalene	1.55E+00	1.77E-04
B46D	7440020	Nickel	6.66E-02	7.60E-06
B46D	95476	o-Xylene	4.75E-01	5.42E-05
B46D	108952	Phenol	2.08E+00	2.37E-04
B46D	115071	Propylene	1.30E+01	1.48E-03
B46D	100425	Styrene	8.84E-01	1.01E-04
B46D	9960	SULFATES	4.17E+01	4.76E-03
B46D	108883	Toluene	1.84E+00	2.10E-04
G45D	106990	1,3-Butadiene	5.32E-02	6.07E-06
G45D	75070	Acetaldehyde	1.46E-01	1.67E-05
G45D	107028	Acrolein	6.98E-02	7.96E-06
G45D	71432	Benzene	6.06E-02	6.92E-06
G45D	7440508	Copper	0.00E+00	0.00E+00
G45D	100414	Ethyl Benzene	5.08E-03	5.80E-07
G45D	50000	Formaldehyde	4.79E-01	5.47E-05
G45D	7782505	Chlorine	0.00E+00	0.00E+00
G45D	1330207	Xylenes	8.81E-03	1.01E-06
G45D	7439965	Manganese	0.00E+00	0.00E+00
G45D	67561	Methanol	0.00E+00	0.00E+00
G45D	91203	Naphthalene	1.73E-02	1.97E-06
G45D	7440020	Nickel	0.00E+00	0.00E+00
G45D	95476	o-Xylene	6.10E-03	6.96E-07
G45D	108952	Phenol	7.45E-03	8.51E-07
G45D	115071	Propylene	1.55E-01	1.77E-05
G45D	100425	Styrene	1.25E-02	1.43E-06
G45D	9960	SULFATES	0.00E+00	0.00E+00
G45D	108883	Toluene	1.66E-02	1.89E-06
G47D	106990	1,3-Butadiene	1.27E-02	1.45E-06
G47D	75070	Acetaldehyde	3.50E-02	4.00E-06
G47D	107028	Acrolein	1.67E-02	1.91E-06
G47D	71432	Benzene	1.45E-02	1.66E-06
G47D	7440508	Copper	0.00E+00	0.00E+00
G47D	100414	Ethyl Benzene	1.22E-03	1.39E-07
G47D	50000	Formaldehyde	1.15E-01	1.31E-05
G47D	7782505	Chlorine	0.00E+00	0.00E+00
G47D	1330207	Xylenes	2.11E-03	2.41E-07
G47D	7439965	Manganese	0.00E+00	0.00E+00
G47D	67561	Methanol	0.00E+00	0.00E+00
G47D	91203	Naphthalene	4.13E-03	4.72E-07
G47D	7440020	Nickel	0.00E+00	0.00E+00
G47D	95476	o-Xylene	1.46E-03	1.67E-07

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
G47D	108952	Phenol	1.78E-03	2.04E-07
G47D	115071	Propylene	3.72E-02	4.25E-06
G47D	100425	Styrene	3.00E-03	3.42E-07
G47D	9960	SULFATES	0.00E+00	0.00E+00
G47D	108883	Toluene	3.97E-03	4.53E-07
G48D	106990	1,3-Butadiene	9.95E-01	1.14E-04
G48D	75070	Acetaldehyde	2.74E+00	3.13E-04
G48D	107028	Acrolein	1.31E+00	1.49E-04
G48D	71432	Benzene	1.13E+00	1.30E-04
G48D	7440508	Copper	0.00E+00	0.00E+00
G48D	100414	Ethyl Benzene	9.51E-02	1.09E-05
G48D	50000	Formaldehyde	8.96E+00	1.02E-03
G48D	7782505	Chlorine	0.00E+00	0.00E+00
G48D	1330207	Xylenes	1.65E-01	1.88E-05
G48D	7439965	Manganese	0.00E+00	0.00E+00
G48D	67561	Methanol	0.00E+00	0.00E+00
G48D	91203	Naphthalene	3.23E-01	3.69E-05
G48D	7440020	Nickel	0.00E+00	0.00E+00
G48D	95476	o-Xylene	1.14E-01	1.30E-05
G48D	108952	Phenol	1.39E-01	1.59E-05
G48D	115071	Propylene	2.91E+00	3.32E-04
G48D	100425	Styrene	2.35E-01	2.68E-05
G48D	9960	SULFATES	0.00E+00	0.00E+00
G48D	108883	Toluene	3.11E-01	3.55E-05
G46D	106990	1,3-Butadiene	1.18E+00	1.35E-04
G46D	75070	Acetaldehyde	3.25E+00	3.71E-04
G46D	107028	Acrolein	1.55E+00	1.77E-04
G46D	71432	Benzene	1.35E+00	1.54E-04
G46D	7440508	Copper	0.00E+00	0.00E+00
G46D	100414	Ethyl Benzene	1.13E-01	1.29E-05
G46D	50000	Formaldehyde	1.06E+01	1.21E-03
G46D	7782505	Chlorine	0.00E+00	0.00E+00
G46D	1330207	Xylenes	1.96E-01	2.23E-05
G46D	7439965	Manganese	0.00E+00	0.00E+00
G46D	67561	Methanol	0.00E+00	0.00E+00
G46D	91203	Naphthalene	3.84E-01	4.38E-05
G46D	7440020	Nickel	0.00E+00	0.00E+00
G46D	95476	o-Xylene	1.35E-01	1.55E-05
G46D	108952	Phenol	1.65E-01	1.89E-05
G46D	115071	Propylene	3.45E+00	3.94E-04
G46D	100425	Styrene	2.78E-01	3.18E-05
G46D	9960	SULFATES	0.00E+00	0.00E+00
G46D	108883	Toluene	3.68E-01	4.21E-05
C45D	106990	1,3-Butadiene	6.48E-04	7.40E-08
C45D	75070	Acetaldehyde	1.64E-03	1.87E-07
C45D	107028	Acrolein	9.41E-04	1.07E-07

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
C45D	71432	Benzene	6.46E-04	7.37E-08
C45D	7440508	Copper	6.94E-04	7.93E-08
C45D	100414	Ethyl Benzene	6.68E-05	7.63E-09
C45D	50000	Formaldehyde	4.73E-03	5.40E-07
C45D	7782505	Chlorine	2.31E-04	2.64E-08
C45D	1330207	Xylenes	1.08E-04	1.24E-08
C45D	7439965	Manganese	5.89E-05	6.73E-09
C45D	67561	Methanol	6.93E-04	7.91E-08
C45D	91203	Naphthalene	2.08E-04	2.37E-08
C45D	7440020	Nickel	1.18E-04	1.35E-08
C45D	95476	o-Xylene	6.38E-05	7.28E-09
C45D	108952	Phenol	2.79E-04	3.18E-08
C45D	115071	Propylene	1.74E-03	1.99E-07
C45D	100425	Styrene	1.19E-04	1.35E-08
C45D	9960	SULFATES	7.40E-02	8.45E-06
C45D	108883	Toluene	2.47E-04	2.81E-08
C47D	106990	1,3-Butadiene	2.57E-05	2.94E-09
C47D	75070	Acetaldehyde	6.51E-05	7.44E-09
C47D	107028	Acrolein	3.73E-05	4.26E-09
C47D	71432	Benzene	2.56E-05	2.93E-09
C47D	7440508	Copper	2.33E-05	2.66E-09
C47D	100414	Ethyl Benzene	2.65E-06	3.03E-10
C47D	50000	Formaldehyde	1.88E-04	2.14E-08
C47D	7782505	Chlorine	7.78E-06	8.88E-10
C47D	1330207	Xylenes	4.30E-06	4.91E-10
C47D	7439965	Manganese	1.98E-06	2.26E-10
C47D	67561	Methanol	2.75E-05	3.14E-09
C47D	91203	Naphthalene	8.25E-06	9.42E-10
C47D	7440020	Nickel	3.97E-06	4.54E-10
C47D	95476	o-Xylene	2.53E-06	2.89E-10
C47D	108952	Phenol	1.11E-05	1.26E-09
C47D	115071	Propylene	6.91E-05	7.89E-09
C47D	100425	Styrene	4.71E-06	5.38E-10
C47D	9960	SULFATES	2.49E-03	2.84E-07
C47D	108883	Toluene	9.79E-06	1.12E-09
C48D	106990	1,3-Butadiene	4.60E-04	5.25E-08
C48D	75070	Acetaldehyde	1.16E-03	1.33E-07
C48D	107028	Acrolein	6.67E-04	7.62E-08
C48D	71432	Benzene	4.58E-04	5.23E-08
C48D	7440508	Copper	4.73E-04	5.40E-08
C48D	100414	Ethyl Benzene	4.74E-05	5.41E-09
C48D	50000	Formaldehyde	3.35E-03	3.83E-07
C48D	7782505	Chlorine	1.58E-04	1.80E-08
C48D	1330207	Xylenes	7.68E-05	8.77E-09
C48D	7439965	Manganese	4.01E-05	4.58E-09
C48D	67561	Methanol	4.92E-04	5.61E-08

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
C48D	91203	Naphthalene	1.47E-04	1.68E-08
C48D	7440020	Nickel	8.05E-05	9.19E-09
C48D	95476	o-Xylene	4.52E-05	5.16E-09
C48D	108952	Phenol	1.98E-04	2.26E-08
C48D	115071	Propylene	1.24E-03	1.41E-07
C48D	100425	Styrene	8.42E-05	9.61E-09
C48D	9960	SULFATES	5.04E-02	5.76E-06
C48D	108883	Toluene	1.75E-04	2.00E-08
C46D	106990	1,3-Butadiene	1.48E-02	1.69E-06
C46D	75070	Acetaldehyde	3.75E-02	4.28E-06
C46D	107028	Acrolein	2.15E-02	2.45E-06
C46D	71432	Benzene	1.48E-02	1.68E-06
C46D	7440508	Copper	1.56E-02	1.78E-06
C46D	100414	Ethyl Benzene	1.53E-03	1.74E-07
C46D	50000	Formaldehyde	1.08E-01	1.23E-05
C46D	7782505	Chlorine	5.18E-03	5.92E-07
C46D	1330207	Xylenes	2.48E-03	2.83E-07
C46D	7439965	Manganese	1.32E-03	1.51E-07
C46D	67561	Methanol	1.58E-02	1.81E-06
C46D	91203	Naphthalene	4.75E-03	5.42E-07
C46D	7440020	Nickel	2.65E-03	3.02E-07
C46D	95476	o-Xylene	1.46E-03	1.66E-07
C46D	108952	Phenol	6.37E-03	7.27E-07
C46D	115071	Propylene	3.98E-02	4.54E-06
C46D	100425	Styrene	2.71E-03	3.10E-07
C46D	9960	SULFATES	1.66E+00	1.89E-04
C46D	108883	Toluene	5.63E-03	6.43E-07
T47D	106990	1,3-Butadiene	6.68E-03	7.63E-07
T47D	75070	Acetaldehyde	1.84E-02	2.10E-06
T47D	107028	Acrolein	8.77E-03	1.00E-06
T47D	71432	Benzene	7.62E-03	8.69E-07
T47D	7440508	Copper	0.00E+00	0.00E+00
T47D	100414	Ethyl Benzene	6.38E-04	7.29E-08
T47D	50000	Formaldehyde	6.02E-02	6.87E-06
T47D	7782505	Chlorine	0.00E+00	0.00E+00
T47D	1330207	Xylenes	1.11E-03	1.26E-07
T47D	7439965	Manganese	0.00E+00	0.00E+00
T47D	67561	Methanol	0.00E+00	0.00E+00
T47D	91203	Naphthalene	2.17E-03	2.48E-07
T47D	7440020	Nickel	0.00E+00	0.00E+00
T47D	95476	o-Xylene	7.66E-04	8.74E-08
T47D	108952	Phenol	9.36E-04	1.07E-07
T47D	115071	Propylene	1.95E-02	2.23E-06
T47D	100425	Styrene	1.57E-03	1.80E-07
T47D	9960	SULFATES	0.00E+00	0.00E+00
T47D	108883	Toluene	2.09E-03	2.38E-07

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
T48D	106990	1,3-Butadiene	3.46E-01	3.94E-05
T48D	75070	Acetaldehyde	9.51E-01	1.09E-04
T48D	107028	Acrolein	4.53E-01	5.18E-05
T48D	71432	Benzene	3.94E-01	4.50E-05
T48D	7440508	Copper	0.00E+00	0.00E+00
T48D	100414	Ethyl Benzene	3.30E-02	3.77E-06
T48D	50000	Formaldehyde	3.11E+00	3.55E-04
T48D	7782505	Chlorine	0.00E+00	0.00E+00
T48D	1330207	Xylenes	5.72E-02	6.53E-06
T48D	7439965	Manganese	0.00E+00	0.00E+00
T48D	67561	Methanol	0.00E+00	0.00E+00
T48D	91203	Naphthalene	1.12E-01	1.28E-05
T48D	7440020	Nickel	0.00E+00	0.00E+00
T48D	95476	o-Xylene	3.96E-02	4.52E-06
T48D	108952	Phenol	4.84E-02	5.53E-06
T48D	115071	Propylene	1.01E+00	1.15E-04
T48D	100425	Styrene	8.14E-02	9.30E-06
T48D	9960	SULFATES	0.00E+00	0.00E+00
T48D	108883	Toluene	1.08E-01	1.23E-05
B4B	106990	1,3-Butadiene	8.88E-02	1.01E-05
B4B	75070	Acetaldehyde	2.25E-01	2.57E-05
B4B	107028	Acrolein	1.29E-01	1.47E-05
B4B	71432	Benzene	8.84E-02	1.01E-05
B4B	7440508	Copper	7.29E-03	8.32E-07
B4B	100414	Ethyl Benzene	9.15E-03	1.05E-06
B4B	50000	Formaldehyde	6.48E-01	7.39E-05
B4B	7782505	Chlorine	2.43E-03	2.77E-07
B4B	1330207	Xylenes	1.48E-02	1.69E-06
B4B	7439965	Manganese	6.19E-04	7.06E-08
B4B	67561	Methanol	9.50E-02	1.08E-05
B4B	91203	Naphthalene	2.85E-02	3.25E-06
B4B	7440020	Nickel	1.24E-03	1.42E-07
B4B	95476	o-Xylene	8.73E-03	9.97E-07
B4B	108952	Phenol	3.82E-02	4.36E-06
B4B	115071	Propylene	2.39E-01	2.72E-05
B4B	100425	Styrene	1.63E-02	1.86E-06
B4B	9960	SULFATES	7.77E-01	8.87E-05
B4B	108883	Toluene	3.38E-02	3.86E-06
B26B	106990	1,3-Butadiene	3.14E+00	3.58E-04
B26B	75070	Acetaldehyde	7.95E+00	9.07E-04
B26B	107028	Acrolein	4.56E+00	5.20E-04
B26B	71432	Benzene	3.13E+00	3.57E-04
B26B	7440508	Copper	2.37E-01	2.71E-05
B26B	100414	Ethyl Benzene	3.24E-01	3.70E-05
B26B	50000	Formaldehyde	2.29E+01	2.61E-03
B26B	7782505	Chlorine	7.90E-02	9.01E-06

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
B26B	1330207	Xylenes	5.25E-01	5.99E-05
B26B	7439965	Manganese	2.01E-02	2.30E-06
B26B	67561	Methanol	3.36E+00	3.83E-04
B26B	91203	Naphthalene	1.01E+00	1.15E-04
B26B	7440020	Nickel	4.03E-02	4.60E-06
B26B	95476	o-Xylene	3.09E-01	3.53E-05
B26B	108952	Phenol	1.35E+00	1.54E-04
B26B	115071	Propylene	8.44E+00	9.63E-04
B26B	100425	Styrene	5.75E-01	6.56E-05
B26B	9960	SULFATES	2.53E+01	2.88E-03
B26B	108883	Toluene	1.19E+00	1.36E-04
H33B	106990	1,3-Butadiene	3.15E+00	3.59E-04
H33B	75070	Acetaldehyde	8.66E+00	9.88E-04
H33B	107028	Acrolein	4.13E+00	4.71E-04
H33B	71432	Benzene	3.59E+00	4.09E-04
H33B	7440508	Copper	0.00E+00	0.00E+00
H33B	100414	Ethyl Benzene	3.01E-01	3.43E-05
H33B	50000	Formaldehyde	2.83E+01	3.23E-03
H33B	7782505	Chlorine	0.00E+00	0.00E+00
H33B	1330207	Xylenes	5.21E-01	5.95E-05
H33B	7439965	Manganese	0.00E+00	0.00E+00
H33B	67561	Methanol	0.00E+00	0.00E+00
H33B	91203	Naphthalene	1.02E+00	1.17E-04
H33B	7440020	Nickel	0.00E+00	0.00E+00
H33B	95476	o-Xylene	3.61E-01	4.12E-05
H33B	108952	Phenol	4.41E-01	5.03E-05
H33B	115071	Propylene	9.20E+00	1.05E-03
H33B	100425	Styrene	7.41E-01	8.46E-05
H33B	9960	SULFATES	0.00E+00	0.00E+00
H33B	108883	Toluene	9.82E-01	1.12E-04
H34B	106990	1,3-Butadiene	3.14E+00	3.59E-04
H34B	75070	Acetaldehyde	8.64E+00	9.87E-04
H34B	107028	Acrolein	4.12E+00	4.70E-04
H34B	71432	Benzene	3.58E+00	4.09E-04
H34B	7440508	Copper	0.00E+00	0.00E+00
H34B	100414	Ethyl Benzene	3.00E-01	3.43E-05
H34B	50000	Formaldehyde	2.83E+01	3.23E-03
H34B	7782505	Chlorine	0.00E+00	0.00E+00
H34B	1330207	Xylenes	5.20E-01	5.94E-05
H34B	7439965	Manganese	0.00E+00	0.00E+00
H34B	67561	Methanol	0.00E+00	0.00E+00
H34B	91203	Naphthalene	1.02E+00	1.16E-04
H34B	7440020	Nickel	0.00E+00	0.00E+00
H34B	95476	o-Xylene	3.60E-01	4.11E-05
H34B	108952	Phenol	4.40E-01	5.02E-05
H34B	115071	Propylene	9.18E+00	1.05E-03

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
H34B	100425	Styrene	7.40E-01	8.45E-05
H34B	9960	SULFATES	0.00E+00	0.00E+00
H34B	108883	Toluene	9.80E-01	1.12E-04
H35B	106990	1,3-Butadiene	2.92E+00	3.33E-04
H35B	75070	Acetaldehyde	8.03E+00	9.17E-04
H35B	107028	Acrolein	3.83E+00	4.37E-04
H35B	71432	Benzene	3.33E+00	3.80E-04
H35B	7440508	Copper	0.00E+00	0.00E+00
H35B	100414	Ethyl Benzene	2.79E-01	3.18E-05
H35B	50000	Formaldehyde	2.63E+01	3.00E-03
H35B	7782505	Chlorine	0.00E+00	0.00E+00
H35B	1330207	Xylenes	4.83E-01	5.52E-05
H35B	7439965	Manganese	0.00E+00	0.00E+00
H35B	67561	Methanol	0.00E+00	0.00E+00
H35B	91203	Naphthalene	9.48E-01	1.08E-04
H35B	7440020	Nickel	0.00E+00	0.00E+00
H35B	95476	o-Xylene	3.35E-01	3.82E-05
H35B	108952	Phenol	4.09E-01	4.67E-05
H35B	115071	Propylene	8.53E+00	9.74E-04
H35B	100425	Styrene	6.88E-01	7.85E-05
H35B	9960	SULFATES	0.00E+00	0.00E+00
H35B	108883	Toluene	9.11E-01	1.04E-04
H36B	106990	1,3-Butadiene	2.93E+00	3.35E-04
H36B	75070	Acetaldehyde	8.07E+00	9.21E-04
H36B	107028	Acrolein	3.85E+00	4.39E-04
H36B	71432	Benzene	3.34E+00	3.82E-04
H36B	7440508	Copper	0.00E+00	0.00E+00
H36B	100414	Ethyl Benzene	2.80E-01	3.20E-05
H36B	50000	Formaldehyde	2.64E+01	3.02E-03
H36B	7782505	Chlorine	0.00E+00	0.00E+00
H36B	1330207	Xylenes	4.86E-01	5.55E-05
H36B	7439965	Manganese	0.00E+00	0.00E+00
H36B	67561	Methanol	0.00E+00	0.00E+00
H36B	91203	Naphthalene	9.53E-01	1.09E-04
H36B	7440020	Nickel	0.00E+00	0.00E+00
H36B	95476	o-Xylene	3.36E-01	3.84E-05
H36B	108952	Phenol	4.11E-01	4.69E-05
H36B	115071	Propylene	8.58E+00	9.79E-04
H36B	100425	Styrene	6.91E-01	7.89E-05
H36B	9960	SULFATES	0.00E+00	0.00E+00
H36B	108883	Toluene	9.15E-01	1.05E-04
H37B	106990	1,3-Butadiene	3.14E+00	3.58E-04
H37B	75070	Acetaldehyde	8.63E+00	9.85E-04
H37B	107028	Acrolein	4.11E+00	4.70E-04
H37B	71432	Benzene	3.58E+00	4.08E-04
H37B	7440508	Copper	0.00E+00	0.00E+00

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
H37B	100414	Ethyl Benzene	3.00E-01	3.42E-05
H37B	50000	Formaldehyde	2.82E+01	3.22E-03
H37B	7782505	Chlorine	0.00E+00	0.00E+00
H37B	1330207	Xylenes	5.19E-01	5.93E-05
H37B	7439965	Manganese	0.00E+00	0.00E+00
H37B	67561	Methanol	0.00E+00	0.00E+00
H37B	91203	Naphthalene	1.02E+00	1.16E-04
H37B	7440020	Nickel	0.00E+00	0.00E+00
H37B	95476	o-Xylene	3.60E-01	4.10E-05
H37B	108952	Phenol	4.39E-01	5.02E-05
H37B	115071	Propylene	9.17E+00	1.05E-03
H37B	100425	Styrene	7.39E-01	8.44E-05
H37B	9960	SULFATES	0.00E+00	0.00E+00
H37B	108883	Toluene	9.79E-01	1.12E-04
H38B	106990	1,3-Butadiene	3.16E+00	3.61E-04
H38B	75070	Acetaldehyde	8.70E+00	9.93E-04
H38B	107028	Acrolein	4.15E+00	4.73E-04
H38B	71432	Benzene	3.60E+00	4.11E-04
H38B	7440508	Copper	0.00E+00	0.00E+00
H38B	100414	Ethyl Benzene	3.02E-01	3.45E-05
H38B	50000	Formaldehyde	2.85E+01	3.25E-03
H38B	7782505	Chlorine	0.00E+00	0.00E+00
H38B	1330207	Xylenes	5.23E-01	5.98E-05
H38B	7439965	Manganese	0.00E+00	0.00E+00
H38B	67561	Methanol	0.00E+00	0.00E+00
H38B	91203	Naphthalene	1.03E+00	1.17E-04
H38B	7440020	Nickel	0.00E+00	0.00E+00
H38B	95476	o-Xylene	3.62E-01	4.14E-05
H38B	108952	Phenol	4.43E-01	5.06E-05
H38B	115071	Propylene	9.24E+00	1.05E-03
H38B	100425	Styrene	7.45E-01	8.50E-05
H38B	9960	SULFATES	0.00E+00	0.00E+00
H38B	108883	Toluene	9.87E-01	1.13E-04
H39B	106990	1,3-Butadiene	2.94E+00	3.35E-04
H39B	75070	Acetaldehyde	8.08E+00	9.23E-04
H39B	107028	Acrolein	3.86E+00	4.40E-04
H39B	71432	Benzene	3.35E+00	3.82E-04
H39B	7440508	Copper	0.00E+00	0.00E+00
H39B	100414	Ethyl Benzene	2.81E-01	3.20E-05
H39B	50000	Formaldehyde	2.65E+01	3.02E-03
H39B	7782505	Chlorine	0.00E+00	0.00E+00
H39B	1330207	Xylenes	4.87E-01	5.55E-05
H39B	7439965	Manganese	0.00E+00	0.00E+00
H39B	67561	Methanol	0.00E+00	0.00E+00
H39B	91203	Naphthalene	9.54E-01	1.09E-04
H39B	7440020	Nickel	0.00E+00	0.00E+00

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
H39B	95476	o-Xylene	3.37E-01	3.85E-05
H39B	108952	Phenol	4.12E-01	4.70E-05
H39B	115071	Propylene	8.59E+00	9.81E-04
H39B	100425	Styrene	6.92E-01	7.90E-05
H39B	9960	SULFATES	0.00E+00	0.00E+00
H39B	108883	Toluene	9.17E-01	1.05E-04
H40B	106990	1,3-Butadiene	2.90E+00	3.31E-04
H40B	75070	Acetaldehyde	7.99E+00	9.12E-04
H40B	107028	Acrolein	3.81E+00	4.35E-04
H40B	71432	Benzene	3.31E+00	3.78E-04
H40B	7440508	Copper	0.00E+00	0.00E+00
H40B	100414	Ethyl Benzene	2.77E-01	3.17E-05
H40B	50000	Formaldehyde	2.62E+01	2.99E-03
H40B	7782505	Chlorine	0.00E+00	0.00E+00
H40B	1330207	Xylenes	4.81E-01	5.49E-05
H40B	7439965	Manganese	0.00E+00	0.00E+00
H40B	67561	Methanol	0.00E+00	0.00E+00
H40B	91203	Naphthalene	9.43E-01	1.08E-04
H40B	7440020	Nickel	0.00E+00	0.00E+00
H40B	95476	o-Xylene	3.33E-01	3.80E-05
H40B	108952	Phenol	4.07E-01	4.64E-05
H40B	115071	Propylene	8.49E+00	9.69E-04
H40B	100425	Styrene	6.84E-01	7.81E-05
H40B	9960	SULFATES	0.00E+00	0.00E+00
H40B	108883	Toluene	9.06E-01	1.03E-04
H41B	106990	1,3-Butadiene	2.03E-02	2.31E-06
H41B	75070	Acetaldehyde	5.58E-02	6.37E-06
H41B	107028	Acrolein	2.66E-02	3.04E-06
H41B	71432	Benzene	2.31E-02	2.64E-06
H41B	7440508	Copper	0.00E+00	0.00E+00
H41B	100414	Ethyl Benzene	1.94E-03	2.21E-07
H41B	50000	Formaldehyde	1.83E-01	2.08E-05
H41B	7782505	Chlorine	0.00E+00	0.00E+00
H41B	1330207	Xylenes	3.36E-03	3.83E-07
H41B	7439965	Manganese	0.00E+00	0.00E+00
H41B	67561	Methanol	0.00E+00	0.00E+00
H41B	91203	Naphthalene	6.59E-03	7.52E-07
H41B	7440020	Nickel	0.00E+00	0.00E+00
H41B	95476	o-Xylene	2.32E-03	2.65E-07
H41B	108952	Phenol	2.84E-03	3.24E-07
H41B	115071	Propylene	5.93E-02	6.77E-06
H41B	100425	Styrene	4.78E-03	5.46E-07
H41B	9960	SULFATES	0.00E+00	0.00E+00
H41B	108883	Toluene	6.33E-03	7.22E-07
H42B	106990	1,3-Butadiene	2.01E-02	2.30E-06
H42B	75070	Acetaldehyde	5.54E-02	6.33E-06

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
H42B	107028	Acrolein	2.64E-02	3.02E-06
H42B	71432	Benzene	2.30E-02	2.62E-06
H42B	7440508	Copper	0.00E+00	0.00E+00
H42B	100414	Ethyl Benzene	1.92E-03	2.20E-07
H42B	50000	Formaldehyde	1.81E-01	2.07E-05
H42B	7782505	Chlorine	0.00E+00	0.00E+00
H42B	1330207	Xylenes	3.34E-03	3.81E-07
H42B	7439965	Manganese	0.00E+00	0.00E+00
H42B	67561	Methanol	0.00E+00	0.00E+00
H42B	91203	Naphthalene	6.54E-03	7.47E-07
H42B	7440020	Nickel	0.00E+00	0.00E+00
H42B	95476	o-Xylene	2.31E-03	2.64E-07
H42B	108952	Phenol	2.82E-03	3.22E-07
H42B	115071	Propylene	5.89E-02	6.72E-06
H42B	100425	Styrene	4.75E-03	5.42E-07
H42B	9960	SULFATES	0.00E+00	0.00E+00
H42B	108883	Toluene	6.29E-03	7.18E-07
H43B	106990	1,3-Butadiene	2.03E-02	2.31E-06
H43B	75070	Acetaldehyde	5.58E-02	6.37E-06
H43B	107028	Acrolein	2.66E-02	3.04E-06
H43B	71432	Benzene	2.31E-02	2.64E-06
H43B	7440508	Copper	0.00E+00	0.00E+00
H43B	100414	Ethyl Benzene	1.94E-03	2.21E-07
H43B	50000	Formaldehyde	1.83E-01	2.08E-05
H43B	7782505	Chlorine	0.00E+00	0.00E+00
H43B	1330207	Xylenes	3.36E-03	3.83E-07
H43B	7439965	Manganese	0.00E+00	0.00E+00
H43B	67561	Methanol	0.00E+00	0.00E+00
H43B	91203	Naphthalene	6.59E-03	7.52E-07
H43B	7440020	Nickel	0.00E+00	0.00E+00
H43B	95476	o-Xylene	2.32E-03	2.65E-07
H43B	108952	Phenol	2.84E-03	3.24E-07
H43B	115071	Propylene	5.93E-02	6.77E-06
H43B	100425	Styrene	4.78E-03	5.46E-07
H43B	9960	SULFATES	0.00E+00	0.00E+00
H43B	108883	Toluene	6.33E-03	7.22E-07
H44B	106990	1,3-Butadiene	2.00E-02	2.28E-06
H44B	75070	Acetaldehyde	5.51E-02	6.29E-06
H44B	107028	Acrolein	2.63E-02	3.00E-06
H44B	71432	Benzene	2.28E-02	2.60E-06
H44B	7440508	Copper	0.00E+00	0.00E+00
H44B	100414	Ethyl Benzene	1.91E-03	2.18E-07
H44B	50000	Formaldehyde	1.80E-01	2.06E-05
H44B	7782505	Chlorine	0.00E+00	0.00E+00
H44B	1330207	Xylenes	3.31E-03	3.78E-07
H44B	7439965	Manganese	0.00E+00	0.00E+00

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
H44B	67561	Methanol	0.00E+00	0.00E+00
H44B	91203	Naphthalene	6.50E-03	7.42E-07
H44B	7440020	Nickel	0.00E+00	0.00E+00
H44B	95476	o-Xylene	2.29E-03	2.62E-07
H44B	108952	Phenol	2.80E-03	3.20E-07
H44B	115071	Propylene	5.85E-02	6.68E-06
H44B	100425	Styrene	4.72E-03	5.38E-07
H44B	9960	SULFATES	0.00E+00	0.00E+00
H44B	108883	Toluene	6.25E-03	7.13E-07
H45B	106990	1,3-Butadiene	3.75E-02	4.28E-06
H45B	75070	Acetaldehyde	1.03E-01	1.18E-05
H45B	107028	Acrolein	4.92E-02	5.61E-06
H45B	71432	Benzene	4.27E-02	4.88E-06
H45B	7440508	Copper	0.00E+00	0.00E+00
H45B	100414	Ethyl Benzene	3.58E-03	4.09E-07
H45B	50000	Formaldehyde	3.37E-01	3.85E-05
H45B	7782505	Chlorine	0.00E+00	0.00E+00
H45B	1330207	Xylenes	6.20E-03	7.08E-07
H45B	7439965	Manganese	0.00E+00	0.00E+00
H45B	67561	Methanol	0.00E+00	0.00E+00
H45B	91203	Naphthalene	1.22E-02	1.39E-06
H45B	7440020	Nickel	0.00E+00	0.00E+00
H45B	95476	o-Xylene	4.30E-03	4.90E-07
H45B	108952	Phenol	5.25E-03	5.99E-07
H45B	115071	Propylene	1.10E-01	1.25E-05
H45B	100425	Styrene	8.83E-03	1.01E-06
H45B	9960	SULFATES	0.00E+00	0.00E+00
H45B	108883	Toluene	1.17E-02	1.33E-06
H46B	106990	1,3-Butadiene	3.79E-02	4.33E-06
H46B	75070	Acetaldehyde	1.04E-01	1.19E-05
H46B	107028	Acrolein	4.97E-02	5.68E-06
H46B	71432	Benzene	4.32E-02	4.93E-06
H46B	7440508	Copper	0.00E+00	0.00E+00
H46B	100414	Ethyl Benzene	3.62E-03	4.13E-07
H46B	50000	Formaldehyde	3.41E-01	3.90E-05
H46B	7782505	Chlorine	0.00E+00	0.00E+00
H46B	1330207	Xylenes	6.28E-03	7.17E-07
H46B	7439965	Manganese	0.00E+00	0.00E+00
H46B	67561	Methanol	0.00E+00	0.00E+00
H46B	91203	Naphthalene	1.23E-02	1.41E-06
H46B	7440020	Nickel	0.00E+00	0.00E+00
H46B	95476	o-Xylene	4.35E-03	4.96E-07
H46B	108952	Phenol	5.31E-03	6.06E-07
H46B	115071	Propylene	1.11E-01	1.27E-05
H46B	100425	Styrene	8.93E-03	1.02E-06
H46B	9960	SULFATES	0.00E+00	0.00E+00

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
H46B	108883	Toluene	1.18E-02	1.35E-06
G4B	106990	1,3-Butadiene	2.24E-01	2.56E-05
G4B	75070	Acetaldehyde	6.18E-01	7.05E-05
G4B	107028	Acrolein	2.95E-01	3.36E-05
G4B	71432	Benzene	2.56E-01	2.92E-05
G4B	7440508	Copper	0.00E+00	0.00E+00
G4B	100414	Ethyl Benzene	2.14E-02	2.45E-06
G4B	50000	Formaldehyde	2.02E+00	2.31E-04
G4B	7782505	Chlorine	0.00E+00	0.00E+00
G4B	1330207	Xylenes	3.72E-02	4.24E-06
G4B	7439965	Manganese	0.00E+00	0.00E+00
G4B	67561	Methanol	0.00E+00	0.00E+00
G4B	91203	Naphthalene	7.29E-02	8.32E-06
G4B	7440020	Nickel	0.00E+00	0.00E+00
G4B	95476	o-Xylene	2.57E-02	2.94E-06
G4B	108952	Phenol	3.15E-02	3.59E-06
G4B	115071	Propylene	6.56E-01	7.49E-05
G4B	100425	Styrene	5.29E-02	6.04E-06
G4B	9960	SULFATES	0.00E+00	0.00E+00
G4B	108883	Toluene	7.01E-02	8.00E-06
G9B	106990	1,3-Butadiene	5.87E-02	6.70E-06
G9B	75070	Acetaldehyde	1.61E-01	1.84E-05
G9B	107028	Acrolein	7.70E-02	8.79E-06
G9B	71432	Benzene	6.69E-02	7.64E-06
G9B	7440508	Copper	0.00E+00	0.00E+00
G9B	100414	Ethyl Benzene	5.60E-03	6.40E-07
G9B	50000	Formaldehyde	5.28E-01	6.03E-05
G9B	7782505	Chlorine	0.00E+00	0.00E+00
G9B	1330207	Xylenes	9.71E-03	1.11E-06
G9B	7439965	Manganese	0.00E+00	0.00E+00
G9B	67561	Methanol	0.00E+00	0.00E+00
G9B	91203	Naphthalene	1.91E-02	2.18E-06
G9B	7440020	Nickel	0.00E+00	0.00E+00
G9B	95476	o-Xylene	6.73E-03	7.68E-07
G9B	108952	Phenol	8.22E-03	9.38E-07
G9B	115071	Propylene	1.72E-01	1.96E-05
G9B	100425	Styrene	1.38E-02	1.58E-06
G9B	9960	SULFATES	0.00E+00	0.00E+00
G9B	108883	Toluene	1.83E-02	2.09E-06
G12B	106990	1,3-Butadiene	2.07E+00	2.37E-04
G12B	75070	Acetaldehyde	5.71E+00	6.52E-04
G12B	107028	Acrolein	2.72E+00	3.11E-04
G12B	71432	Benzene	2.37E+00	2.70E-04
G12B	7440508	Copper	0.00E+00	0.00E+00
G12B	100414	Ethyl Benzene	1.98E-01	2.26E-05
G12B	50000	Formaldehyde	1.87E+01	2.13E-03

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
G12B	7782505	Chlorine	0.00E+00	0.00E+00
G12B	1330207	Xylenes	3.44E-01	3.92E-05
G12B	7439965	Manganese	0.00E+00	0.00E+00
G12B	67561	Methanol	0.00E+00	0.00E+00
G12B	91203	Naphthalene	6.74E-01	7.69E-05
G12B	7440020	Nickel	0.00E+00	0.00E+00
G12B	95476	o-Xylene	2.38E-01	2.72E-05
G12B	108952	Phenol	2.91E-01	3.32E-05
G12B	115071	Propylene	6.06E+00	6.92E-04
G12B	100425	Styrene	4.89E-01	5.58E-05
G12B	9960	SULFATES	0.00E+00	0.00E+00
G12B	108883	Toluene	6.47E-01	7.39E-05
G13B	106990	1,3-Butadiene	2.09E+00	2.38E-04
G13B	75070	Acetaldehyde	5.74E+00	6.56E-04
G13B	107028	Acrolein	2.74E+00	3.13E-04
G13B	71432	Benzene	2.38E+00	2.72E-04
G13B	7440508	Copper	0.00E+00	0.00E+00
G13B	100414	Ethyl Benzene	1.99E-01	2.28E-05
G13B	50000	Formaldehyde	1.88E+01	2.15E-03
G13B	7782505	Chlorine	0.00E+00	0.00E+00
G13B	1330207	Xylenes	3.46E-01	3.95E-05
G13B	7439965	Manganese	0.00E+00	0.00E+00
G13B	67561	Methanol	0.00E+00	0.00E+00
G13B	91203	Naphthalene	6.78E-01	7.74E-05
G13B	7440020	Nickel	0.00E+00	0.00E+00
G13B	95476	o-Xylene	2.39E-01	2.73E-05
G13B	108952	Phenol	2.92E-01	3.34E-05
G13B	115071	Propylene	6.10E+00	6.96E-04
G13B	100425	Styrene	4.92E-01	5.61E-05
G13B	9960	SULFATES	0.00E+00	0.00E+00
G13B	108883	Toluene	6.51E-01	7.44E-05
G27B	106990	1,3-Butadiene	4.53E+00	5.17E-04
G27B	75070	Acetaldehyde	1.25E+01	1.42E-03
G27B	107028	Acrolein	5.95E+00	6.79E-04
G27B	71432	Benzene	5.17E+00	5.90E-04
G27B	7440508	Copper	0.00E+00	0.00E+00
G27B	100414	Ethyl Benzene	4.33E-01	4.94E-05
G27B	50000	Formaldehyde	4.08E+01	4.66E-03
G27B	7782505	Chlorine	0.00E+00	0.00E+00
G27B	1330207	Xylenes	7.51E-01	8.57E-05
G27B	7439965	Manganese	0.00E+00	0.00E+00
G27B	67561	Methanol	0.00E+00	0.00E+00
G27B	91203	Naphthalene	1.47E+00	1.68E-04
G27B	7440020	Nickel	0.00E+00	0.00E+00
G27B	95476	o-Xylene	5.20E-01	5.93E-05
G27B	108952	Phenol	6.35E-01	7.25E-05

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
G27B	115071	Propylene	1.32E+01	1.51E-03
G27B	100425	Styrene	1.07E+00	1.22E-04
G27B	9960	SULFATES	0.00E+00	0.00E+00
G27B	108883	Toluene	1.41E+00	1.61E-04
T14D	106990	1,3-Butadiene	2.40E+01	2.74E-03
T14D	75070	Acetaldehyde	6.61E+01	7.54E-03
T14D	107028	Acrolein	3.15E+01	3.60E-03
T14D	71432	Benzene	2.74E+01	3.12E-03
T14D	7440508	Copper	0.00E+00	0.00E+00
T14D	100414	Ethyl Benzene	2.29E+00	2.62E-04
T14D	50000	Formaldehyde	2.16E+02	2.47E-02
T14D	7782505	Chlorine	0.00E+00	0.00E+00
T14D	1330207	Xylenes	3.98E+00	4.54E-04
T14D	7439965	Manganese	0.00E+00	0.00E+00
T14D	67561	Methanol	0.00E+00	0.00E+00
T14D	91203	Naphthalene	7.80E+00	8.90E-04
T14D	7440020	Nickel	0.00E+00	0.00E+00
T14D	95476	o-Xylene	2.75E+00	3.14E-04
T14D	108952	Phenol	3.36E+00	3.84E-04
T14D	115071	Propylene	7.02E+01	8.01E-03
T14D	100425	Styrene	5.66E+00	6.46E-04
T14D	9960	SULFATES	0.00E+00	0.00E+00
T14D	108883	Toluene	7.49E+00	8.55E-04
T10D	106990	1,3-Butadiene	4.62E-01	5.28E-05
T10D	75070	Acetaldehyde	1.27E+00	1.45E-04
T10D	107028	Acrolein	6.07E-01	6.93E-05
T10D	71432	Benzene	5.27E-01	6.02E-05
T10D	7440508	Copper	0.00E+00	0.00E+00
T10D	100414	Ethyl Benzene	4.42E-02	5.04E-06
T10D	50000	Formaldehyde	4.16E+00	4.75E-04
T10D	7782505	Chlorine	0.00E+00	0.00E+00
T10D	1330207	Xylenes	7.66E-02	8.74E-06
T10D	7439965	Manganese	0.00E+00	0.00E+00
T10D	67561	Methanol	0.00E+00	0.00E+00
T10D	91203	Naphthalene	1.50E-01	1.71E-05
T10D	7440020	Nickel	0.00E+00	0.00E+00
T10D	95476	o-Xylene	5.30E-02	6.05E-06
T10D	108952	Phenol	6.48E-02	7.40E-06
T10D	115071	Propylene	1.35E+00	1.54E-04
T10D	100425	Styrene	1.09E-01	1.24E-05
T10D	9960	SULFATES	0.00E+00	0.00E+00
T10D	108883	Toluene	1.44E-01	1.65E-05
C4B	106990	1,3-Butadiene	2.04E-04	2.32E-08
C4B	75070	Acetaldehyde	5.15E-04	5.88E-08
C4B	107028	Acrolein	2.95E-04	3.37E-08
C4B	71432	Benzene	2.03E-04	2.32E-08

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
C4B	7440508	Copper	1.26E-03	1.44E-07
C4B	100414	Ethyl Benzene	2.10E-05	2.40E-09
C4B	50000	Formaldehyde	1.49E-03	1.70E-07
C4B	7782505	Chlorine	4.20E-04	4.79E-08
C4B	1330207	Xylenes	3.40E-05	3.88E-09
C4B	7439965	Manganese	1.07E-04	1.22E-08
C4B	67561	Methanol	2.18E-04	2.49E-08
C4B	91203	Naphthalene	6.53E-05	7.45E-09
C4B	7440020	Nickel	2.14E-04	2.45E-08
C4B	95476	o-Xylene	2.00E-05	2.29E-09
C4B	108952	Phenol	8.76E-05	1.00E-08
C4B	115071	Propylene	5.47E-04	6.25E-08
C4B	100425	Styrene	3.73E-05	4.26E-09
C4B	9960	SULFATES	1.34E-01	1.53E-05
C4B	108883	Toluene	7.75E-05	8.84E-09
C9B	106990	1,3-Butadiene	2.48E-05	2.83E-09
C9B	75070	Acetaldehyde	6.28E-05	7.17E-09
C9B	107028	Acrolein	3.60E-05	4.11E-09
C9B	71432	Benzene	2.47E-05	2.82E-09
C9B	7440508	Copper	6.55E-05	7.47E-09
C9B	100414	Ethyl Benzene	2.56E-06	2.92E-10
C9B	50000	Formaldehyde	1.81E-04	2.07E-08
C9B	7782505	Chlorine	2.18E-05	2.49E-09
C9B	1330207	Xylenes	4.15E-06	4.74E-10
C9B	7439965	Manganese	5.55E-06	6.34E-10
C9B	67561	Methanol	2.66E-05	3.03E-09
C9B	91203	Naphthalene	7.96E-06	9.09E-10
C9B	7440020	Nickel	1.11E-05	1.27E-09
C9B	95476	o-Xylene	2.44E-06	2.79E-10
C9B	108952	Phenol	1.07E-05	1.22E-09
C9B	115071	Propylene	6.67E-05	7.61E-09
C9B	100425	Styrene	4.55E-06	5.19E-10
C9B	9960	SULFATES	6.98E-03	7.97E-07
C9B	108883	Toluene	9.44E-06	1.08E-09
C12B	106990	1,3-Butadiene	2.58E-04	2.95E-08
C12B	75070	Acetaldehyde	6.54E-04	7.46E-08
C12B	107028	Acrolein	3.75E-04	4.28E-08
C12B	71432	Benzene	2.57E-04	2.94E-08
C12B	7440508	Copper	6.75E-04	7.71E-08
C12B	100414	Ethyl Benzene	2.66E-05	3.04E-09
C12B	50000	Formaldehyde	1.88E-03	2.15E-07
C12B	7782505	Chlorine	2.25E-04	2.57E-08
C12B	1330207	Xylenes	4.31E-05	4.93E-09
C12B	7439965	Manganese	5.73E-05	6.54E-09
C12B	67561	Methanol	2.76E-04	3.15E-08
C12B	91203	Naphthalene	8.28E-05	9.45E-09

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
C12B	7440020	Nickel	1.15E-04	1.31E-08
C12B	95476	o-Xylene	2.54E-05	2.90E-09
C12B	108952	Phenol	1.11E-04	1.27E-08
C12B	115071	Propylene	6.94E-04	7.92E-08
C12B	100425	Styrene	4.73E-05	5.40E-09
C12B	9960	SULFATES	7.20E-02	8.22E-06
C12B	108883	Toluene	9.82E-05	1.12E-08
C13B	106990	1,3-Butadiene	2.70E-04	3.09E-08
C13B	75070	Acetaldehyde	6.85E-04	7.82E-08
C13B	107028	Acrolein	3.93E-04	4.48E-08
C13B	71432	Benzene	2.69E-04	3.08E-08
C13B	7440508	Copper	6.86E-04	7.83E-08
C13B	100414	Ethyl Benzene	2.79E-05	3.18E-09
C13B	50000	Formaldehyde	1.97E-03	2.25E-07
C13B	7782505	Chlorine	2.29E-04	2.61E-08
C13B	1330207	Xylenes	4.52E-05	5.16E-09
C13B	7439965	Manganese	5.82E-05	6.64E-09
C13B	67561	Methanol	2.89E-04	3.30E-08
C13B	91203	Naphthalene	8.67E-05	9.90E-09
C13B	7440020	Nickel	1.17E-04	1.33E-08
C13B	95476	o-Xylene	2.66E-05	3.04E-09
C13B	108952	Phenol	1.16E-04	1.33E-08
C13B	115071	Propylene	7.27E-04	8.30E-08
C13B	100425	Styrene	4.95E-05	5.65E-09
C13B	9960	SULFATES	7.31E-02	8.35E-06
C13B	108883	Toluene	1.03E-04	1.17E-08
C26B	106990	1,3-Butadiene	3.51E-03	4.00E-07
C26B	75070	Acetaldehyde	8.88E-03	1.01E-06
C26B	107028	Acrolein	5.09E-03	5.81E-07
C26B	71432	Benzene	3.49E-03	3.99E-07
C26B	7440508	Copper	1.18E-02	1.35E-06
C26B	100414	Ethyl Benzene	3.62E-04	4.13E-08
C26B	50000	Formaldehyde	2.56E-02	2.92E-06
C26B	7782505	Chlorine	3.94E-03	4.50E-07
C26B	1330207	Xylenes	5.86E-04	6.69E-08
C26B	7439965	Manganese	1.00E-03	1.15E-07
C26B	67561	Methanol	3.75E-03	4.28E-07
C26B	91203	Naphthalene	1.12E-03	1.28E-07
C26B	7440020	Nickel	2.01E-03	2.30E-07
C26B	95476	o-Xylene	3.45E-04	3.94E-08
C26B	108952	Phenol	1.51E-03	1.72E-07
C26B	115071	Propylene	9.42E-03	1.08E-06
C26B	100425	Styrene	6.42E-04	7.33E-08
C26B	9960	SULFATES	1.26E+00	1.44E-04
C26B	108883	Toluene	1.33E-03	1.52E-07
C27B	106990	1,3-Butadiene	5.95E-03	6.79E-07

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
C27B	75070	Acetaldehyde	1.51E-02	1.72E-06
C27B	107028	Acrolein	8.63E-03	9.85E-07
C27B	71432	Benzene	5.92E-03	6.76E-07
C27B	7440508	Copper	1.45E-02	1.66E-06
C27B	100414	Ethyl Benzene	6.13E-04	7.00E-08
C27B	50000	Formaldehyde	4.34E-02	4.95E-06
C27B	7782505	Chlorine	4.84E-03	5.52E-07
C27B	1330207	Xylenes	9.94E-04	1.13E-07
C27B	7439965	Manganese	1.23E-03	1.41E-07
C27B	67561	Methanol	6.36E-03	7.26E-07
C27B	91203	Naphthalene	1.91E-03	2.18E-07
C27B	7440020	Nickel	2.47E-03	2.82E-07
C27B	95476	o-Xylene	5.85E-04	6.68E-08
C27B	108952	Phenol	2.56E-03	2.92E-07
C27B	115071	Propylene	1.60E-02	1.82E-06
C27B	100425	Styrene	1.09E-03	1.24E-07
C27B	9960	SULFATES	1.55E+00	1.77E-04
C27B	108883	Toluene	2.26E-03	2.58E-07
B4A	106990	1,3-Butadiene	3.06E-01	3.49E-05
B4A	75070	Acetaldehyde	7.74E-01	8.84E-05
B4A	107028	Acrolein	4.44E-01	5.07E-05
B4A	71432	Benzene	3.05E-01	3.48E-05
B4A	7440508	Copper	1.71E-02	1.95E-06
B4A	100414	Ethyl Benzene	3.15E-02	3.60E-06
B4A	50000	Formaldehyde	2.23E+00	2.55E-04
B4A	7782505	Chlorine	5.70E-03	6.51E-07
B4A	1330207	Xylenes	5.11E-02	5.84E-06
B4A	7439965	Manganese	1.45E-03	1.66E-07
B4A	67561	Methanol	3.27E-01	3.73E-05
B4A	91203	Naphthalene	9.81E-02	1.12E-05
B4A	7440020	Nickel	2.91E-03	3.32E-07
B4A	95476	o-Xylene	3.01E-02	3.43E-06
B4A	108952	Phenol	1.32E-01	1.50E-05
B4A	115071	Propylene	8.22E-01	9.38E-05
B4A	100425	Styrene	5.60E-02	6.39E-06
B4A	9960	SULFATES	1.82E+00	2.08E-04
B4A	108883	Toluene	1.16E-01	1.33E-05
B26A	106990	1,3-Butadiene	7.80E+00	8.90E-04
B26A	75070	Acetaldehyde	1.98E+01	2.25E-03
B26A	107028	Acrolein	1.13E+01	1.29E-03
B26A	71432	Benzene	7.77E+00	8.87E-04
B26A	7440508	Copper	5.00E-01	5.70E-05
B26A	100414	Ethyl Benzene	8.05E-01	9.18E-05
B26A	50000	Formaldehyde	5.69E+01	6.50E-03
B26A	7782505	Chlorine	1.66E-01	1.90E-05
B26A	1330207	Xylenes	1.30E+00	1.49E-04

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
B26A	7439965	Manganese	4.24E-02	4.84E-06
B26A	67561	Methanol	8.35E+00	9.53E-04
B26A	91203	Naphthalene	2.50E+00	2.86E-04
B26A	7440020	Nickel	8.50E-02	9.70E-06
B26A	95476	o-Xylene	7.68E-01	8.76E-05
B26A	108952	Phenol	3.36E+00	3.83E-04
B26A	115071	Propylene	2.10E+01	2.39E-03
B26A	100425	Styrene	1.43E+00	1.63E-04
B26A	9960	SULFATES	5.33E+01	6.08E-03
B26A	108883	Toluene	2.97E+00	3.39E-04
G4A	106990	1,3-Butadiene	4.81E-01	5.49E-05
G4A	75070	Acetaldehyde	1.32E+00	1.51E-04
G4A	107028	Acrolein	6.31E-01	7.21E-05
G4A	71432	Benzene	5.48E-01	6.26E-05
G4A	7440508	Copper	0.00E+00	0.00E+00
G4A	100414	Ethyl Benzene	4.60E-02	5.25E-06
G4A	50000	Formaldehyde	4.33E+00	4.95E-04
G4A	7782505	Chlorine	0.00E+00	0.00E+00
G4A	1330207	Xylenes	7.97E-02	9.09E-06
G4A	7439965	Manganese	0.00E+00	0.00E+00
G4A	67561	Methanol	0.00E+00	0.00E+00
G4A	91203	Naphthalene	1.56E-01	1.78E-05
G4A	7440020	Nickel	0.00E+00	0.00E+00
G4A	95476	o-Xylene	5.52E-02	6.30E-06
G4A	108952	Phenol	6.74E-02	7.69E-06
G4A	115071	Propylene	1.41E+00	1.61E-04
G4A	100425	Styrene	1.13E-01	1.29E-05
G4A	9960	SULFATES	0.00E+00	0.00E+00
G4A	108883	Toluene	1.50E-01	1.71E-05
G9A	106990	1,3-Butadiene	1.43E-01	1.63E-05
G9A	75070	Acetaldehyde	3.93E-01	4.48E-05
G9A	107028	Acrolein	1.87E-01	2.14E-05
G9A	71432	Benzene	1.63E-01	1.86E-05
G9A	7440508	Copper	0.00E+00	0.00E+00
G9A	100414	Ethyl Benzene	1.36E-02	1.56E-06
G9A	50000	Formaldehyde	1.29E+00	1.47E-04
G9A	7782505	Chlorine	0.00E+00	0.00E+00
G9A	1330207	Xylenes	2.36E-02	2.70E-06
G9A	7439965	Manganese	0.00E+00	0.00E+00
G9A	67561	Methanol	0.00E+00	0.00E+00
G9A	91203	Naphthalene	4.64E-02	5.29E-06
G9A	7440020	Nickel	0.00E+00	0.00E+00
G9A	95476	o-Xylene	1.64E-02	1.87E-06
G9A	108952	Phenol	2.00E-02	2.28E-06
G9A	115071	Propylene	4.17E-01	4.76E-05
G9A	100425	Styrene	3.36E-02	3.84E-06

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
G9A	9960	SULFATES	0.00E+00	0.00E+00
G9A	108883	Toluene	4.46E-02	5.09E-06
G12A	106990	1,3-Butadiene	5.07E+00	5.79E-04
G12A	75070	Acetaldehyde	1.40E+01	1.59E-03
G12A	107028	Acrolein	6.66E+00	7.60E-04
G12A	71432	Benzene	5.79E+00	6.60E-04
G12A	7440508	Copper	0.00E+00	0.00E+00
G12A	100414	Ethyl Benzene	4.85E-01	5.53E-05
G12A	50000	Formaldehyde	4.57E+01	5.22E-03
G12A	7782505	Chlorine	0.00E+00	0.00E+00
G12A	1330207	Xylenes	8.40E-01	9.59E-05
G12A	7439965	Manganese	0.00E+00	0.00E+00
G12A	67561	Methanol	0.00E+00	0.00E+00
G12A	91203	Naphthalene	1.65E+00	1.88E-04
G12A	7440020	Nickel	0.00E+00	0.00E+00
G12A	95476	o-Xylene	5.82E-01	6.64E-05
G12A	108952	Phenol	7.11E-01	8.12E-05
G12A	115071	Propylene	1.48E+01	1.69E-03
G12A	100425	Styrene	1.20E+00	1.37E-04
G12A	9960	SULFATES	0.00E+00	0.00E+00
G12A	108883	Toluene	1.58E+00	1.81E-04
G13A	106990	1,3-Butadiene	5.08E+00	5.80E-04
G13A	75070	Acetaldehyde	1.40E+01	1.60E-03
G13A	107028	Acrolein	6.67E+00	7.61E-04
G13A	71432	Benzene	5.79E+00	6.61E-04
G13A	7440508	Copper	0.00E+00	0.00E+00
G13A	100414	Ethyl Benzene	4.85E-01	5.54E-05
G13A	50000	Formaldehyde	4.58E+01	5.22E-03
G13A	7782505	Chlorine	0.00E+00	0.00E+00
G13A	1330207	Xylenes	8.41E-01	9.61E-05
G13A	7439965	Manganese	0.00E+00	0.00E+00
G13A	67561	Methanol	0.00E+00	0.00E+00
G13A	91203	Naphthalene	1.65E+00	1.88E-04
G13A	7440020	Nickel	0.00E+00	0.00E+00
G13A	95476	o-Xylene	5.83E-01	6.65E-05
G13A	108952	Phenol	7.12E-01	8.13E-05
G13A	115071	Propylene	1.49E+01	1.70E-03
G13A	100425	Styrene	1.20E+00	1.37E-04
G13A	9960	SULFATES	0.00E+00	0.00E+00
G13A	108883	Toluene	1.59E+00	1.81E-04
G27A	106990	1,3-Butadiene	1.10E+01	1.26E-03
G27A	75070	Acetaldehyde	3.04E+01	3.47E-03
G27A	107028	Acrolein	1.45E+01	1.65E-03
G27A	71432	Benzene	1.26E+01	1.44E-03
G27A	7440508	Copper	0.00E+00	0.00E+00
G27A	100414	Ethyl Benzene	1.05E+00	1.20E-04

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
G27A	50000	Formaldehyde	9.94E+01	1.13E-02
G27A	7782505	Chlorine	0.00E+00	0.00E+00
G27A	1330207	Xylenes	1.83E+00	2.09E-04
G27A	7439965	Manganese	0.00E+00	0.00E+00
G27A	67561	Methanol	0.00E+00	0.00E+00
G27A	91203	Naphthalene	3.59E+00	4.09E-04
G27A	7440020	Nickel	0.00E+00	0.00E+00
G27A	95476	o-Xylene	1.27E+00	1.44E-04
G27A	108952	Phenol	1.55E+00	1.77E-04
G27A	115071	Propylene	3.23E+01	3.68E-03
G27A	100425	Styrene	2.60E+00	2.97E-04
G27A	9960	SULFATES	0.00E+00	0.00E+00
G27A	108883	Toluene	3.45E+00	3.93E-04
C4A	106990	1,3-Butadiene	1.30E-03	1.48E-07
C4A	75070	Acetaldehyde	3.29E-03	3.75E-07
C4A	107028	Acrolein	1.89E-03	2.15E-07
C4A	71432	Benzene	1.29E-03	1.48E-07
C4A	7440508	Copper	3.65E-03	4.17E-07
C4A	100414	Ethyl Benzene	1.34E-04	1.53E-08
C4A	50000	Formaldehyde	9.48E-03	1.08E-06
C4A	7782505	Chlorine	1.22E-03	1.39E-07
C4A	1330207	Xylenes	2.17E-04	2.48E-08
C4A	7439965	Manganese	3.10E-04	3.54E-08
C4A	67561	Methanol	1.39E-03	1.59E-07
C4A	91203	Naphthalene	4.16E-04	4.75E-08
C4A	7440020	Nickel	6.22E-04	7.10E-08
C4A	95476	o-Xylene	1.28E-04	1.46E-08
C4A	108952	Phenol	5.59E-04	6.38E-08
C4A	115071	Propylene	3.49E-03	3.98E-07
C4A	100425	Styrene	2.38E-04	2.72E-08
C4A	9960	SULFATES	3.90E-01	4.45E-05
C4A	108883	Toluene	4.94E-04	5.64E-08
C9A	106990	1,3-Butadiene	3.93E-05	4.48E-09
C9A	75070	Acetaldehyde	9.94E-05	1.14E-08
C9A	107028	Acrolein	5.70E-05	6.51E-09
C9A	71432	Benzene	3.91E-05	4.47E-09
C9A	7440508	Copper	1.10E-04	1.25E-08
C9A	100414	Ethyl Benzene	4.05E-06	4.62E-10
C9A	50000	Formaldehyde	2.87E-04	3.27E-08
C9A	7782505	Chlorine	3.65E-05	4.17E-09
C9A	1330207	Xylenes	6.56E-06	7.49E-10
C9A	7439965	Manganese	9.30E-06	1.06E-09
C9A	67561	Methanol	4.20E-05	4.80E-09
C9A	91203	Naphthalene	1.26E-05	1.44E-09
C9A	7440020	Nickel	1.87E-05	2.13E-09
C9A	95476	o-Xylene	3.86E-06	4.41E-10

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
C9A	108952	Phenol	1.69E-05	1.93E-09
C9A	115071	Propylene	1.06E-04	1.20E-08
C9A	100425	Styrene	7.19E-06	8.21E-10
C9A	9960	SULFATES	1.17E-02	1.33E-06
C9A	108883	Toluene	1.49E-05	1.71E-09
C12A	106990	1,3-Butadiene	4.11E-04	4.70E-08
C12A	75070	Acetaldehyde	1.04E-03	1.19E-07
C12A	107028	Acrolein	5.97E-04	6.82E-08
C12A	71432	Benzene	4.10E-04	4.68E-08
C12A	7440508	Copper	1.03E-03	1.17E-07
C12A	100414	Ethyl Benzene	4.24E-05	4.84E-09
C12A	50000	Formaldehyde	3.00E-03	3.43E-07
C12A	7782505	Chlorine	3.42E-04	3.90E-08
C12A	1330207	Xylenes	6.88E-05	7.85E-09
C12A	7439965	Manganese	8.70E-05	9.94E-09
C12A	67561	Methanol	4.40E-04	5.02E-08
C12A	91203	Naphthalene	1.32E-04	1.51E-08
C12A	7440020	Nickel	1.75E-04	1.99E-08
C12A	95476	o-Xylene	4.05E-05	4.62E-09
C12A	108952	Phenol	1.77E-04	2.02E-08
C12A	115071	Propylene	1.11E-03	1.26E-07
C12A	100425	Styrene	7.54E-05	8.60E-09
C12A	9960	SULFATES	1.09E-01	1.25E-05
C12A	108883	Toluene	1.57E-04	1.79E-08
C13A	106990	1,3-Butadiene	3.99E-04	4.56E-08
C13A	75070	Acetaldehyde	1.01E-03	1.15E-07
C13A	107028	Acrolein	5.79E-04	6.61E-08
C13A	71432	Benzene	3.98E-04	4.54E-08
C13A	7440508	Copper	1.03E-03	1.17E-07
C13A	100414	Ethyl Benzene	4.12E-05	4.70E-09
C13A	50000	Formaldehyde	2.91E-03	3.32E-07
C13A	7782505	Chlorine	3.43E-04	3.91E-08
C13A	1330207	Xylenes	6.67E-05	7.62E-09
C13A	7439965	Manganese	8.73E-05	9.96E-09
C13A	67561	Methanol	4.27E-04	4.87E-08
C13A	91203	Naphthalene	1.28E-04	1.46E-08
C13A	7440020	Nickel	1.75E-04	2.00E-08
C13A	95476	o-Xylene	3.93E-05	4.48E-09
C13A	108952	Phenol	1.72E-04	1.96E-08
C13A	115071	Propylene	1.07E-03	1.22E-07
C13A	100425	Styrene	7.31E-05	8.35E-09
C13A	9960	SULFATES	1.10E-01	1.25E-05
C13A	108883	Toluene	1.52E-04	1.73E-08
C26A	106990	1,3-Butadiene	8.26E-03	9.43E-07
C26A	75070	Acetaldehyde	2.09E-02	2.39E-06
C26A	107028	Acrolein	1.20E-02	1.37E-06

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
C26A	71432	Benzene	8.23E-03	9.40E-07
C26A	7440508	Copper	2.64E-02	3.02E-06
C26A	100414	Ethyl Benzene	8.52E-04	9.73E-08
C26A	50000	Formaldehyde	6.03E-02	6.88E-06
C26A	7782505	Chlorine	8.81E-03	1.01E-06
C26A	1330207	Xylenes	1.38E-03	1.58E-07
C26A	7439965	Manganese	2.24E-03	2.56E-07
C26A	67561	Methanol	8.84E-03	1.01E-06
C26A	91203	Naphthalene	2.65E-03	3.03E-07
C26A	7440020	Nickel	4.50E-03	5.13E-07
C26A	95476	o-Xylene	8.13E-04	9.28E-08
C26A	108952	Phenol	3.56E-03	4.06E-07
C26A	115071	Propylene	2.22E-02	2.54E-06
C26A	100425	Styrene	1.51E-03	1.73E-07
C26A	9960	SULFATES	2.82E+00	3.22E-04
C26A	108883	Toluene	3.14E-03	3.59E-07
C27A	106990	1,3-Butadiene	1.87E-02	2.14E-06
C27A	75070	Acetaldehyde	4.74E-02	5.41E-06
C27A	107028	Acrolein	2.72E-02	3.10E-06
C27A	71432	Benzene	1.87E-02	2.13E-06
C27A	7440508	Copper	3.77E-02	4.31E-06
C27A	100414	Ethyl Benzene	1.93E-03	2.20E-07
C27A	50000	Formaldehyde	1.37E-01	1.56E-05
C27A	7782505	Chlorine	1.26E-02	1.43E-06
C27A	1330207	Xylenes	3.13E-03	3.57E-07
C27A	7439965	Manganese	3.20E-03	3.65E-07
C27A	67561	Methanol	2.00E-02	2.29E-06
C27A	91203	Naphthalene	6.00E-03	6.85E-07
C27A	7440020	Nickel	6.42E-03	7.33E-07
C27A	95476	o-Xylene	1.84E-03	2.10E-07
C27A	108952	Phenol	8.05E-03	9.19E-07
C27A	115071	Propylene	5.03E-02	5.74E-06
C27A	100425	Styrene	3.43E-03	3.91E-07
C27A	9960	SULFATES	4.02E+00	4.59E-04
C27A	108883	Toluene	7.12E-03	8.13E-07
A1B	106990	1,3-Butadiene	1.01E+00	1.15E-04
A1B	75070	Acetaldehyde	2.58E+00	2.94E-04
A1B	107028	Acrolein	1.44E+00	1.65E-04
A1B	71432	Benzene	1.02E+00	1.17E-04
A1B	7440508	Copper	8.51E-03	9.72E-07
A1B	100414	Ethyl Benzene	1.03E-01	1.17E-05
A1B	50000	Formaldehyde	7.57E+00	8.64E-04
A1B	7782505	Chlorine	2.84E-03	3.24E-07
A1B	1330207	Xylenes	1.68E-01	1.92E-05
A1B	7439965	Manganese	7.22E-04	8.24E-08
A1B	67561	Methanol	9.33E-01	1.07E-04

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
A1B	91203	Naphthalene	3.23E-01	3.69E-05
A1B	7440020	Nickel	1.45E-03	1.65E-07
A1B	95476	o-Xylene	1.01E-01	1.15E-05
A1B	108952	Phenol	3.94E-01	4.50E-05
A1B	115071	Propylene	2.73E+00	3.12E-04
A1B	100425	Styrene	1.91E-01	2.18E-05
A1B	9960	SULFATES	9.08E-01	1.04E-04
A1B	108883	Toluene	3.74E-01	4.26E-05
A2B	106990	1,3-Butadiene	3.32E-01	3.79E-05
A2B	75070	Acetaldehyde	8.51E-01	9.71E-05
A2B	107028	Acrolein	4.76E-01	5.43E-05
A2B	71432	Benzene	3.37E-01	3.85E-05
A2B	7440508	Copper	2.88E-03	3.29E-07
A2B	100414	Ethyl Benzene	3.39E-02	3.87E-06
A2B	50000	Formaldehyde	2.50E+00	2.85E-04
A2B	7782505	Chlorine	9.59E-04	1.09E-07
A2B	1330207	Xylenes	5.54E-02	6.33E-06
A2B	7439965	Manganese	2.44E-04	2.79E-08
A2B	67561	Methanol	3.08E-01	3.51E-05
A2B	91203	Naphthalene	1.07E-01	1.22E-05
A2B	7440020	Nickel	4.90E-04	5.59E-08
A2B	95476	o-Xylene	3.34E-02	3.81E-06
A2B	108952	Phenol	1.30E-01	1.48E-05
A2B	115071	Propylene	9.03E-01	1.03E-04
A2B	100425	Styrene	6.32E-02	7.21E-06
A2B	9960	SULFATES	3.07E-01	3.50E-05
A2B	108883	Toluene	1.23E-01	1.41E-05
A15B	106990	1,3-Butadiene	3.06E+00	3.50E-04
A15B	75070	Acetaldehyde	7.90E+00	9.01E-04
A15B	107028	Acrolein	4.36E+00	4.98E-04
A15B	71432	Benzene	3.14E+00	3.59E-04
A15B	7440508	Copper	2.59E-02	2.96E-06
A15B	100414	Ethyl Benzene	3.11E-01	3.55E-05
A15B	50000	Formaldehyde	2.34E+01	2.67E-03
A15B	7782505	Chlorine	8.64E-03	9.87E-07
A15B	1330207	Xylenes	5.11E-01	5.83E-05
A15B	7439965	Manganese	2.20E-03	2.51E-07
A15B	67561	Methanol	2.60E+00	2.97E-04
A15B	91203	Naphthalene	9.85E-01	1.12E-04
A15B	7440020	Nickel	4.41E-03	5.04E-07
A15B	95476	o-Xylene	3.12E-01	3.56E-05
A15B	108952	Phenol	1.14E+00	1.30E-04
A15B	115071	Propylene	8.38E+00	9.57E-04
A15B	100425	Styrene	5.94E-01	6.78E-05
A15B	9960	SULFATES	2.77E+00	3.16E-04
A15B	108883	Toluene	1.12E+00	1.28E-04

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
A16B	106990	1,3-Butadiene	4.09E+00	4.67E-04
A16B	75070	Acetaldehyde	1.05E+01	1.20E-03
A16B	107028	Acrolein	5.82E+00	6.64E-04
A16B	71432	Benzene	4.20E+00	4.79E-04
A16B	7440508	Copper	3.45E-02	3.94E-06
A16B	100414	Ethyl Benzene	4.15E-01	4.74E-05
A16B	50000	Formaldehyde	3.13E+01	3.57E-03
A16B	7782505	Chlorine	1.15E-02	1.31E-06
A16B	1330207	Xylenes	6.82E-01	7.79E-05
A16B	7439965	Manganese	2.93E-03	3.34E-07
A16B	67561	Methanol	3.48E+00	3.97E-04
A16B	91203	Naphthalene	1.31E+00	1.50E-04
A16B	7440020	Nickel	5.87E-03	6.70E-07
A16B	95476	o-Xylene	4.16E-01	4.75E-05
A16B	108952	Phenol	1.52E+00	1.73E-04
A16B	115071	Propylene	1.12E+01	1.28E-03
A16B	100425	Styrene	7.93E-01	9.05E-05
A16B	9960	SULFATES	3.68E+00	4.20E-04
A16B	108883	Toluene	1.50E+00	1.71E-04
A17B	106990	1,3-Butadiene	3.07E+00	3.50E-04
A17B	75070	Acetaldehyde	7.90E+00	9.02E-04
A17B	107028	Acrolein	4.36E+00	4.98E-04
A17B	71432	Benzene	3.15E+00	3.59E-04
A17B	7440508	Copper	2.59E-02	2.95E-06
A17B	100414	Ethyl Benzene	3.12E-01	3.56E-05
A17B	50000	Formaldehyde	2.35E+01	2.68E-03
A17B	7782505	Chlorine	8.62E-03	9.84E-07
A17B	1330207	Xylenes	5.12E-01	5.84E-05
A17B	7439965	Manganese	2.20E-03	2.51E-07
A17B	67561	Methanol	2.61E+00	2.98E-04
A17B	91203	Naphthalene	9.86E-01	1.13E-04
A17B	7440020	Nickel	4.40E-03	5.03E-07
A17B	95476	o-Xylene	3.12E-01	3.56E-05
A17B	108952	Phenol	1.14E+00	1.30E-04
A17B	115071	Propylene	8.39E+00	9.58E-04
A17B	100425	Styrene	5.95E-01	6.79E-05
A17B	9960	SULFATES	2.76E+00	3.15E-04
A17B	108883	Toluene	1.12E+00	1.28E-04
A19B	106990	1,3-Butadiene	3.58E+01	4.08E-03
A19B	75070	Acetaldehyde	9.22E+01	1.05E-02
A19B	107028	Acrolein	5.09E+01	5.81E-03
A19B	71432	Benzene	3.67E+01	4.19E-03
A19B	7440508	Copper	3.02E-01	3.45E-05
A19B	100414	Ethyl Benzene	3.63E+00	4.15E-04
A19B	50000	Formaldehyde	2.74E+02	3.12E-02
A19B	7782505	Chlorine	1.01E-01	1.15E-05

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
A19B	1330207	Xylenes	5.97E+00	6.82E-04
A19B	7439965	Manganese	2.56E-02	2.92E-06
A19B	67561	Methanol	3.04E+01	3.47E-03
A19B	91203	Naphthalene	1.15E+01	1.31E-03
A19B	7440020	Nickel	5.14E-02	5.86E-06
A19B	95476	o-Xylene	3.64E+00	4.16E-04
A19B	108952	Phenol	1.33E+01	1.51E-03
A19B	115071	Propylene	9.79E+01	1.12E-02
A19B	100425	Styrene	6.94E+00	7.92E-04
A19B	9960	SULFATES	3.22E+01	3.67E-03
A19B	108883	Toluene	1.31E+01	1.50E-03
A20B	106990	1,3-Butadiene	5.10E+00	5.82E-04
A20B	75070	Acetaldehyde	1.31E+01	1.50E-03
A20B	107028	Acrolein	7.26E+00	8.29E-04
A20B	71432	Benzene	5.23E+00	5.97E-04
A20B	7440508	Copper	4.33E-02	4.94E-06
A20B	100414	Ethyl Benzene	5.18E-01	5.91E-05
A20B	50000	Formaldehyde	3.90E+01	4.45E-03
A20B	7782505	Chlorine	1.44E-02	1.65E-06
A20B	1330207	Xylenes	8.51E-01	9.72E-05
A20B	7439965	Manganese	3.67E-03	4.19E-07
A20B	67561	Methanol	4.33E+00	4.95E-04
A20B	91203	Naphthalene	1.64E+00	1.87E-04
A20B	7440020	Nickel	7.37E-03	8.41E-07
A20B	95476	o-Xylene	5.19E-01	5.92E-05
A20B	108952	Phenol	1.89E+00	2.16E-04
A20B	115071	Propylene	1.40E+01	1.59E-03
A20B	100425	Styrene	9.89E-01	1.13E-04
A20B	9960	SULFATES	4.62E+00	5.27E-04
A20B	108883	Toluene	1.87E+00	2.13E-04
A8B	106990	1,3-Butadiene	2.05E-01	2.34E-05
A8B	75070	Acetaldehyde	5.63E-01	6.43E-05
A8B	107028	Acrolein	2.68E-01	3.06E-05
A8B	71432	Benzene	2.33E-01	2.66E-05
A8B	7440508	Copper	1.29E-04	1.48E-08
A8B	100414	Ethyl Benzene	1.95E-02	2.23E-06
A8B	50000	Formaldehyde	1.84E+00	2.10E-04
A8B	7782505	Chlorine	4.31E-05	4.92E-09
A8B	1330207	Xylenes	3.39E-02	3.87E-06
A8B	7439965	Manganese	1.10E-05	1.25E-09
A8B	67561	Methanol	1.30E-04	1.49E-08
A8B	91203	Naphthalene	6.65E-02	7.59E-06
A8B	7440020	Nickel	2.20E-05	2.51E-09
A8B	95476	o-Xylene	2.35E-02	2.68E-06
A8B	108952	Phenol	2.87E-02	3.28E-06
A8B	115071	Propylene	5.98E-01	6.83E-05

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
A8B	100425	Styrene	4.82E-02	5.50E-06
A8B	9960	SULFATES	1.38E-02	1.58E-06
A8B	108883	Toluene	6.39E-02	7.29E-06
A11B	106990	1,3-Butadiene	8.83E+00	1.01E-03
A11B	75070	Acetaldehyde	2.43E+01	2.77E-03
A11B	107028	Acrolein	1.16E+01	1.32E-03
A11B	71432	Benzene	1.01E+01	1.15E-03
A11B	7440508	Copper	1.62E-03	1.85E-07
A11B	100414	Ethyl Benzene	8.43E-01	9.63E-05
A11B	50000	Formaldehyde	7.95E+01	9.08E-03
A11B	7782505	Chlorine	5.40E-04	6.17E-08
A11B	1330207	Xylenes	1.46E+00	1.67E-04
A11B	7439965	Manganese	1.38E-04	1.57E-08
A11B	67561	Methanol	2.08E-03	2.37E-07
A11B	91203	Naphthalene	2.87E+00	3.27E-04
A11B	7440020	Nickel	2.76E-04	3.15E-08
A11B	95476	o-Xylene	1.01E+00	1.16E-04
A11B	108952	Phenol	1.24E+00	1.41E-04
A11B	115071	Propylene	2.58E+01	2.95E-03
A11B	100425	Styrene	2.08E+00	2.37E-04
A11B	9960	SULFATES	1.73E-01	1.97E-05
A11B	108883	Toluene	2.76E+00	3.15E-04
A1A	106990	1,3-Butadiene	2.34E+00	2.67E-04
A1A	75070	Acetaldehyde	5.97E+00	6.81E-04
A1A	107028	Acrolein	3.36E+00	3.83E-04
A1A	71432	Benzene	2.36E+00	2.70E-04
A1A	7440508	Copper	1.10E-02	1.25E-06
A1A	100414	Ethyl Benzene	2.39E-01	2.73E-05
A1A	50000	Formaldehyde	1.75E+01	1.99E-03
A1A	7782505	Chlorine	3.65E-03	4.17E-07
A1A	1330207	Xylenes	3.90E-01	4.45E-05
A1A	7439965	Manganese	9.30E-04	1.06E-07
A1A	67561	Methanol	2.24E+00	2.55E-04
A1A	91203	Naphthalene	7.50E-01	8.56E-05
A1A	7440020	Nickel	1.86E-03	2.13E-07
A1A	95476	o-Xylene	2.34E-01	2.67E-05
A1A	108952	Phenol	9.34E-01	1.07E-04
A1A	115071	Propylene	6.34E+00	7.23E-04
A1A	100425	Styrene	4.41E-01	5.03E-05
A1A	9960	SULFATES	1.17E+00	1.33E-04
A1A	108883	Toluene	8.72E-01	9.96E-05
A2A	106990	1,3-Butadiene	7.76E-01	8.86E-05
A2A	75070	Acetaldehyde	1.98E+00	2.26E-04
A2A	107028	Acrolein	1.12E+00	1.27E-04
A2A	71432	Benzene	7.85E-01	8.96E-05
A2A	7440508	Copper	3.75E-03	4.28E-07

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
A2A	100414	Ethyl Benzene	7.94E-02	9.07E-06
A2A	50000	Formaldehyde	5.80E+00	6.62E-04
A2A	7782505	Chlorine	1.25E-03	1.43E-07
A2A	1330207	Xylenes	1.30E-01	1.48E-05
A2A	7439965	Manganese	3.18E-04	3.63E-08
A2A	67561	Methanol	7.43E-01	8.48E-05
A2A	91203	Naphthalene	2.49E-01	2.84E-05
A2A	7440020	Nickel	6.38E-04	7.28E-08
A2A	95476	o-Xylene	7.77E-02	8.87E-06
A2A	108952	Phenol	3.10E-01	3.54E-05
A2A	115071	Propylene	2.10E+00	2.40E-04
A2A	100425	Styrene	1.46E-01	1.67E-05
A2A	9960	SULFATES	4.00E-01	4.56E-05
A2A	108883	Toluene	2.90E-01	3.31E-05
A15A	106990	1,3-Butadiene	7.47E+00	8.53E-04
A15A	75070	Acetaldehyde	1.92E+01	2.19E-03
A15A	107028	Acrolein	1.07E+01	1.22E-03
A15A	71432	Benzene	7.61E+00	8.69E-04
A15A	7440508	Copper	3.36E-02	3.83E-06
A15A	100414	Ethyl Benzene	7.62E-01	8.70E-05
A15A	50000	Formaldehyde	5.65E+01	6.45E-03
A15A	7782505	Chlorine	1.12E-02	1.28E-06
A15A	1330207	Xylenes	1.25E+00	1.42E-04
A15A	7439965	Manganese	2.85E-03	3.25E-07
A15A	67561	Methanol	6.77E+00	7.72E-04
A15A	91203	Naphthalene	2.40E+00	2.74E-04
A15A	7440020	Nickel	5.71E-03	6.52E-07
A15A	95476	o-Xylene	7.54E-01	8.61E-05
A15A	108952	Phenol	2.88E+00	3.29E-04
A15A	115071	Propylene	2.04E+01	2.32E-03
A15A	100425	Styrene	1.43E+00	1.63E-04
A15A	9960	SULFATES	3.58E+00	4.09E-04
A15A	108883	Toluene	2.77E+00	3.16E-04
A16A	106990	1,3-Butadiene	9.98E+00	1.14E-03
A16A	75070	Acetaldehyde	2.56E+01	2.92E-03
A16A	107028	Acrolein	1.43E+01	1.63E-03
A16A	71432	Benzene	1.02E+01	1.16E-03
A16A	7440508	Copper	4.44E-02	5.07E-06
A16A	100414	Ethyl Benzene	1.02E+00	1.16E-04
A16A	50000	Formaldehyde	7.55E+01	8.62E-03
A16A	7782505	Chlorine	1.48E-02	1.69E-06
A16A	1330207	Xylenes	1.67E+00	1.90E-04
A16A	7439965	Manganese	3.77E-03	4.30E-07
A16A	67561	Methanol	9.04E+00	1.03E-03
A16A	91203	Naphthalene	3.21E+00	3.66E-04
A16A	7440020	Nickel	7.56E-03	8.63E-07

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
A16A	95476	o-Xylene	1.01E+00	1.15E-04
A16A	108952	Phenol	3.85E+00	4.40E-04
A16A	115071	Propylene	2.72E+01	3.10E-03
A16A	100425	Styrene	1.91E+00	2.18E-04
A16A	9960	SULFATES	4.74E+00	5.41E-04
A16A	108883	Toluene	3.69E+00	4.22E-04
A17A	106990	1,3-Butadiene	7.47E+00	8.52E-04
A17A	75070	Acetaldehyde	1.92E+01	2.19E-03
A17A	107028	Acrolein	1.07E+01	1.22E-03
A17A	71432	Benzene	7.60E+00	8.68E-04
A17A	7440508	Copper	3.31E-02	3.78E-06
A17A	100414	Ethyl Benzene	7.61E-01	8.69E-05
A17A	50000	Formaldehyde	5.64E+01	6.44E-03
A17A	7782505	Chlorine	1.10E-02	1.26E-06
A17A	1330207	Xylenes	1.25E+00	1.42E-04
A17A	7439965	Manganese	2.81E-03	3.21E-07
A17A	67561	Methanol	6.76E+00	7.71E-04
A17A	91203	Naphthalene	2.40E+00	2.74E-04
A17A	7440020	Nickel	5.63E-03	6.43E-07
A17A	95476	o-Xylene	7.53E-01	8.60E-05
A17A	108952	Phenol	2.88E+00	3.29E-04
A17A	115071	Propylene	2.03E+01	2.32E-03
A17A	100425	Styrene	1.43E+00	1.63E-04
A17A	9960	SULFATES	3.53E+00	4.03E-04
A17A	108883	Toluene	2.76E+00	3.15E-04
A19A	106990	1,3-Butadiene	8.73E+01	9.96E-03
A19A	75070	Acetaldehyde	2.24E+02	2.56E-02
A19A	107028	Acrolein	1.25E+02	1.42E-02
A19A	71432	Benzene	8.89E+01	1.01E-02
A19A	7440508	Copper	3.84E-01	4.38E-05
A19A	100414	Ethyl Benzene	8.90E+00	1.02E-03
A19A	50000	Formaldehyde	6.60E+02	7.53E-02
A19A	7782505	Chlorine	1.28E-01	1.46E-05
A19A	1330207	Xylenes	1.46E+01	1.66E-03
A19A	7439965	Manganese	3.26E-02	3.72E-06
A19A	67561	Methanol	7.90E+01	9.02E-03
A19A	91203	Naphthalene	2.80E+01	3.20E-03
A19A	7440020	Nickel	6.53E-02	7.45E-06
A19A	95476	o-Xylene	8.81E+00	1.01E-03
A19A	108952	Phenol	3.37E+01	3.84E-03
A19A	115071	Propylene	2.38E+02	2.71E-02
A19A	100425	Styrene	1.67E+01	1.91E-03
A19A	9960	SULFATES	4.09E+01	4.67E-03
A19A	108883	Toluene	3.23E+01	3.69E-03
A20A	106990	1,3-Butadiene	1.25E+01	1.42E-03
A20A	75070	Acetaldehyde	3.20E+01	3.65E-03

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
A20A	107028	Acrolein	1.78E+01	2.04E-03
A20A	71432	Benzene	1.27E+01	1.45E-03
A20A	7440508	Copper	5.48E-02	6.26E-06
A20A	100414	Ethyl Benzene	1.27E+00	1.45E-04
A20A	50000	Formaldehyde	9.42E+01	1.08E-02
A20A	7782505	Chlorine	1.83E-02	2.08E-06
A20A	1330207	Xylenes	2.08E+00	2.38E-04
A20A	7439965	Manganese	4.65E-03	5.31E-07
A20A	67561	Methanol	1.13E+01	1.29E-03
A20A	91203	Naphthalene	4.01E+00	4.57E-04
A20A	7440020	Nickel	9.33E-03	1.06E-06
A20A	95476	o-Xylene	1.26E+00	1.44E-04
A20A	108952	Phenol	4.81E+00	5.49E-04
A20A	115071	Propylene	3.40E+01	3.88E-03
A20A	100425	Styrene	2.38E+00	2.72E-04
A20A	9960	SULFATES	5.84E+00	6.67E-04
A20A	108883	Toluene	4.61E+00	5.27E-04
A8A	106990	1,3-Butadiene	3.76E-01	4.29E-05
A8A	75070	Acetaldehyde	1.03E+00	1.18E-04
A8A	107028	Acrolein	4.93E-01	5.63E-05
A8A	71432	Benzene	4.29E-01	4.89E-05
A8A	7440508	Copper	2.01E-04	2.29E-08
A8A	100414	Ethyl Benzene	3.59E-02	4.10E-06
A8A	50000	Formaldehyde	3.39E+00	3.87E-04
A8A	7782505	Chlorine	6.69E-05	7.63E-09
A8A	1330207	Xylenes	6.23E-02	7.11E-06
A8A	7439965	Manganese	1.70E-05	1.94E-09
A8A	67561	Methanol	2.22E-04	2.53E-08
A8A	91203	Naphthalene	1.22E-01	1.39E-05
A8A	7440020	Nickel	3.42E-05	3.90E-09
A8A	95476	o-Xylene	4.31E-02	4.92E-06
A8A	108952	Phenol	5.28E-02	6.02E-06
A8A	115071	Propylene	1.10E+00	1.26E-04
A8A	100425	Styrene	8.86E-02	1.01E-05
A8A	9960	SULFATES	2.14E-02	2.44E-06
A8A	108883	Toluene	1.17E-01	1.34E-05
A11A	106990	1,3-Butadiene	1.62E+01	1.84E-03
A11A	75070	Acetaldehyde	4.45E+01	5.08E-03
A11A	107028	Acrolein	2.12E+01	2.42E-03
A11A	71432	Benzene	1.84E+01	2.10E-03
A11A	7440508	Copper	2.53E-03	2.89E-07
A11A	100414	Ethyl Benzene	1.54E+00	1.76E-04
A11A	50000	Formaldehyde	1.46E+02	1.66E-02
A11A	7782505	Chlorine	8.43E-04	9.62E-08
A11A	1330207	Xylenes	2.68E+00	3.05E-04
A11A	7439965	Manganese	2.15E-04	2.45E-08

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
A11A	67561	Methanol	3.65E-03	4.16E-07
A11A	91203	Naphthalene	5.25E+00	5.99E-04
A11A	7440020	Nickel	4.31E-04	4.92E-08
A11A	95476	o-Xylene	1.85E+00	2.11E-04
A11A	108952	Phenol	2.27E+00	2.59E-04
A11A	115071	Propylene	4.72E+01	5.39E-03
A11A	100425	Styrene	3.81E+00	4.35E-04
A11A	9960	SULFATES	2.70E-01	3.08E-05
A11A	108883	Toluene	5.04E+00	5.76E-04
T14A	106990	1,3-Butadiene	1.38E+01	1.58E-03
T14A	75070	Acetaldehyde	3.80E+01	4.34E-03
T14A	107028	Acrolein	1.81E+01	2.07E-03
T14A	71432	Benzene	1.58E+01	1.80E-03
T14A	7440508	Copper	0.00E+00	0.00E+00
T14A	100414	Ethyl Benzene	1.32E+00	1.51E-04
T14A	50000	Formaldehyde	1.24E+02	1.42E-02
T14A	7782505	Chlorine	0.00E+00	0.00E+00
T14A	1330207	Xylenes	2.29E+00	2.61E-04
T14A	7439965	Manganese	0.00E+00	0.00E+00
T14A	67561	Methanol	0.00E+00	0.00E+00
T14A	91203	Naphthalene	4.49E+00	5.13E-04
T14A	7440020	Nickel	0.00E+00	0.00E+00
T14A	95476	o-Xylene	1.58E+00	1.81E-04
T14A	108952	Phenol	1.94E+00	2.21E-04
T14A	115071	Propylene	4.04E+01	4.61E-03
T14A	100425	Styrene	3.26E+00	3.72E-04
T14A	9960	SULFATES	0.00E+00	0.00E+00
T14A	108883	Toluene	4.31E+00	4.92E-04
T10A	106990	1,3-Butadiene	2.82E-01	3.22E-05
T10A	75070	Acetaldehyde	7.76E-01	8.86E-05
T10A	107028	Acrolein	3.70E-01	4.22E-05
T10A	71432	Benzene	3.22E-01	3.67E-05
T10A	7440508	Copper	0.00E+00	0.00E+00
T10A	100414	Ethyl Benzene	2.69E-02	3.08E-06
T10A	50000	Formaldehyde	2.54E+00	2.90E-04
T10A	7782505	Chlorine	0.00E+00	0.00E+00
T10A	1330207	Xylenes	4.67E-02	5.33E-06
T10A	7439965	Manganese	0.00E+00	0.00E+00
T10A	67561	Methanol	0.00E+00	0.00E+00
T10A	91203	Naphthalene	9.16E-02	1.05E-05
T10A	7440020	Nickel	0.00E+00	0.00E+00
T10A	95476	o-Xylene	3.23E-02	3.69E-06
T10A	108952	Phenol	3.95E-02	4.51E-06
T10A	115071	Propylene	8.25E-01	9.41E-05
T10A	100425	Styrene	6.65E-02	7.59E-06
T10A	9960	SULFATES	0.00E+00	0.00E+00

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
T10A	108883	Toluene	8.80E-02	1.00E-05
H1	106990	1,3-Butadiene	1.19E+00	1.36E-04
H1	75070	Acetaldehyde	3.28E+00	3.74E-04
H1	107028	Acrolein	1.56E+00	1.78E-04
H1	71432	Benzene	1.36E+00	1.55E-04
H1	7440508	Copper	0.00E+00	0.00E+00
H1	100414	Ethyl Benzene	1.14E-01	1.30E-05
H1	50000	Formaldehyde	1.07E+01	1.22E-03
H1	7782505	Chlorine	0.00E+00	0.00E+00
H1	1330207	Xylenes	1.97E-01	2.25E-05
H1	7439965	Manganese	0.00E+00	0.00E+00
H1	67561	Methanol	0.00E+00	0.00E+00
H1	91203	Naphthalene	3.87E-01	4.41E-05
H1	7440020	Nickel	0.00E+00	0.00E+00
H1	95476	o-Xylene	1.37E-01	1.56E-05
H1	108952	Phenol	1.67E-01	1.90E-05
H1	115071	Propylene	3.48E+00	3.97E-04
H1	100425	Styrene	2.81E-01	3.20E-05
H1	9960	SULFATES	0.00E+00	0.00E+00
H1	108883	Toluene	3.72E-01	4.24E-05
H2	106990	1,3-Butadiene	1.19E+00	1.36E-04
H2	75070	Acetaldehyde	3.28E+00	3.74E-04
H2	107028	Acrolein	1.56E+00	1.78E-04
H2	71432	Benzene	1.36E+00	1.55E-04
H2	7440508	Copper	0.00E+00	0.00E+00
H2	100414	Ethyl Benzene	1.14E-01	1.30E-05
H2	50000	Formaldehyde	1.07E+01	1.22E-03
H2	7782505	Chlorine	0.00E+00	0.00E+00
H2	1330207	Xylenes	1.97E-01	2.25E-05
H2	7439965	Manganese	0.00E+00	0.00E+00
H2	67561	Methanol	0.00E+00	0.00E+00
H2	91203	Naphthalene	3.87E-01	4.41E-05
H2	7440020	Nickel	0.00E+00	0.00E+00
H2	95476	o-Xylene	1.37E-01	1.56E-05
H2	108952	Phenol	1.67E-01	1.90E-05
H2	115071	Propylene	3.48E+00	3.97E-04
H2	100425	Styrene	2.81E-01	3.20E-05
H2	9960	SULFATES	0.00E+00	0.00E+00
H2	108883	Toluene	3.72E-01	4.24E-05
H4	106990	1,3-Butadiene	1.68E-02	1.92E-06
H4	75070	Acetaldehyde	4.62E-02	5.27E-06
H4	107028	Acrolein	2.20E-02	2.51E-06
H4	71432	Benzene	1.91E-02	2.19E-06
H4	7440508	Copper	0.00E+00	0.00E+00
H4	100414	Ethyl Benzene	1.60E-03	1.83E-07
H4	50000	Formaldehyde	1.51E-01	1.73E-05

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
H4	7782505	Chlorine	0.00E+00	0.00E+00
H4	1330207	Xylenes	2.78E-03	3.17E-07
H4	7439965	Manganese	0.00E+00	0.00E+00
H4	67561	Methanol	0.00E+00	0.00E+00
H4	91203	Naphthalene	5.45E-03	6.23E-07
H4	7440020	Nickel	0.00E+00	0.00E+00
H4	95476	o-Xylene	1.92E-03	2.20E-07
H4	108952	Phenol	2.35E-03	2.69E-07
H4	115071	Propylene	4.91E-02	5.60E-06
H4	100425	Styrene	3.96E-03	4.52E-07
H4	9960	SULFATES	0.00E+00	0.00E+00
H4	108883	Toluene	5.24E-03	5.98E-07
B45L	7439921	Lead	0.00E+00	0.00E+00
B46L	7439921	Lead	0.00E+00	0.00E+00
G45L	7439921	Lead	1.97E-02	2.25E-06
G47L	7439921	Lead	1.99E-02	2.27E-06
G48L	7439921	Lead	9.23E-01	1.05E-04
G46L	7439921	Lead	1.23E+00	1.40E-04
C45L	7439921	Lead	0.00E+00	0.00E+00
C47L	7439921	Lead	0.00E+00	0.00E+00
C48L	7439921	Lead	0.00E+00	0.00E+00
C46L	7439921	Lead	0.00E+00	0.00E+00
B45D	7439921	Lead	0.00E+00	0.00E+00
B46D	7439921	Lead	0.00E+00	0.00E+00
G45D	7439921	Lead	1.13E-01	1.29E-05
G47D	7439921	Lead	2.67E-02	3.04E-06
G48D	7439921	Lead	2.16E+00	2.46E-04
G46D	7439921	Lead	2.47E+00	2.82E-04
C45D	7439921	Lead	0.00E+00	0.00E+00
C47D	7439921	Lead	0.00E+00	0.00E+00
C48D	7439921	Lead	0.00E+00	0.00E+00
C46D	7439921	Lead	0.00E+00	0.00E+00
T47D	7439921	Lead	1.40E-02	1.60E-06
T48D	7439921	Lead	6.87E-01	7.84E-05
B4B	7439921	Lead	0.00E+00	0.00E+00
B26B	7439921	Lead	0.00E+00	0.00E+00
H33B	7439921	Lead	5.46E+00	6.24E-04
H34B	7439921	Lead	5.45E+00	6.23E-04
H35B	7439921	Lead	5.06E+00	5.78E-04
H36B	7439921	Lead	5.09E+00	5.81E-04
H37B	7439921	Lead	5.45E+00	6.22E-04
H38B	7439921	Lead	5.49E+00	6.27E-04
H39B	7439921	Lead	5.10E+00	5.82E-04
H40B	7439921	Lead	5.04E+00	5.75E-04
H41B	7439921	Lead	2.89E+00	3.30E-04
H42B	7439921	Lead	2.87E+00	3.28E-04

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
H43B	7439921	Lead	2.89E+00	3.30E-04
H44B	7439921	Lead	2.86E+00	3.26E-04
H45B	7439921	Lead	5.34E+00	6.09E-04
H46B	7439921	Lead	5.41E+00	6.17E-04
G4B	7439921	Lead	4.91E-01	5.60E-05
G9B	7439921	Lead	1.26E-01	1.44E-05
G12B	7439921	Lead	4.66E+00	5.32E-04
G13B	7439921	Lead	4.67E+00	5.33E-04
G27B	7439921	Lead	1.01E+01	1.15E-03
T14D	7439921	Lead	5.80E+01	6.62E-03
T10D	7439921	Lead	1.11E+00	1.27E-04
C4B	7439921	Lead	0.00E+00	0.00E+00
C9B	7439921	Lead	0.00E+00	0.00E+00
C12B	7439921	Lead	0.00E+00	0.00E+00
C13B	7439921	Lead	0.00E+00	0.00E+00
C26B	7439921	Lead	0.00E+00	0.00E+00
C27B	7439921	Lead	0.00E+00	0.00E+00
B4A	7439921	Lead	0.00E+00	0.00E+00
B26A	7439921	Lead	0.00E+00	0.00E+00
G4A	7439921	Lead	1.02E+00	1.16E-04
G9A	7439921	Lead	3.07E-01	3.51E-05
G12A	7439921	Lead	1.12E+01	1.28E-03
G13A	7439921	Lead	1.12E+01	1.28E-03
G27A	7439921	Lead	2.35E+01	2.68E-03
C4A	7439921	Lead	0.00E+00	0.00E+00
C9A	7439921	Lead	0.00E+00	0.00E+00
C12A	7439921	Lead	0.00E+00	0.00E+00
C13A	7439921	Lead	0.00E+00	0.00E+00
C26A	7439921	Lead	0.00E+00	0.00E+00
C27A	7439921	Lead	0.00E+00	0.00E+00
A1B	7439921	Lead	2.70E-01	3.08E-05
A2B	7439921	Lead	9.00E-02	1.03E-05
A15B	7439921	Lead	1.26E+00	1.44E-04
A16B	7439921	Lead	1.69E+00	1.92E-04
A17B	7439921	Lead	1.26E+00	1.44E-04
A19B	7439921	Lead	1.48E+01	1.68E-03
A20B	7439921	Lead	2.11E+00	2.41E-04
A8B	7439921	Lead	4.31E-01	4.92E-05
A11B	7439921	Lead	1.91E+01	2.19E-03
A1A	7439921	Lead	4.86E-01	5.55E-05
A2A	7439921	Lead	1.62E-01	1.85E-05
A15A	7439921	Lead	2.27E+00	2.59E-04
A16A	7439921	Lead	3.03E+00	3.45E-04
A17A	7439921	Lead	2.27E+00	2.59E-04
A19A	7439921	Lead	2.65E+01	3.03E-03
A20A	7439921	Lead	3.79E+00	4.32E-04

Table C-1. Emission Rates for Speciated COPC (Baseline)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions[1] (lb/year)	Maximum Hourly Emissions[1] (lb/hr)
A8A	7439921	Lead	7.79E-01	8.89E-05
A11A	7439921	Lead	3.44E+01	3.93E-03
T14A	7439921	Lead	3.33E+01	3.80E-03
T10A	7439921	Lead	6.80E-01	7.76E-05
H1	7439921	Lead	2.09E+00	2.39E-04
H2	7439921	Lead	2.09E+00	2.39E-04
H4	7439921	Lead	2.44E+00	2.78E-04

Notes:

[1] Aviation gas storage tank (AVGAS, AVGAS_R, and AVGAS_S) emissions are assumed to be zero in the Baseline scenario.

Abbreviations:

COPC - chemicals of potential concern

lb - pound

hr - hour

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
AVGAS	110543	Hexane	7.14E-01	8.15E-05
AVGAS	71432	Benzene	1.29E+00	1.47E-04
AVGAS	108883	Toluene	5.00E+00	5.71E-04
AVGAS	100414	Ethyl Benzene	1.00E+00	1.14E-04
AVGAS	1330207	Xylenes	5.00E+00	5.71E-04
AVGAS	95636	1,2,4TriMeBenze	1.79E+00	2.04E-04
AVGAS	110827	Cyclohexane	1.71E-01	1.96E-05
AVGAS_R	110543	Hexane	2.21E-01	2.52E-05
AVGAS_R	71432	Benzene	3.98E-01	4.54E-05
AVGAS_R	108883	Toluene	1.55E+00	1.76E-04
AVGAS_R	100414	Ethyl Benzene	3.09E-01	3.53E-05
AVGAS_R	1330207	Xylenes	1.55E+00	1.76E-04
AVGAS_R	95636	1,2,4TriMeBenze	5.52E-01	6.30E-05
AVGAS_R	110827	Cyclohexane	5.30E-02	6.05E-06
AVGAS_S	110543	Hexane	2.88E-01	3.29E-05
AVGAS_S	71432	Benzene	5.19E-01	5.92E-05
AVGAS_S	108883	Toluene	2.02E+00	2.30E-04
AVGAS_S	100414	Ethyl Benzene	4.03E-01	4.60E-05
AVGAS_S	1330207	Xylenes	2.02E+00	2.30E-04
AVGAS_S	95636	1,2,4TriMeBenze	7.20E-01	8.22E-05
AVGAS_S	110827	Cyclohexane	6.91E-02	7.89E-06
GSE_APU	9901	DieselExhPM	2.63E+01	6.50E-03
GSE_APU	75070	Acetaldehyde	3.68E+02	5.00E-02
GSE_APU	107028	Acrolein	2.11E+02	2.87E-02
GSE_APU	71432	Benzene	1.45E+02	1.97E-02
GSE_APU	100414	Ethyl Benzene	1.50E+01	2.04E-03
GSE_APU	50000	Formaldehyde	1.06E+03	1.44E-01
GSE_APU	106990	1,3-Butadiene	1.45E+02	1.98E-02
GSE_APU	1330207	Xylenes	2.43E+01	3.30E-03
GSE_APU	67561	Methanol	1.56E+02	2.11E-02
GSE_APU	91203	Naphthalene	4.66E+01	6.34E-03
GSE_APU	95476	o-Xylene	1.43E+01	1.94E-03
GSE_APU	108952	Phenol	6.26E+01	8.50E-03
GSE_APU	115071	Propylene	3.91E+02	5.31E-02
GSE_APU	100425	Styrene	2.66E+01	3.62E-03
GSE_APU	108883	Toluene	5.53E+01	7.52E-03
GSE_APU	7782505	Chlorine	2.79E-01	2.35E-04
GSE_APU	7440508	Copper	8.38E-01	7.05E-04
GSE_APU	7439965	Manganese	7.11E-02	5.98E-05
GSE_APU	7440020	Nickel	1.43E-01	1.20E-04
GSE_APU	9960	SULFATES	8.93E+01	7.52E-02
Taxiway	75070	Acetaldehyde	2.18E+03	2.49E-01
Taxiway	107028	Acrolein	1.23E+03	1.41E-01
Taxiway	71432	Benzene	8.62E+02	9.84E-02
Taxiway	100414	Ethyl Benzene	8.79E+01	1.00E-02
Taxiway	50000	Formaldehyde	6.35E+03	7.25E-01
Taxiway	106990	1,3-Butadiene	8.56E+02	9.77E-02

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
Taxiway	1330207	Xylenes	1.43E+02	1.63E-02
Taxiway	67561	Methanol	8.53E+02	9.74E-02
Taxiway	91203	Naphthalene	2.75E+02	3.14E-02
Taxiway	95476	o-Xylene	8.52E+01	9.73E-03
Taxiway	108952	Phenol	3.51E+02	4.01E-02
Taxiway	115071	Propylene	2.32E+03	2.64E-01
Taxiway	100425	Styrene	1.60E+02	1.83E-02
Taxiway	108883	Toluene	3.22E+02	3.67E-02
Taxiway	7782505	Chlorine	3.80E-01	4.34E-05
Taxiway	7440508	Copper	1.14E+00	1.30E-04
Taxiway	7439965	Manganese	9.68E-02	1.11E-05
Taxiway	7440020	Nickel	1.94E-01	2.22E-05
Taxiway	9960	SULFATES	1.22E+02	1.39E-02
Taxiway	7439921	Lead	2.62E+01	2.99E-03
B45L	106990	1,3-Butadiene	2.10E-01	2.40E-05
B45L	75070	Acetaldehyde	5.32E-01	6.07E-05
B45L	107028	Acrolein	3.05E-01	3.48E-05
B45L	71432	Benzene	2.09E-01	2.39E-05
B45L	7440508	Copper	2.39E-03	2.72E-07
B45L	100414	Ethyl Benzene	2.17E-02	2.47E-06
B45L	50000	Formaldehyde	1.53E+00	1.75E-04
B45L	7782505	Chlorine	7.95E-04	9.08E-08
B45L	1330207	Xylenes	3.51E-02	4.01E-06
B45L	7439965	Manganese	2.03E-04	2.31E-08
B45L	67561	Methanol	2.25E-01	2.57E-05
B45L	91203	Naphthalene	6.74E-02	7.69E-06
B45L	7440020	Nickel	4.06E-04	4.64E-08
B45L	95476	o-Xylene	2.07E-02	2.36E-06
B45L	108952	Phenol	9.04E-02	1.03E-05
B45L	115071	Propylene	5.65E-01	6.44E-05
B45L	100425	Styrene	3.85E-02	4.39E-06
B45L	9960	SULFATES	2.54E-01	2.91E-05
B45L	108883	Toluene	7.99E-02	9.13E-06
B46L	106990	1,3-Butadiene	8.01E+00	9.14E-04
B46L	75070	Acetaldehyde	2.03E+01	2.32E-03
B46L	107028	Acrolein	1.16E+01	1.33E-03
B46L	71432	Benzene	7.98E+00	9.11E-04
B46L	7440508	Copper	9.04E-02	1.03E-05
B46L	100414	Ethyl Benzene	8.26E-01	9.43E-05
B46L	50000	Formaldehyde	5.85E+01	6.67E-03
B46L	7782505	Chlorine	3.01E-02	3.44E-06
B46L	1330207	Xylenes	1.34E+00	1.53E-04
B46L	7439965	Manganese	7.67E-03	8.76E-07
B46L	67561	Methanol	8.57E+00	9.78E-04
B46L	91203	Naphthalene	2.57E+00	2.93E-04
B46L	7440020	Nickel	1.54E-02	1.76E-06
B46L	95476	o-Xylene	7.88E-01	9.00E-05

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
B46L	108952	Phenol	3.45E+00	3.94E-04
B46L	115071	Propylene	2.15E+01	2.46E-03
B46L	100425	Styrene	1.47E+00	1.67E-04
B46L	9960	SULFATES	9.64E+00	1.10E-03
B46L	108883	Toluene	3.05E+00	3.48E-04
G45L	106990	1,3-Butadiene	7.29E-03	8.33E-07
G45L	75070	Acetaldehyde	2.01E-02	2.29E-06
G45L	107028	Acrolein	9.57E-03	1.09E-06
G45L	71432	Benzene	8.32E-03	9.49E-07
G45L	7440508	Copper	0.00E+00	0.00E+00
G45L	100414	Ethyl Benzene	6.97E-04	7.96E-08
G45L	50000	Formaldehyde	6.57E-02	7.50E-06
G45L	7782505	Chlorine	0.00E+00	0.00E+00
G45L	1330207	Xylenes	1.21E-03	1.38E-07
G45L	7439965	Manganese	0.00E+00	0.00E+00
G45L	67561	Methanol	0.00E+00	0.00E+00
G45L	91203	Naphthalene	2.37E-03	2.71E-07
G45L	7440020	Nickel	0.00E+00	0.00E+00
G45L	95476	o-Xylene	8.36E-04	9.55E-08
G45L	108952	Phenol	1.02E-03	1.17E-07
G45L	115071	Propylene	2.13E-02	2.43E-06
G45L	100425	Styrene	1.72E-03	1.96E-07
G45L	9960	SULFATES	0.00E+00	0.00E+00
G45L	108883	Toluene	2.28E-03	2.60E-07
G47L	106990	1,3-Butadiene	6.95E-03	7.94E-07
G47L	75070	Acetaldehyde	1.91E-02	2.18E-06
G47L	107028	Acrolein	9.12E-03	1.04E-06
G47L	71432	Benzene	7.93E-03	9.05E-07
G47L	7440508	Copper	0.00E+00	0.00E+00
G47L	100414	Ethyl Benzene	6.64E-04	7.58E-08
G47L	50000	Formaldehyde	6.26E-02	7.15E-06
G47L	7782505	Chlorine	0.00E+00	0.00E+00
G47L	1330207	Xylenes	1.15E-03	1.31E-07
G47L	7439965	Manganese	0.00E+00	0.00E+00
G47L	67561	Methanol	0.00E+00	0.00E+00
G47L	91203	Naphthalene	2.26E-03	2.58E-07
G47L	7440020	Nickel	0.00E+00	0.00E+00
G47L	95476	o-Xylene	7.97E-04	9.10E-08
G47L	108952	Phenol	9.74E-04	1.11E-07
G47L	115071	Propylene	2.03E-02	2.32E-06
G47L	100425	Styrene	1.64E-03	1.87E-07
G47L	9960	SULFATES	0.00E+00	0.00E+00
G47L	108883	Toluene	2.17E-03	2.48E-07
G48L	106990	1,3-Butadiene	3.15E-01	3.59E-05
G48L	75070	Acetaldehyde	8.65E-01	9.88E-05
G48L	107028	Acrolein	4.13E-01	4.71E-05
G48L	71432	Benzene	3.59E-01	4.09E-05

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
G48L	7440508	Copper	0.00E+00	0.00E+00
G48L	100414	Ethyl Benzene	3.01E-02	3.43E-06
G48L	50000	Formaldehyde	2.83E+00	3.23E-04
G48L	7782505	Chlorine	0.00E+00	0.00E+00
G48L	1330207	Xylenes	5.21E-02	5.95E-06
G48L	7439965	Manganese	0.00E+00	0.00E+00
G48L	67561	Methanol	0.00E+00	0.00E+00
G48L	91203	Naphthalene	1.02E-01	1.17E-05
G48L	7440020	Nickel	0.00E+00	0.00E+00
G48L	95476	o-Xylene	3.61E-02	4.12E-06
G48L	108952	Phenol	4.41E-02	5.03E-06
G48L	115071	Propylene	9.20E-01	1.05E-04
G48L	100425	Styrene	7.41E-02	8.46E-06
G48L	9960	SULFATES	0.00E+00	0.00E+00
G48L	108883	Toluene	9.82E-02	1.12E-05
G46L	106990	1,3-Butadiene	4.57E-01	5.21E-05
G46L	75070	Acetaldehyde	1.26E+00	1.43E-04
G46L	107028	Acrolein	5.99E-01	6.84E-05
G46L	71432	Benzene	5.21E-01	5.95E-05
G46L	7440508	Copper	0.00E+00	0.00E+00
G46L	100414	Ethyl Benzene	4.36E-02	4.98E-06
G46L	50000	Formaldehyde	4.11E+00	4.70E-04
G46L	7782505	Chlorine	0.00E+00	0.00E+00
G46L	1330207	Xylenes	7.56E-02	8.64E-06
G46L	7439965	Manganese	0.00E+00	0.00E+00
G46L	67561	Methanol	0.00E+00	0.00E+00
G46L	91203	Naphthalene	1.48E-01	1.69E-05
G46L	7440020	Nickel	0.00E+00	0.00E+00
G46L	95476	o-Xylene	5.24E-02	5.98E-06
G46L	108952	Phenol	6.40E-02	7.31E-06
G46L	115071	Propylene	1.34E+00	1.52E-04
G46L	100425	Styrene	1.08E-01	1.23E-05
G46L	9960	SULFATES	0.00E+00	0.00E+00
G46L	108883	Toluene	1.43E-01	1.63E-05
C45L	106990	1,3-Butadiene	5.48E-04	6.26E-08
C45L	75070	Acetaldehyde	1.39E-03	1.58E-07
C45L	107028	Acrolein	7.96E-04	9.08E-08
C45L	71432	Benzene	5.46E-04	6.24E-08
C45L	7440508	Copper	1.66E-04	1.90E-08
C45L	100414	Ethyl Benzene	5.65E-05	6.45E-09
C45L	50000	Formaldehyde	4.00E-03	4.57E-07
C45L	7782505	Chlorine	5.54E-05	6.32E-09
C45L	1330207	Xylenes	9.16E-05	1.05E-08
C45L	7439965	Manganese	1.41E-05	1.61E-09
C45L	67561	Methanol	5.87E-04	6.70E-08
C45L	91203	Naphthalene	1.76E-04	2.01E-08
C45L	7440020	Nickel	2.83E-05	3.23E-09

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C45L	95476	o-Xylene	5.39E-05	6.16E-09
C45L	108952	Phenol	2.36E-04	2.69E-08
C45L	115071	Propylene	1.47E-03	1.68E-07
C45L	100425	Styrene	1.00E-04	1.15E-08
C45L	9960	SULFATES	1.77E-02	2.02E-06
C45L	108883	Toluene	2.09E-04	2.38E-08
C47L	106990	1,3-Butadiene	5.86E-06	6.69E-10
C47L	75070	Acetaldehyde	1.48E-05	1.70E-09
C47L	107028	Acrolein	8.51E-06	9.72E-10
C47L	71432	Benzene	5.84E-06	6.67E-10
C47L	7440508	Copper	9.02E-06	1.03E-09
C47L	100414	Ethyl Benzene	6.05E-07	6.90E-11
C47L	50000	Formaldehyde	4.28E-05	4.88E-09
C47L	7782505	Chlorine	3.01E-06	3.43E-10
C47L	1330207	Xylenes	9.80E-07	1.12E-10
C47L	7439965	Manganese	7.65E-07	8.74E-11
C47L	67561	Methanol	6.27E-06	7.16E-10
C47L	91203	Naphthalene	1.88E-06	2.15E-10
C47L	7440020	Nickel	1.54E-06	1.75E-10
C47L	95476	o-Xylene	5.77E-07	6.59E-11
C47L	108952	Phenol	2.52E-06	2.88E-10
C47L	115071	Propylene	1.58E-05	1.80E-09
C47L	100425	Styrene	1.07E-06	1.23E-10
C47L	9960	SULFATES	9.62E-04	1.10E-07
C47L	108883	Toluene	2.23E-06	2.55E-10
C48L	106990	1,3-Butadiene	1.20E-04	1.37E-08
C48L	75070	Acetaldehyde	3.04E-04	3.47E-08
C48L	107028	Acrolein	1.75E-04	1.99E-08
C48L	71432	Benzene	1.20E-04	1.37E-08
C48L	7440508	Copper	1.23E-04	1.40E-08
C48L	100414	Ethyl Benzene	1.24E-05	1.42E-09
C48L	50000	Formaldehyde	8.77E-04	1.00E-07
C48L	7782505	Chlorine	4.09E-05	4.67E-09
C48L	1330207	Xylenes	2.01E-05	2.29E-09
C48L	7439965	Manganese	1.04E-05	1.19E-09
C48L	67561	Methanol	1.29E-04	1.47E-08
C48L	91203	Naphthalene	3.85E-05	4.40E-09
C48L	7440020	Nickel	2.09E-05	2.39E-09
C48L	95476	o-Xylene	1.18E-05	1.35E-09
C48L	108952	Phenol	5.17E-05	5.91E-09
C48L	115071	Propylene	3.23E-04	3.69E-08
C48L	100425	Styrene	2.20E-05	2.51E-09
C48L	9960	SULFATES	1.31E-02	1.50E-06
C48L	108883	Toluene	4.57E-05	5.22E-09
C46L	106990	1,3-Butadiene	1.35E-02	1.54E-06
C46L	75070	Acetaldehyde	3.41E-02	3.89E-06
C46L	107028	Acrolein	1.95E-02	2.23E-06

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C46L	71432	Benzene	1.34E-02	1.53E-06
C46L	7440508	Copper	6.11E-03	6.98E-07
C46L	100414	Ethyl Benzene	1.39E-03	1.58E-07
C46L	50000	Formaldehyde	9.82E-02	1.12E-05
C46L	7782505	Chlorine	2.04E-03	2.32E-07
C46L	1330207	Xylenes	2.25E-03	2.57E-07
C46L	7439965	Manganese	5.19E-04	5.92E-08
C46L	67561	Methanol	1.44E-02	1.64E-06
C46L	91203	Naphthalene	4.31E-03	4.92E-07
C46L	7440020	Nickel	1.04E-03	1.19E-07
C46L	95476	o-Xylene	1.32E-03	1.51E-07
C46L	108952	Phenol	5.79E-03	6.61E-07
C46L	115071	Propylene	3.62E-02	4.13E-06
C46L	100425	Styrene	2.46E-03	2.81E-07
C46L	9960	SULFATES	6.52E-01	7.44E-05
C46L	108883	Toluene	5.12E-03	5.84E-07
B45D	106990	1,3-Butadiene	2.12E-01	2.42E-05
B45D	75070	Acetaldehyde	5.37E-01	6.13E-05
B45D	107028	Acrolein	3.08E-01	3.51E-05
B45D	71432	Benzene	2.11E-01	2.41E-05
B45D	7440508	Copper	1.57E-02	1.80E-06
B45D	100414	Ethyl Benzene	2.19E-02	2.50E-06
B45D	50000	Formaldehyde	1.55E+00	1.77E-04
B45D	7782505	Chlorine	5.24E-03	5.98E-07
B45D	1330207	Xylenes	3.54E-02	4.04E-06
B45D	7439965	Manganese	1.33E-03	1.52E-07
B45D	67561	Methanol	2.27E-01	2.59E-05
B45D	91203	Naphthalene	6.80E-02	7.76E-06
B45D	7440020	Nickel	2.68E-03	3.06E-07
B45D	95476	o-Xylene	2.09E-02	2.38E-06
B45D	108952	Phenol	9.12E-02	1.04E-05
B45D	115071	Propylene	5.70E-01	6.50E-05
B45D	100425	Styrene	3.88E-02	4.43E-06
B45D	9960	SULFATES	1.68E+00	1.91E-04
B45D	108883	Toluene	8.07E-02	9.21E-06
B46D	106990	1,3-Butadiene	6.15E+00	7.02E-04
B46D	75070	Acetaldehyde	1.56E+01	1.78E-03
B46D	107028	Acrolein	8.93E+00	1.02E-03
B46D	71432	Benzene	6.13E+00	7.00E-04
B46D	7440508	Copper	4.99E-01	5.69E-05
B46D	100414	Ethyl Benzene	6.34E-01	7.24E-05
B46D	50000	Formaldehyde	4.49E+01	5.12E-03
B46D	7782505	Chlorine	1.66E-01	1.90E-05
B46D	1330207	Xylenes	1.03E+00	1.17E-04
B46D	7439965	Manganese	4.23E-02	4.83E-06
B46D	67561	Methanol	6.58E+00	7.51E-04
B46D	91203	Naphthalene	1.97E+00	2.25E-04

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
B46D	7440020	Nickel	8.49E-02	9.69E-06
B46D	95476	o-Xylene	6.05E-01	6.91E-05
B46D	108952	Phenol	2.65E+00	3.02E-04
B46D	115071	Propylene	1.65E+01	1.89E-03
B46D	100425	Styrene	1.13E+00	1.29E-04
B46D	9960	SULFATES	5.32E+01	6.07E-03
B46D	108883	Toluene	2.34E+00	2.67E-04
G45D	106990	1,3-Butadiene	4.01E-02	4.57E-06
G45D	75070	Acetaldehyde	1.10E-01	1.26E-05
G45D	107028	Acrolein	5.26E-02	6.00E-06
G45D	71432	Benzene	4.57E-02	5.21E-06
G45D	7440508	Copper	0.00E+00	0.00E+00
G45D	100414	Ethyl Benzene	3.83E-03	4.37E-07
G45D	50000	Formaldehyde	3.61E-01	4.12E-05
G45D	7782505	Chlorine	0.00E+00	0.00E+00
G45D	1330207	Xylenes	6.63E-03	7.57E-07
G45D	7439965	Manganese	0.00E+00	0.00E+00
G45D	67561	Methanol	0.00E+00	0.00E+00
G45D	91203	Naphthalene	1.30E-02	1.49E-06
G45D	7440020	Nickel	0.00E+00	0.00E+00
G45D	95476	o-Xylene	4.59E-03	5.24E-07
G45D	108952	Phenol	5.61E-03	6.41E-07
G45D	115071	Propylene	1.17E-01	1.34E-05
G45D	100425	Styrene	9.44E-03	1.08E-06
G45D	9960	SULFATES	0.00E+00	0.00E+00
G45D	108883	Toluene	1.25E-02	1.43E-06
G47D	106990	1,3-Butadiene	9.59E-03	1.09E-06
G47D	75070	Acetaldehyde	2.64E-02	3.01E-06
G47D	107028	Acrolein	1.26E-02	1.44E-06
G47D	71432	Benzene	1.09E-02	1.25E-06
G47D	7440508	Copper	0.00E+00	0.00E+00
G47D	100414	Ethyl Benzene	9.16E-04	1.05E-07
G47D	50000	Formaldehyde	8.63E-02	9.86E-06
G47D	7782505	Chlorine	0.00E+00	0.00E+00
G47D	1330207	Xylenes	1.59E-03	1.81E-07
G47D	7439965	Manganese	0.00E+00	0.00E+00
G47D	67561	Methanol	0.00E+00	0.00E+00
G47D	91203	Naphthalene	3.11E-03	3.56E-07
G47D	7440020	Nickel	0.00E+00	0.00E+00
G47D	95476	o-Xylene	1.10E-03	1.25E-07
G47D	108952	Phenol	1.34E-03	1.53E-07
G47D	115071	Propylene	2.80E-02	3.20E-06
G47D	100425	Styrene	2.26E-03	2.58E-07
G47D	9960	SULFATES	0.00E+00	0.00E+00
G47D	108883	Toluene	2.99E-03	3.42E-07
G48D	106990	1,3-Butadiene	7.50E-01	8.56E-05
G48D	75070	Acetaldehyde	2.06E+00	2.36E-04

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
G48D	107028	Acrolein	9.84E-01	1.12E-04
G48D	71432	Benzene	8.55E-01	9.76E-05
G48D	7440508	Copper	0.00E+00	0.00E+00
G48D	100414	Ethyl Benzene	7.16E-02	8.18E-06
G48D	50000	Formaldehyde	6.75E+00	7.71E-04
G48D	7782505	Chlorine	0.00E+00	0.00E+00
G48D	1330207	Xylenes	1.24E-01	1.42E-05
G48D	7439965	Manganese	0.00E+00	0.00E+00
G48D	67561	Methanol	0.00E+00	0.00E+00
G48D	91203	Naphthalene	2.44E-01	2.78E-05
G48D	7440020	Nickel	0.00E+00	0.00E+00
G48D	95476	o-Xylene	8.60E-02	9.81E-06
G48D	108952	Phenol	1.05E-01	1.20E-05
G48D	115071	Propylene	2.19E+00	2.50E-04
G48D	100425	Styrene	1.77E-01	2.02E-05
G48D	9960	SULFATES	0.00E+00	0.00E+00
G48D	108883	Toluene	2.34E-01	2.67E-05
G46D	106990	1,3-Butadiene	8.89E-01	1.02E-04
G46D	75070	Acetaldehyde	2.45E+00	2.79E-04
G46D	107028	Acrolein	1.17E+00	1.33E-04
G46D	71432	Benzene	1.01E+00	1.16E-04
G46D	7440508	Copper	0.00E+00	0.00E+00
G46D	100414	Ethyl Benzene	8.50E-02	9.70E-06
G46D	50000	Formaldehyde	8.01E+00	9.14E-04
G46D	7782505	Chlorine	0.00E+00	0.00E+00
G46D	1330207	Xylenes	1.47E-01	1.68E-05
G46D	7439965	Manganese	0.00E+00	0.00E+00
G46D	67561	Methanol	0.00E+00	0.00E+00
G46D	91203	Naphthalene	2.89E-01	3.30E-05
G46D	7440020	Nickel	0.00E+00	0.00E+00
G46D	95476	o-Xylene	1.02E-01	1.16E-05
G46D	108952	Phenol	1.25E-01	1.42E-05
G46D	115071	Propylene	2.60E+00	2.97E-04
G46D	100425	Styrene	2.10E-01	2.39E-05
G46D	9960	SULFATES	0.00E+00	0.00E+00
G46D	108883	Toluene	2.78E-01	3.17E-05
C45D	106990	1,3-Butadiene	7.74E-04	8.83E-08
C45D	75070	Acetaldehyde	1.96E-03	2.24E-07
C45D	107028	Acrolein	1.12E-03	1.28E-07
C45D	71432	Benzene	7.71E-04	8.80E-08
C45D	7440508	Copper	8.29E-04	9.47E-08
C45D	100414	Ethyl Benzene	7.98E-05	9.11E-09
C45D	50000	Formaldehyde	5.65E-03	6.44E-07
C45D	7782505	Chlorine	2.76E-04	3.15E-08
C45D	1330207	Xylenes	1.29E-04	1.48E-08
C45D	7439965	Manganese	7.04E-05	8.03E-09
C45D	67561	Methanol	8.28E-04	9.45E-08

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C45D	91203	Naphthalene	2.48E-04	2.83E-08
C45D	7440020	Nickel	1.41E-04	1.61E-08
C45D	95476	o-Xylene	7.61E-05	8.69E-09
C45D	108952	Phenol	3.33E-04	3.80E-08
C45D	115071	Propylene	2.08E-03	2.37E-07
C45D	100425	Styrene	1.42E-04	1.62E-08
C45D	9960	SULFATES	8.84E-02	1.01E-05
C45D	108883	Toluene	2.94E-04	3.36E-08
C47D	106990	1,3-Butadiene	3.07E-05	3.51E-09
C47D	75070	Acetaldehyde	7.78E-05	8.88E-09
C47D	107028	Acrolein	4.46E-05	5.09E-09
C47D	71432	Benzene	3.06E-05	3.49E-09
C47D	7440508	Copper	2.79E-05	3.18E-09
C47D	100414	Ethyl Benzene	3.17E-06	3.62E-10
C47D	50000	Formaldehyde	2.24E-04	2.56E-08
C47D	7782505	Chlorine	9.29E-06	1.06E-09
C47D	1330207	Xylenes	5.13E-06	5.86E-10
C47D	7439965	Manganese	2.37E-06	2.70E-10
C47D	67561	Methanol	3.29E-05	3.75E-09
C47D	91203	Naphthalene	9.85E-06	1.12E-09
C47D	7440020	Nickel	4.74E-06	5.42E-10
C47D	95476	o-Xylene	3.02E-06	3.45E-10
C47D	108952	Phenol	1.32E-05	1.51E-09
C47D	115071	Propylene	8.26E-05	9.42E-09
C47D	100425	Styrene	5.63E-06	6.42E-10
C47D	9960	SULFATES	2.97E-03	3.39E-07
C47D	108883	Toluene	1.17E-05	1.33E-09
C48D	106990	1,3-Butadiene	5.49E-04	6.27E-08
C48D	75070	Acetaldehyde	1.39E-03	1.59E-07
C48D	107028	Acrolein	7.97E-04	9.10E-08
C48D	71432	Benzene	5.47E-04	6.24E-08
C48D	7440508	Copper	5.65E-04	6.45E-08
C48D	100414	Ethyl Benzene	5.66E-05	6.46E-09
C48D	50000	Formaldehyde	4.01E-03	4.57E-07
C48D	7782505	Chlorine	1.88E-04	2.15E-08
C48D	1330207	Xylenes	9.18E-05	1.05E-08
C48D	7439965	Manganese	4.79E-05	5.47E-09
C48D	67561	Methanol	5.87E-04	6.70E-08
C48D	91203	Naphthalene	1.76E-04	2.01E-08
C48D	7440020	Nickel	9.61E-05	1.10E-08
C48D	95476	o-Xylene	5.40E-05	6.17E-09
C48D	108952	Phenol	2.36E-04	2.70E-08
C48D	115071	Propylene	1.48E-03	1.68E-07
C48D	100425	Styrene	1.01E-04	1.15E-08
C48D	9960	SULFATES	6.02E-02	6.87E-06
C48D	108883	Toluene	2.09E-04	2.38E-08
C46D	106990	1,3-Butadiene	1.77E-02	2.02E-06

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C46D	75070	Acetaldehyde	4.48E-02	5.11E-06
C46D	107028	Acrolein	2.57E-02	2.93E-06
C46D	71432	Benzene	1.76E-02	2.01E-06
C46D	7440508	Copper	1.86E-02	2.12E-06
C46D	100414	Ethyl Benzene	1.82E-03	2.08E-07
C46D	50000	Formaldehyde	1.29E-01	1.47E-05
C46D	7782505	Chlorine	6.19E-03	7.07E-07
C46D	1330207	Xylenes	2.96E-03	3.37E-07
C46D	7439965	Manganese	1.58E-03	1.80E-07
C46D	67561	Methanol	1.89E-02	2.16E-06
C46D	91203	Naphthalene	5.67E-03	6.47E-07
C46D	7440020	Nickel	3.16E-03	3.61E-07
C46D	95476	o-Xylene	1.74E-03	1.99E-07
C46D	108952	Phenol	7.61E-03	8.69E-07
C46D	115071	Propylene	4.75E-02	5.42E-06
C46D	100425	Styrene	3.24E-03	3.70E-07
C46D	9960	SULFATES	1.98E+00	2.26E-04
C46D	108883	Toluene	6.73E-03	7.68E-07
T47D	106990	1,3-Butadiene	5.03E-03	5.74E-07
T47D	75070	Acetaldehyde	1.38E-02	1.58E-06
T47D	107028	Acrolein	6.60E-03	7.54E-07
T47D	71432	Benzene	5.74E-03	6.55E-07
T47D	7440508	Copper	0.00E+00	0.00E+00
T47D	100414	Ethyl Benzene	4.81E-04	5.49E-08
T47D	50000	Formaldehyde	4.53E-02	5.17E-06
T47D	7782505	Chlorine	0.00E+00	0.00E+00
T47D	1330207	Xylenes	8.33E-04	9.51E-08
T47D	7439965	Manganese	0.00E+00	0.00E+00
T47D	67561	Methanol	0.00E+00	0.00E+00
T47D	91203	Naphthalene	1.63E-03	1.87E-07
T47D	7440020	Nickel	0.00E+00	0.00E+00
T47D	95476	o-Xylene	5.77E-04	6.59E-08
T47D	108952	Phenol	7.05E-04	8.05E-08
T47D	115071	Propylene	1.47E-02	1.68E-06
T47D	100425	Styrene	1.19E-03	1.35E-07
T47D	9960	SULFATES	0.00E+00	0.00E+00
T47D	108883	Toluene	1.57E-03	1.79E-07
T48D	106990	1,3-Butadiene	2.60E-01	2.97E-05
T48D	75070	Acetaldehyde	7.16E-01	8.18E-05
T48D	107028	Acrolein	3.42E-01	3.90E-05
T48D	71432	Benzene	2.97E-01	3.39E-05
T48D	7440508	Copper	0.00E+00	0.00E+00
T48D	100414	Ethyl Benzene	2.49E-02	2.84E-06
T48D	50000	Formaldehyde	2.34E+00	2.68E-04
T48D	7782505	Chlorine	0.00E+00	0.00E+00
T48D	1330207	Xylenes	4.31E-02	4.92E-06
T48D	7439965	Manganese	0.00E+00	0.00E+00

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
T48D	67561	Methanol	0.00E+00	0.00E+00
T48D	91203	Naphthalene	8.46E-02	9.65E-06
T48D	7440020	Nickel	0.00E+00	0.00E+00
T48D	95476	o-Xylene	2.98E-02	3.41E-06
T48D	108952	Phenol	3.65E-02	4.16E-06
T48D	115071	Propylene	7.61E-01	8.69E-05
T48D	100425	Styrene	6.13E-02	7.00E-06
T48D	9960	SULFATES	0.00E+00	0.00E+00
T48D	108883	Toluene	8.12E-02	9.27E-06
B4B	106990	1,3-Butadiene	1.13E-01	1.29E-05
B4B	75070	Acetaldehyde	2.86E-01	3.27E-05
B4B	107028	Acrolein	1.64E-01	1.87E-05
B4B	71432	Benzene	1.13E-01	1.29E-05
B4B	7440508	Copper	9.29E-03	1.06E-06
B4B	100414	Ethyl Benzene	1.17E-02	1.33E-06
B4B	50000	Formaldehyde	8.25E-01	9.42E-05
B4B	7782505	Chlorine	3.09E-03	3.53E-07
B4B	1330207	Xylenes	1.89E-02	2.16E-06
B4B	7439965	Manganese	7.88E-04	9.00E-08
B4B	67561	Methanol	1.21E-01	1.38E-05
B4B	91203	Naphthalene	3.63E-02	4.14E-06
B4B	7440020	Nickel	1.58E-03	1.80E-07
B4B	95476	o-Xylene	1.11E-02	1.27E-06
B4B	108952	Phenol	4.87E-02	5.56E-06
B4B	115071	Propylene	3.04E-01	3.47E-05
B4B	100425	Styrene	2.07E-02	2.36E-06
B4B	9960	SULFATES	9.90E-01	1.13E-04
B4B	108883	Toluene	4.30E-02	4.91E-06
B26B	106990	1,3-Butadiene	4.00E+00	4.56E-04
B26B	75070	Acetaldehyde	1.01E+01	1.16E-03
B26B	107028	Acrolein	5.80E+00	6.63E-04
B26B	71432	Benzene	3.98E+00	4.55E-04
B26B	7440508	Copper	3.02E-01	3.45E-05
B26B	100414	Ethyl Benzene	4.12E-01	4.71E-05
B26B	50000	Formaldehyde	2.92E+01	3.33E-03
B26B	7782505	Chlorine	1.01E-01	1.15E-05
B26B	1330207	Xylenes	6.68E-01	7.63E-05
B26B	7439965	Manganese	2.56E-02	2.92E-06
B26B	67561	Methanol	4.28E+00	4.88E-04
B26B	91203	Naphthalene	1.28E+00	1.46E-04
B26B	7440020	Nickel	5.14E-02	5.86E-06
B26B	95476	o-Xylene	3.93E-01	4.49E-05
B26B	108952	Phenol	1.72E+00	1.96E-04
B26B	115071	Propylene	1.07E+01	1.23E-03
B26B	100425	Styrene	7.32E-01	8.36E-05
B26B	9960	SULFATES	3.22E+01	3.67E-03
B26B	108883	Toluene	1.52E+00	1.74E-04

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H33B	106990	1,3-Butadiene	3.91E+00	4.46E-04
H33B	75070	Acetaldehyde	1.08E+01	1.23E-03
H33B	107028	Acrolein	5.13E+00	5.86E-04
H33B	71432	Benzene	4.46E+00	5.09E-04
H33B	7440508	Copper	0.00E+00	0.00E+00
H33B	100414	Ethyl Benzene	3.74E-01	4.26E-05
H33B	50000	Formaldehyde	3.52E+01	4.02E-03
H33B	7782505	Chlorine	0.00E+00	0.00E+00
H33B	1330207	Xylenes	6.48E-01	7.39E-05
H33B	7439965	Manganese	0.00E+00	0.00E+00
H33B	67561	Methanol	0.00E+00	0.00E+00
H33B	91203	Naphthalene	1.27E+00	1.45E-04
H33B	7440020	Nickel	0.00E+00	0.00E+00
H33B	95476	o-Xylene	4.48E-01	5.12E-05
H33B	108952	Phenol	5.48E-01	6.26E-05
H33B	115071	Propylene	1.14E+01	1.31E-03
H33B	100425	Styrene	9.22E-01	1.05E-04
H33B	9960	SULFATES	0.00E+00	0.00E+00
H33B	108883	Toluene	1.22E+00	1.39E-04
H34B	106990	1,3-Butadiene	3.90E+00	4.46E-04
H34B	75070	Acetaldehyde	1.07E+01	1.23E-03
H34B	107028	Acrolein	5.12E+00	5.85E-04
H34B	71432	Benzene	4.45E+00	5.08E-04
H34B	7440508	Copper	0.00E+00	0.00E+00
H34B	100414	Ethyl Benzene	3.73E-01	4.26E-05
H34B	50000	Formaldehyde	3.52E+01	4.01E-03
H34B	7782505	Chlorine	0.00E+00	0.00E+00
H34B	1330207	Xylenes	6.47E-01	7.38E-05
H34B	7439965	Manganese	0.00E+00	0.00E+00
H34B	67561	Methanol	0.00E+00	0.00E+00
H34B	91203	Naphthalene	1.27E+00	1.45E-04
H34B	7440020	Nickel	0.00E+00	0.00E+00
H34B	95476	o-Xylene	4.48E-01	5.11E-05
H34B	108952	Phenol	5.47E-01	6.25E-05
H34B	115071	Propylene	1.14E+01	1.30E-03
H34B	100425	Styrene	9.20E-01	1.05E-04
H34B	9960	SULFATES	0.00E+00	0.00E+00
H34B	108883	Toluene	1.22E+00	1.39E-04
H35B	106990	1,3-Butadiene	3.63E+00	4.14E-04
H35B	75070	Acetaldehyde	9.98E+00	1.14E-03
H35B	107028	Acrolein	4.76E+00	5.43E-04
H35B	71432	Benzene	4.14E+00	4.72E-04
H35B	7440508	Copper	0.00E+00	0.00E+00
H35B	100414	Ethyl Benzene	3.47E-01	3.96E-05
H35B	50000	Formaldehyde	3.27E+01	3.73E-03
H35B	7782505	Chlorine	0.00E+00	0.00E+00
H35B	1330207	Xylenes	6.01E-01	6.86E-05

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H35B	7439965	Manganese	0.00E+00	0.00E+00
H35B	67561	Methanol	0.00E+00	0.00E+00
H35B	91203	Naphthalene	1.18E+00	1.35E-04
H35B	7440020	Nickel	0.00E+00	0.00E+00
H35B	95476	o-Xylene	4.16E-01	4.75E-05
H35B	108952	Phenol	5.08E-01	5.80E-05
H35B	115071	Propylene	1.06E+01	1.21E-03
H35B	100425	Styrene	8.55E-01	9.76E-05
H35B	9960	SULFATES	0.00E+00	0.00E+00
H35B	108883	Toluene	1.13E+00	1.29E-04
H36B	106990	1,3-Butadiene	3.65E+00	4.16E-04
H36B	75070	Acetaldehyde	1.00E+01	1.15E-03
H36B	107028	Acrolein	4.78E+00	5.46E-04
H36B	71432	Benzene	4.16E+00	4.74E-04
H36B	7440508	Copper	0.00E+00	0.00E+00
H36B	100414	Ethyl Benzene	3.48E-01	3.98E-05
H36B	50000	Formaldehyde	3.28E+01	3.75E-03
H36B	7782505	Chlorine	0.00E+00	0.00E+00
H36B	1330207	Xylenes	6.04E-01	6.89E-05
H36B	7439965	Manganese	0.00E+00	0.00E+00
H36B	67561	Methanol	0.00E+00	0.00E+00
H36B	91203	Naphthalene	1.18E+00	1.35E-04
H36B	7440020	Nickel	0.00E+00	0.00E+00
H36B	95476	o-Xylene	4.18E-01	4.77E-05
H36B	108952	Phenol	5.11E-01	5.83E-05
H36B	115071	Propylene	1.07E+01	1.22E-03
H36B	100425	Styrene	8.59E-01	9.81E-05
H36B	9960	SULFATES	0.00E+00	0.00E+00
H36B	108883	Toluene	1.14E+00	1.30E-04
H37B	106990	1,3-Butadiene	3.90E+00	4.45E-04
H37B	75070	Acetaldehyde	1.07E+01	1.22E-03
H37B	107028	Acrolein	5.11E+00	5.84E-04
H37B	71432	Benzene	4.44E+00	5.07E-04
H37B	7440508	Copper	0.00E+00	0.00E+00
H37B	100414	Ethyl Benzene	3.72E-01	4.25E-05
H37B	50000	Formaldehyde	3.51E+01	4.01E-03
H37B	7782505	Chlorine	0.00E+00	0.00E+00
H37B	1330207	Xylenes	6.46E-01	7.37E-05
H37B	7439965	Manganese	0.00E+00	0.00E+00
H37B	67561	Methanol	0.00E+00	0.00E+00
H37B	91203	Naphthalene	1.27E+00	1.45E-04
H37B	7440020	Nickel	0.00E+00	0.00E+00
H37B	95476	o-Xylene	4.47E-01	5.10E-05
H37B	108952	Phenol	5.46E-01	6.24E-05
H37B	115071	Propylene	1.14E+01	1.30E-03
H37B	100425	Styrene	9.19E-01	1.05E-04
H37B	9960	SULFATES	0.00E+00	0.00E+00

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H37B	108883	Toluene	1.22E+00	1.39E-04
H38B	106990	1,3-Butadiene	3.93E+00	4.48E-04
H38B	75070	Acetaldehyde	1.08E+01	1.23E-03
H38B	107028	Acrolein	5.15E+00	5.88E-04
H38B	71432	Benzene	4.48E+00	5.11E-04
H38B	7440508	Copper	0.00E+00	0.00E+00
H38B	100414	Ethyl Benzene	3.75E-01	4.28E-05
H38B	50000	Formaldehyde	3.54E+01	4.04E-03
H38B	7782505	Chlorine	0.00E+00	0.00E+00
H38B	1330207	Xylenes	6.51E-01	7.43E-05
H38B	7439965	Manganese	0.00E+00	0.00E+00
H38B	67561	Methanol	0.00E+00	0.00E+00
H38B	91203	Naphthalene	1.28E+00	1.46E-04
H38B	7440020	Nickel	0.00E+00	0.00E+00
H38B	95476	o-Xylene	4.50E-01	5.14E-05
H38B	108952	Phenol	5.51E-01	6.28E-05
H38B	115071	Propylene	1.15E+01	1.31E-03
H38B	100425	Styrene	9.26E-01	1.06E-04
H38B	9960	SULFATES	0.00E+00	0.00E+00
H38B	108883	Toluene	1.23E+00	1.40E-04
H39B	106990	1,3-Butadiene	3.65E+00	4.17E-04
H39B	75070	Acetaldehyde	1.00E+01	1.15E-03
H39B	107028	Acrolein	4.79E+00	5.47E-04
H39B	71432	Benzene	4.16E+00	4.75E-04
H39B	7440508	Copper	0.00E+00	0.00E+00
H39B	100414	Ethyl Benzene	3.49E-01	3.98E-05
H39B	50000	Formaldehyde	3.29E+01	3.75E-03
H39B	7782505	Chlorine	0.00E+00	0.00E+00
H39B	1330207	Xylenes	6.05E-01	6.90E-05
H39B	7439965	Manganese	0.00E+00	0.00E+00
H39B	67561	Methanol	0.00E+00	0.00E+00
H39B	91203	Naphthalene	1.19E+00	1.35E-04
H39B	7440020	Nickel	0.00E+00	0.00E+00
H39B	95476	o-Xylene	4.19E-01	4.78E-05
H39B	108952	Phenol	5.12E-01	5.84E-05
H39B	115071	Propylene	1.07E+01	1.22E-03
H39B	100425	Styrene	8.61E-01	9.82E-05
H39B	9960	SULFATES	0.00E+00	0.00E+00
H39B	108883	Toluene	1.14E+00	1.30E-04
H40B	106990	1,3-Butadiene	3.61E+00	4.12E-04
H40B	75070	Acetaldehyde	9.93E+00	1.13E-03
H40B	107028	Acrolein	4.74E+00	5.41E-04
H40B	71432	Benzene	4.11E+00	4.70E-04
H40B	7440508	Copper	0.00E+00	0.00E+00
H40B	100414	Ethyl Benzene	3.45E-01	3.94E-05
H40B	50000	Formaldehyde	3.25E+01	3.71E-03
H40B	7782505	Chlorine	0.00E+00	0.00E+00

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H40B	1330207	Xylenes	5.98E-01	6.82E-05
H40B	7439965	Manganese	0.00E+00	0.00E+00
H40B	67561	Methanol	0.00E+00	0.00E+00
H40B	91203	Naphthalene	1.17E+00	1.34E-04
H40B	7440020	Nickel	0.00E+00	0.00E+00
H40B	95476	o-Xylene	4.14E-01	4.72E-05
H40B	108952	Phenol	5.06E-01	5.77E-05
H40B	115071	Propylene	1.06E+01	1.20E-03
H40B	100425	Styrene	8.50E-01	9.71E-05
H40B	9960	SULFATES	0.00E+00	0.00E+00
H40B	108883	Toluene	1.13E+00	1.29E-04
H41B	106990	1,3-Butadiene	2.52E-02	2.88E-06
H41B	75070	Acetaldehyde	6.94E-02	7.92E-06
H41B	107028	Acrolein	3.31E-02	3.78E-06
H41B	71432	Benzene	2.87E-02	3.28E-06
H41B	7440508	Copper	0.00E+00	0.00E+00
H41B	100414	Ethyl Benzene	2.41E-03	2.75E-07
H41B	50000	Formaldehyde	2.27E-01	2.59E-05
H41B	7782505	Chlorine	0.00E+00	0.00E+00
H41B	1330207	Xylenes	4.17E-03	4.76E-07
H41B	7439965	Manganese	0.00E+00	0.00E+00
H41B	67561	Methanol	0.00E+00	0.00E+00
H41B	91203	Naphthalene	8.19E-03	9.35E-07
H41B	7440020	Nickel	0.00E+00	0.00E+00
H41B	95476	o-Xylene	2.89E-03	3.30E-07
H41B	108952	Phenol	3.53E-03	4.03E-07
H41B	115071	Propylene	7.37E-02	8.41E-06
H41B	100425	Styrene	5.94E-03	6.78E-07
H41B	9960	SULFATES	0.00E+00	0.00E+00
H41B	108883	Toluene	7.87E-03	8.98E-07
H42B	106990	1,3-Butadiene	2.50E-02	2.86E-06
H42B	75070	Acetaldehyde	6.89E-02	7.86E-06
H42B	107028	Acrolein	3.29E-02	3.75E-06
H42B	71432	Benzene	2.85E-02	3.26E-06
H42B	7440508	Copper	0.00E+00	0.00E+00
H42B	100414	Ethyl Benzene	2.39E-03	2.73E-07
H42B	50000	Formaldehyde	2.26E-01	2.57E-05
H42B	7782505	Chlorine	0.00E+00	0.00E+00
H42B	1330207	Xylenes	4.15E-03	4.73E-07
H42B	7439965	Manganese	0.00E+00	0.00E+00
H42B	67561	Methanol	0.00E+00	0.00E+00
H42B	91203	Naphthalene	8.13E-03	9.29E-07
H42B	7440020	Nickel	0.00E+00	0.00E+00
H42B	95476	o-Xylene	2.87E-03	3.28E-07
H42B	108952	Phenol	3.51E-03	4.01E-07
H42B	115071	Propylene	7.32E-02	8.36E-06
H42B	100425	Styrene	5.90E-03	6.74E-07

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H42B	9960	SULFATES	0.00E+00	0.00E+00
H42B	108883	Toluene	7.81E-03	8.92E-07
H43B	106990	1,3-Butadiene	2.52E-02	2.88E-06
H43B	75070	Acetaldehyde	6.94E-02	7.92E-06
H43B	107028	Acrolein	3.31E-02	3.78E-06
H43B	71432	Benzene	2.87E-02	3.28E-06
H43B	7440508	Copper	0.00E+00	0.00E+00
H43B	100414	Ethyl Benzene	2.41E-03	2.75E-07
H43B	50000	Formaldehyde	2.27E-01	2.59E-05
H43B	7782505	Chlorine	0.00E+00	0.00E+00
H43B	1330207	Xylenes	4.17E-03	4.76E-07
H43B	7439965	Manganese	0.00E+00	0.00E+00
H43B	67561	Methanol	0.00E+00	0.00E+00
H43B	91203	Naphthalene	8.19E-03	9.35E-07
H43B	7440020	Nickel	0.00E+00	0.00E+00
H43B	95476	o-Xylene	2.89E-03	3.30E-07
H43B	108952	Phenol	3.53E-03	4.03E-07
H43B	115071	Propylene	7.37E-02	8.41E-06
H43B	100425	Styrene	5.94E-03	6.78E-07
H43B	9960	SULFATES	0.00E+00	0.00E+00
H43B	108883	Toluene	7.87E-03	8.98E-07
H44B	106990	1,3-Butadiene	2.49E-02	2.84E-06
H44B	75070	Acetaldehyde	6.84E-02	7.81E-06
H44B	107028	Acrolein	3.26E-02	3.73E-06
H44B	71432	Benzene	2.84E-02	3.24E-06
H44B	7440508	Copper	0.00E+00	0.00E+00
H44B	100414	Ethyl Benzene	2.38E-03	2.71E-07
H44B	50000	Formaldehyde	2.24E-01	2.56E-05
H44B	7782505	Chlorine	0.00E+00	0.00E+00
H44B	1330207	Xylenes	4.12E-03	4.70E-07
H44B	7439965	Manganese	0.00E+00	0.00E+00
H44B	67561	Methanol	0.00E+00	0.00E+00
H44B	91203	Naphthalene	8.08E-03	9.22E-07
H44B	7440020	Nickel	0.00E+00	0.00E+00
H44B	95476	o-Xylene	2.85E-03	3.26E-07
H44B	108952	Phenol	3.49E-03	3.98E-07
H44B	115071	Propylene	7.27E-02	8.30E-06
H44B	100425	Styrene	5.86E-03	6.69E-07
H44B	9960	SULFATES	0.00E+00	0.00E+00
H44B	108883	Toluene	7.76E-03	8.86E-07
H45B	106990	1,3-Butadiene	4.66E-02	5.32E-06
H45B	75070	Acetaldehyde	1.28E-01	1.46E-05
H45B	107028	Acrolein	6.11E-02	6.97E-06
H45B	71432	Benzene	5.31E-02	6.06E-06
H45B	7440508	Copper	0.00E+00	0.00E+00
H45B	100414	Ethyl Benzene	4.45E-03	5.08E-07
H45B	50000	Formaldehyde	4.19E-01	4.79E-05

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H45B	7782505	Chlorine	0.00E+00	0.00E+00
H45B	1330207	Xylenes	7.71E-03	8.80E-07
H45B	7439965	Manganese	0.00E+00	0.00E+00
H45B	67561	Methanol	0.00E+00	0.00E+00
H45B	91203	Naphthalene	1.51E-02	1.73E-06
H45B	7440020	Nickel	0.00E+00	0.00E+00
H45B	95476	o-Xylene	5.34E-03	6.09E-07
H45B	108952	Phenol	6.52E-03	7.45E-07
H45B	115071	Propylene	1.36E-01	1.55E-05
H45B	100425	Styrene	1.10E-02	1.25E-06
H45B	9960	SULFATES	0.00E+00	0.00E+00
H45B	108883	Toluene	1.45E-02	1.66E-06
H46B	106990	1,3-Butadiene	4.71E-02	5.38E-06
H46B	75070	Acetaldehyde	1.30E-01	1.48E-05
H46B	107028	Acrolein	6.18E-02	7.06E-06
H46B	71432	Benzene	5.37E-02	6.13E-06
H46B	7440508	Copper	0.00E+00	0.00E+00
H46B	100414	Ethyl Benzene	4.50E-03	5.14E-07
H46B	50000	Formaldehyde	4.24E-01	4.84E-05
H46B	7782505	Chlorine	0.00E+00	0.00E+00
H46B	1330207	Xylenes	7.80E-03	8.91E-07
H46B	7439965	Manganese	0.00E+00	0.00E+00
H46B	67561	Methanol	0.00E+00	0.00E+00
H46B	91203	Naphthalene	1.53E-02	1.75E-06
H46B	7440020	Nickel	0.00E+00	0.00E+00
H46B	95476	o-Xylene	5.40E-03	6.17E-07
H46B	108952	Phenol	6.60E-03	7.54E-07
H46B	115071	Propylene	1.38E-01	1.57E-05
H46B	100425	Styrene	1.11E-02	1.27E-06
H46B	9960	SULFATES	0.00E+00	0.00E+00
H46B	108883	Toluene	1.47E-02	1.68E-06
G4B	106990	1,3-Butadiene	1.69E-01	1.93E-05
G4B	75070	Acetaldehyde	4.65E-01	5.31E-05
G4B	107028	Acrolein	2.22E-01	2.53E-05
G4B	71432	Benzene	1.93E-01	2.20E-05
G4B	7440508	Copper	0.00E+00	0.00E+00
G4B	100414	Ethyl Benzene	1.62E-02	1.84E-06
G4B	50000	Formaldehyde	1.52E+00	1.74E-04
G4B	7782505	Chlorine	0.00E+00	0.00E+00
G4B	1330207	Xylenes	2.80E-02	3.20E-06
G4B	7439965	Manganese	0.00E+00	0.00E+00
G4B	67561	Methanol	0.00E+00	0.00E+00
G4B	91203	Naphthalene	5.49E-02	6.27E-06
G4B	7440020	Nickel	0.00E+00	0.00E+00
G4B	95476	o-Xylene	1.94E-02	2.21E-06
G4B	108952	Phenol	2.37E-02	2.70E-06
G4B	115071	Propylene	4.94E-01	5.64E-05

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
G4B	100425	Styrene	3.99E-02	4.55E-06
G4B	9960	SULFATES	0.00E+00	0.00E+00
G4B	108883	Toluene	5.28E-02	6.02E-06
G9B	106990	1,3-Butadiene	4.42E-02	5.04E-06
G9B	75070	Acetaldehyde	1.22E-01	1.39E-05
G9B	107028	Acrolein	5.80E-02	6.62E-06
G9B	71432	Benzene	5.04E-02	5.75E-06
G9B	7440508	Copper	0.00E+00	0.00E+00
G9B	100414	Ethyl Benzene	4.22E-03	4.82E-07
G9B	50000	Formaldehyde	3.98E-01	4.54E-05
G9B	7782505	Chlorine	0.00E+00	0.00E+00
G9B	1330207	Xylenes	7.32E-03	8.35E-07
G9B	7439965	Manganese	0.00E+00	0.00E+00
G9B	67561	Methanol	0.00E+00	0.00E+00
G9B	91203	Naphthalene	1.44E-02	1.64E-06
G9B	7440020	Nickel	0.00E+00	0.00E+00
G9B	95476	o-Xylene	5.07E-03	5.78E-07
G9B	108952	Phenol	6.19E-03	7.07E-07
G9B	115071	Propylene	1.29E-01	1.47E-05
G9B	100425	Styrene	1.04E-02	1.19E-06
G9B	9960	SULFATES	0.00E+00	0.00E+00
G9B	108883	Toluene	1.38E-02	1.57E-06
G12B	106990	1,3-Butadiene	1.56E+00	1.78E-04
G12B	75070	Acetaldehyde	4.30E+00	4.91E-04
G12B	107028	Acrolein	2.05E+00	2.34E-04
G12B	71432	Benzene	1.78E+00	2.03E-04
G12B	7440508	Copper	0.00E+00	0.00E+00
G12B	100414	Ethyl Benzene	1.49E-01	1.70E-05
G12B	50000	Formaldehyde	1.41E+01	1.61E-03
G12B	7782505	Chlorine	0.00E+00	0.00E+00
G12B	1330207	Xylenes	2.59E-01	2.95E-05
G12B	7439965	Manganese	0.00E+00	0.00E+00
G12B	67561	Methanol	0.00E+00	0.00E+00
G12B	91203	Naphthalene	5.08E-01	5.79E-05
G12B	7440020	Nickel	0.00E+00	0.00E+00
G12B	95476	o-Xylene	1.79E-01	2.05E-05
G12B	108952	Phenol	2.19E-01	2.50E-05
G12B	115071	Propylene	4.57E+00	5.22E-04
G12B	100425	Styrene	3.68E-01	4.20E-05
G12B	9960	SULFATES	0.00E+00	0.00E+00
G12B	108883	Toluene	4.88E-01	5.57E-05
G13B	106990	1,3-Butadiene	1.57E+00	1.79E-04
G13B	75070	Acetaldehyde	4.33E+00	4.94E-04
G13B	107028	Acrolein	2.06E+00	2.35E-04
G13B	71432	Benzene	1.79E+00	2.05E-04
G13B	7440508	Copper	0.00E+00	0.00E+00
G13B	100414	Ethyl Benzene	1.50E-01	1.71E-05

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
G13B	50000	Formaldehyde	1.42E+01	1.62E-03
G13B	7782505	Chlorine	0.00E+00	0.00E+00
G13B	1330207	Xylenes	2.60E-01	2.97E-05
G13B	7439965	Manganese	0.00E+00	0.00E+00
G13B	67561	Methanol	0.00E+00	0.00E+00
G13B	91203	Naphthalene	5.11E-01	5.83E-05
G13B	7440020	Nickel	0.00E+00	0.00E+00
G13B	95476	o-Xylene	1.80E-01	2.06E-05
G13B	108952	Phenol	2.20E-01	2.51E-05
G13B	115071	Propylene	4.60E+00	5.25E-04
G13B	100425	Styrene	3.70E-01	4.23E-05
G13B	9960	SULFATES	0.00E+00	0.00E+00
G13B	108883	Toluene	4.91E-01	5.60E-05
G27B	106990	1,3-Butadiene	3.41E+00	3.90E-04
G27B	75070	Acetaldehyde	9.39E+00	1.07E-03
G27B	107028	Acrolein	4.48E+00	5.11E-04
G27B	71432	Benzene	3.89E+00	4.44E-04
G27B	7440508	Copper	0.00E+00	0.00E+00
G27B	100414	Ethyl Benzene	3.26E-01	3.72E-05
G27B	50000	Formaldehyde	3.07E+01	3.51E-03
G27B	7782505	Chlorine	0.00E+00	0.00E+00
G27B	1330207	Xylenes	5.65E-01	6.45E-05
G27B	7439965	Manganese	0.00E+00	0.00E+00
G27B	67561	Methanol	0.00E+00	0.00E+00
G27B	91203	Naphthalene	1.11E+00	1.27E-04
G27B	7440020	Nickel	0.00E+00	0.00E+00
G27B	95476	o-Xylene	3.91E-01	4.47E-05
G27B	108952	Phenol	4.78E-01	5.46E-05
G27B	115071	Propylene	9.98E+00	1.14E-03
G27B	100425	Styrene	8.05E-01	9.18E-05
G27B	9960	SULFATES	0.00E+00	0.00E+00
G27B	108883	Toluene	1.07E+00	1.22E-04
T14D	106990	1,3-Butadiene	1.81E+01	2.06E-03
T14D	75070	Acetaldehyde	4.98E+01	5.68E-03
T14D	107028	Acrolein	2.37E+01	2.71E-03
T14D	71432	Benzene	2.06E+01	2.35E-03
T14D	7440508	Copper	0.00E+00	0.00E+00
T14D	100414	Ethyl Benzene	1.73E+00	1.97E-04
T14D	50000	Formaldehyde	1.63E+02	1.86E-02
T14D	7782505	Chlorine	0.00E+00	0.00E+00
T14D	1330207	Xylenes	2.99E+00	3.42E-04
T14D	7439965	Manganese	0.00E+00	0.00E+00
T14D	67561	Methanol	0.00E+00	0.00E+00
T14D	91203	Naphthalene	5.87E+00	6.71E-04
T14D	7440020	Nickel	0.00E+00	0.00E+00
T14D	95476	o-Xylene	2.07E+00	2.37E-04
T14D	108952	Phenol	2.53E+00	2.89E-04

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
T14D	115071	Propylene	5.29E+01	6.04E-03
T14D	100425	Styrene	4.26E+00	4.86E-04
T14D	9960	SULFATES	0.00E+00	0.00E+00
T14D	108883	Toluene	5.64E+00	6.44E-04
T10D	106990	1,3-Butadiene	3.48E-01	3.98E-05
T10D	75070	Acetaldehyde	9.59E-01	1.09E-04
T10D	107028	Acrolein	4.57E-01	5.22E-05
T10D	71432	Benzene	3.97E-01	4.53E-05
T10D	7440508	Copper	0.00E+00	0.00E+00
T10D	100414	Ethyl Benzene	3.33E-02	3.80E-06
T10D	50000	Formaldehyde	3.14E+00	3.58E-04
T10D	7782505	Chlorine	0.00E+00	0.00E+00
T10D	1330207	Xylenes	5.77E-02	6.59E-06
T10D	7439965	Manganese	0.00E+00	0.00E+00
T10D	67561	Methanol	0.00E+00	0.00E+00
T10D	91203	Naphthalene	1.13E-01	1.29E-05
T10D	7440020	Nickel	0.00E+00	0.00E+00
T10D	95476	o-Xylene	3.99E-02	4.56E-06
T10D	108952	Phenol	4.88E-02	5.57E-06
T10D	115071	Propylene	1.02E+00	1.16E-04
T10D	100425	Styrene	8.21E-02	9.37E-06
T10D	9960	SULFATES	0.00E+00	0.00E+00
T10D	108883	Toluene	1.09E-01	1.24E-05
C4B	106990	1,3-Butadiene	2.43E-04	2.77E-08
C4B	75070	Acetaldehyde	6.16E-04	7.03E-08
C4B	107028	Acrolein	3.53E-04	4.03E-08
C4B	71432	Benzene	2.42E-04	2.76E-08
C4B	7440508	Copper	1.50E-03	1.72E-07
C4B	100414	Ethyl Benzene	2.51E-05	2.86E-09
C4B	50000	Formaldehyde	1.77E-03	2.02E-07
C4B	7782505	Chlorine	5.01E-04	5.72E-08
C4B	1330207	Xylenes	4.06E-05	4.64E-09
C4B	7439965	Manganese	1.28E-04	1.46E-08
C4B	67561	Methanol	2.60E-04	2.97E-08
C4B	91203	Naphthalene	7.79E-05	8.90E-09
C4B	7440020	Nickel	2.56E-04	2.92E-08
C4B	95476	o-Xylene	2.39E-05	2.73E-09
C4B	108952	Phenol	1.05E-04	1.19E-08
C4B	115071	Propylene	6.53E-04	7.46E-08
C4B	100425	Styrene	4.45E-05	5.08E-09
C4B	9960	SULFATES	1.60E-01	1.83E-05
C4B	108883	Toluene	9.25E-05	1.06E-08
C9B	106990	1,3-Butadiene	2.96E-05	3.38E-09
C9B	75070	Acetaldehyde	7.50E-05	8.57E-09
C9B	107028	Acrolein	4.30E-05	4.91E-09
C9B	71432	Benzene	2.95E-05	3.37E-09
C9B	7440508	Copper	7.82E-05	8.92E-09

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C9B	100414	Ethyl Benzene	3.06E-06	3.49E-10
C9B	50000	Formaldehyde	2.16E-04	2.47E-08
C9B	7782505	Chlorine	2.60E-05	2.97E-09
C9B	1330207	Xylenes	4.95E-06	5.66E-10
C9B	7439965	Manganese	6.63E-06	7.57E-10
C9B	67561	Methanol	3.17E-05	3.62E-09
C9B	91203	Naphthalene	9.50E-06	1.08E-09
C9B	7440020	Nickel	1.33E-05	1.52E-09
C9B	95476	o-Xylene	2.92E-06	3.33E-10
C9B	108952	Phenol	1.28E-05	1.46E-09
C9B	115071	Propylene	7.97E-05	9.09E-09
C9B	100425	Styrene	5.43E-06	6.20E-10
C9B	9960	SULFATES	8.34E-03	9.52E-07
C9B	108883	Toluene	1.13E-05	1.29E-09
C12B	106990	1,3-Butadiene	3.08E-04	3.52E-08
C12B	75070	Acetaldehyde	7.81E-04	8.91E-08
C12B	107028	Acrolein	4.47E-04	5.11E-08
C12B	71432	Benzene	3.07E-04	3.51E-08
C12B	7440508	Copper	8.06E-04	9.21E-08
C12B	100414	Ethyl Benzene	3.18E-05	3.63E-09
C12B	50000	Formaldehyde	2.25E-03	2.57E-07
C12B	7782505	Chlorine	2.69E-04	3.07E-08
C12B	1330207	Xylenes	5.15E-05	5.88E-09
C12B	7439965	Manganese	6.84E-05	7.81E-09
C12B	67561	Methanol	3.30E-04	3.76E-08
C12B	91203	Naphthalene	9.88E-05	1.13E-08
C12B	7440020	Nickel	1.37E-04	1.57E-08
C12B	95476	o-Xylene	3.03E-05	3.46E-09
C12B	108952	Phenol	1.33E-04	1.51E-08
C12B	115071	Propylene	8.28E-04	9.46E-08
C12B	100425	Styrene	5.65E-05	6.45E-09
C12B	9960	SULFATES	8.60E-02	9.82E-06
C12B	108883	Toluene	1.17E-04	1.34E-08
C13B	106990	1,3-Butadiene	3.23E-04	3.69E-08
C13B	75070	Acetaldehyde	8.18E-04	9.33E-08
C13B	107028	Acrolein	4.69E-04	5.35E-08
C13B	71432	Benzene	3.22E-04	3.67E-08
C13B	7440508	Copper	8.19E-04	9.35E-08
C13B	100414	Ethyl Benzene	3.33E-05	3.80E-09
C13B	50000	Formaldehyde	2.36E-03	2.69E-07
C13B	7782505	Chlorine	2.73E-04	3.12E-08
C13B	1330207	Xylenes	5.40E-05	6.16E-09
C13B	7439965	Manganese	6.95E-05	7.93E-09
C13B	67561	Methanol	3.46E-04	3.94E-08
C13B	91203	Naphthalene	1.04E-04	1.18E-08
C13B	7440020	Nickel	1.39E-04	1.59E-08
C13B	95476	o-Xylene	3.18E-05	3.63E-09

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C13B	108952	Phenol	1.39E-04	1.59E-08
C13B	115071	Propylene	8.68E-04	9.91E-08
C13B	100425	Styrene	5.91E-05	6.75E-09
C13B	9960	SULFATES	8.73E-02	9.97E-06
C13B	108883	Toluene	1.23E-04	1.40E-08
C26B	106990	1,3-Butadiene	4.19E-03	4.78E-07
C26B	75070	Acetaldehyde	1.06E-02	1.21E-06
C26B	107028	Acrolein	6.08E-03	6.94E-07
C26B	71432	Benzene	4.17E-03	4.76E-07
C26B	7440508	Copper	1.41E-02	1.61E-06
C26B	100414	Ethyl Benzene	4.32E-04	4.93E-08
C26B	50000	Formaldehyde	3.06E-02	3.49E-06
C26B	7782505	Chlorine	4.71E-03	5.37E-07
C26B	1330207	Xylenes	7.00E-04	7.99E-08
C26B	7439965	Manganese	1.20E-03	1.37E-07
C26B	67561	Methanol	4.48E-03	5.11E-07
C26B	91203	Naphthalene	1.34E-03	1.53E-07
C26B	7440020	Nickel	2.40E-03	2.74E-07
C26B	95476	o-Xylene	4.12E-04	4.70E-08
C26B	108952	Phenol	1.80E-03	2.06E-07
C26B	115071	Propylene	1.13E-02	1.28E-06
C26B	100425	Styrene	7.67E-04	8.76E-08
C26B	9960	SULFATES	1.51E+00	1.72E-04
C26B	108883	Toluene	1.59E-03	1.82E-07
C27B	106990	1,3-Butadiene	7.10E-03	8.10E-07
C27B	75070	Acetaldehyde	1.80E-02	2.05E-06
C27B	107028	Acrolein	1.03E-02	1.18E-06
C27B	71432	Benzene	7.07E-03	8.08E-07
C27B	7440508	Copper	1.73E-02	1.98E-06
C27B	100414	Ethyl Benzene	7.32E-04	8.36E-08
C27B	50000	Formaldehyde	5.18E-02	5.91E-06
C27B	7782505	Chlorine	5.77E-03	6.59E-07
C27B	1330207	Xylenes	1.19E-03	1.35E-07
C27B	7439965	Manganese	1.47E-03	1.68E-07
C27B	67561	Methanol	7.60E-03	8.67E-07
C27B	91203	Naphthalene	2.28E-03	2.60E-07
C27B	7440020	Nickel	2.95E-03	3.37E-07
C27B	95476	o-Xylene	6.99E-04	7.97E-08
C27B	108952	Phenol	3.06E-03	3.49E-07
C27B	115071	Propylene	1.91E-02	2.18E-06
C27B	100425	Styrene	1.30E-03	1.48E-07
C27B	9960	SULFATES	1.85E+00	2.11E-04
C27B	108883	Toluene	2.70E-03	3.08E-07
B4A	106990	1,3-Butadiene	3.90E-01	4.45E-05
B4A	75070	Acetaldehyde	9.86E-01	1.13E-04
B4A	107028	Acrolein	5.66E-01	6.46E-05
B4A	71432	Benzene	3.88E-01	4.43E-05

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
B4A	7440508	Copper	2.18E-02	2.49E-06
B4A	100414	Ethyl Benzene	4.02E-02	4.59E-06
B4A	50000	Formaldehyde	2.84E+00	3.24E-04
B4A	7782505	Chlorine	7.26E-03	8.29E-07
B4A	1330207	Xylenes	6.51E-02	7.43E-06
B4A	7439965	Manganese	1.85E-03	2.11E-07
B4A	67561	Methanol	4.17E-01	4.76E-05
B4A	91203	Naphthalene	1.25E-01	1.43E-05
B4A	7440020	Nickel	3.71E-03	4.24E-07
B4A	95476	o-Xylene	3.83E-02	4.38E-06
B4A	108952	Phenol	1.68E-01	1.91E-05
B4A	115071	Propylene	1.05E+00	1.20E-04
B4A	100425	Styrene	7.14E-02	8.15E-06
B4A	9960	SULFATES	2.32E+00	2.65E-04
B4A	108883	Toluene	1.48E-01	1.69E-05
B26A	106990	1,3-Butadiene	9.94E+00	1.13E-03
B26A	75070	Acetaldehyde	2.52E+01	2.87E-03
B26A	107028	Acrolein	1.44E+01	1.65E-03
B26A	71432	Benzene	9.90E+00	1.13E-03
B26A	7440508	Copper	6.36E-01	7.26E-05
B26A	100414	Ethyl Benzene	1.02E+00	1.17E-04
B26A	50000	Formaldehyde	7.25E+01	8.28E-03
B26A	7782505	Chlorine	2.12E-01	2.42E-05
B26A	1330207	Xylenes	1.66E+00	1.90E-04
B26A	7439965	Manganese	5.40E-02	6.16E-06
B26A	67561	Methanol	1.06E+01	1.21E-03
B26A	91203	Naphthalene	3.19E+00	3.64E-04
B26A	7440020	Nickel	1.08E-01	1.24E-05
B26A	95476	o-Xylene	9.78E-01	1.12E-04
B26A	108952	Phenol	4.28E+00	4.88E-04
B26A	115071	Propylene	2.67E+01	3.05E-03
B26A	100425	Styrene	1.82E+00	2.08E-04
B26A	9960	SULFATES	6.79E+01	7.75E-03
B26A	108883	Toluene	3.78E+00	4.32E-04
G4A	106990	1,3-Butadiene	3.62E-01	4.14E-05
G4A	75070	Acetaldehyde	9.97E-01	1.14E-04
G4A	107028	Acrolein	4.75E-01	5.43E-05
G4A	71432	Benzene	4.13E-01	4.72E-05
G4A	7440508	Copper	0.00E+00	0.00E+00
G4A	100414	Ethyl Benzene	3.46E-02	3.95E-06
G4A	50000	Formaldehyde	3.26E+00	3.73E-04
G4A	7782505	Chlorine	0.00E+00	0.00E+00
G4A	1330207	Xylenes	6.00E-02	6.85E-06
G4A	7439965	Manganese	0.00E+00	0.00E+00
G4A	67561	Methanol	0.00E+00	0.00E+00
G4A	91203	Naphthalene	1.18E-01	1.34E-05
G4A	7440020	Nickel	0.00E+00	0.00E+00

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
G4A	95476	o-Xylene	4.15E-02	4.74E-06
G4A	108952	Phenol	5.08E-02	5.80E-06
G4A	115071	Propylene	1.06E+00	1.21E-04
G4A	100425	Styrene	8.54E-02	9.75E-06
G4A	9960	SULFATES	0.00E+00	0.00E+00
G4A	108883	Toluene	1.13E-01	1.29E-05
G9A	106990	1,3-Butadiene	1.08E-01	1.23E-05
G9A	75070	Acetaldehyde	2.96E-01	3.38E-05
G9A	107028	Acrolein	1.41E-01	1.61E-05
G9A	71432	Benzene	1.23E-01	1.40E-05
G9A	7440508	Copper	0.00E+00	0.00E+00
G9A	100414	Ethyl Benzene	1.03E-02	1.17E-06
G9A	50000	Formaldehyde	9.69E-01	1.11E-04
G9A	7782505	Chlorine	0.00E+00	0.00E+00
G9A	1330207	Xylenes	1.78E-02	2.03E-06
G9A	7439965	Manganese	0.00E+00	0.00E+00
G9A	67561	Methanol	0.00E+00	0.00E+00
G9A	91203	Naphthalene	3.49E-02	3.99E-06
G9A	7440020	Nickel	0.00E+00	0.00E+00
G9A	95476	o-Xylene	1.23E-02	1.41E-06
G9A	108952	Phenol	1.51E-02	1.72E-06
G9A	115071	Propylene	3.14E-01	3.59E-05
G9A	100425	Styrene	2.53E-02	2.89E-06
G9A	9960	SULFATES	0.00E+00	0.00E+00
G9A	108883	Toluene	3.36E-02	3.83E-06
G12A	106990	1,3-Butadiene	3.82E+00	4.36E-04
G12A	75070	Acetaldehyde	1.05E+01	1.20E-03
G12A	107028	Acrolein	5.02E+00	5.73E-04
G12A	71432	Benzene	4.36E+00	4.98E-04
G12A	7440508	Copper	0.00E+00	0.00E+00
G12A	100414	Ethyl Benzene	3.65E-01	4.17E-05
G12A	50000	Formaldehyde	3.44E+01	3.93E-03
G12A	7782505	Chlorine	0.00E+00	0.00E+00
G12A	1330207	Xylenes	6.33E-01	7.23E-05
G12A	7439965	Manganese	0.00E+00	0.00E+00
G12A	67561	Methanol	0.00E+00	0.00E+00
G12A	91203	Naphthalene	1.24E+00	1.42E-04
G12A	7440020	Nickel	0.00E+00	0.00E+00
G12A	95476	o-Xylene	4.38E-01	5.00E-05
G12A	108952	Phenol	5.36E-01	6.12E-05
G12A	115071	Propylene	1.12E+01	1.28E-03
G12A	100425	Styrene	9.01E-01	1.03E-04
G12A	9960	SULFATES	0.00E+00	0.00E+00
G12A	108883	Toluene	1.19E+00	1.36E-04
G13A	106990	1,3-Butadiene	3.83E+00	4.37E-04
G13A	75070	Acetaldehyde	1.05E+01	1.20E-03
G13A	107028	Acrolein	5.02E+00	5.73E-04

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
G13A	71432	Benzene	4.36E+00	4.98E-04
G13A	7440508	Copper	0.00E+00	0.00E+00
G13A	100414	Ethyl Benzene	3.66E-01	4.17E-05
G13A	50000	Formaldehyde	3.45E+01	3.94E-03
G13A	7782505	Chlorine	0.00E+00	0.00E+00
G13A	1330207	Xylenes	6.34E-01	7.24E-05
G13A	7439965	Manganese	0.00E+00	0.00E+00
G13A	67561	Methanol	0.00E+00	0.00E+00
G13A	91203	Naphthalene	1.24E+00	1.42E-04
G13A	7440020	Nickel	0.00E+00	0.00E+00
G13A	95476	o-Xylene	4.39E-01	5.01E-05
G13A	108952	Phenol	5.36E-01	6.12E-05
G13A	115071	Propylene	1.12E+01	1.28E-03
G13A	100425	Styrene	9.02E-01	1.03E-04
G13A	9960	SULFATES	0.00E+00	0.00E+00
G13A	108883	Toluene	1.19E+00	1.36E-04
G27A	106990	1,3-Butadiene	8.32E+00	9.49E-04
G27A	75070	Acetaldehyde	2.29E+01	2.61E-03
G27A	107028	Acrolein	1.09E+01	1.25E-03
G27A	71432	Benzene	9.48E+00	1.08E-03
G27A	7440508	Copper	0.00E+00	0.00E+00
G27A	100414	Ethyl Benzene	7.94E-01	9.07E-05
G27A	50000	Formaldehyde	7.49E+01	8.55E-03
G27A	7782505	Chlorine	0.00E+00	0.00E+00
G27A	1330207	Xylenes	1.38E+00	1.57E-04
G27A	7439965	Manganese	0.00E+00	0.00E+00
G27A	67561	Methanol	0.00E+00	0.00E+00
G27A	91203	Naphthalene	2.70E+00	3.08E-04
G27A	7440020	Nickel	0.00E+00	0.00E+00
G27A	95476	o-Xylene	9.53E-01	1.09E-04
G27A	108952	Phenol	1.17E+00	1.33E-04
G27A	115071	Propylene	2.43E+01	2.78E-03
G27A	100425	Styrene	1.96E+00	2.24E-04
G27A	9960	SULFATES	0.00E+00	0.00E+00
G27A	108883	Toluene	2.60E+00	2.96E-04
C4A	106990	1,3-Butadiene	1.55E-03	1.77E-07
C4A	75070	Acetaldehyde	3.93E-03	4.48E-07
C4A	107028	Acrolein	2.25E-03	2.57E-07
C4A	71432	Benzene	1.55E-03	1.76E-07
C4A	7440508	Copper	4.36E-03	4.98E-07
C4A	100414	Ethyl Benzene	1.60E-04	1.83E-08
C4A	50000	Formaldehyde	1.13E-02	1.29E-06
C4A	7782505	Chlorine	1.45E-03	1.66E-07
C4A	1330207	Xylenes	2.59E-04	2.96E-08
C4A	7439965	Manganese	3.70E-04	4.23E-08
C4A	67561	Methanol	1.66E-03	1.89E-07
C4A	91203	Naphthalene	4.97E-04	5.68E-08

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C4A	7440020	Nickel	7.43E-04	8.48E-08
C4A	95476	o-Xylene	1.53E-04	1.74E-08
C4A	108952	Phenol	6.67E-04	7.62E-08
C4A	115071	Propylene	4.17E-03	4.76E-07
C4A	100425	Styrene	2.84E-04	3.24E-08
C4A	9960	SULFATES	4.65E-01	5.31E-05
C4A	108883	Toluene	5.90E-04	6.74E-08
C9A	106990	1,3-Butadiene	4.69E-05	5.35E-09
C9A	75070	Acetaldehyde	1.19E-04	1.36E-08
C9A	107028	Acrolein	6.81E-05	7.77E-09
C9A	71432	Benzene	4.67E-05	5.33E-09
C9A	7440508	Copper	1.31E-04	1.49E-08
C9A	100414	Ethyl Benzene	4.84E-06	5.52E-10
C9A	50000	Formaldehyde	3.42E-04	3.91E-08
C9A	7782505	Chlorine	4.36E-05	4.98E-09
C9A	1330207	Xylenes	7.84E-06	8.95E-10
C9A	7439965	Manganese	1.11E-05	1.27E-09
C9A	67561	Methanol	5.02E-05	5.73E-09
C9A	91203	Naphthalene	1.50E-05	1.72E-09
C9A	7440020	Nickel	2.23E-05	2.54E-09
C9A	95476	o-Xylene	4.61E-06	5.27E-10
C9A	108952	Phenol	2.02E-05	2.30E-09
C9A	115071	Propylene	1.26E-04	1.44E-08
C9A	100425	Styrene	8.59E-06	9.81E-10
C9A	9960	SULFATES	1.40E-02	1.59E-06
C9A	108883	Toluene	1.78E-05	2.04E-09
C12A	106990	1,3-Butadiene	4.91E-04	5.61E-08
C12A	75070	Acetaldehyde	1.24E-03	1.42E-07
C12A	107028	Acrolein	7.13E-04	8.14E-08
C12A	71432	Benzene	4.90E-04	5.59E-08
C12A	7440508	Copper	1.23E-03	1.40E-07
C12A	100414	Ethyl Benzene	5.07E-05	5.78E-09
C12A	50000	Formaldehyde	3.58E-03	4.09E-07
C12A	7782505	Chlorine	4.08E-04	4.66E-08
C12A	1330207	Xylenes	8.21E-05	9.37E-09
C12A	7439965	Manganese	1.04E-04	1.19E-08
C12A	67561	Methanol	5.26E-04	6.00E-08
C12A	91203	Naphthalene	1.58E-04	1.80E-08
C12A	7440020	Nickel	2.08E-04	2.38E-08
C12A	95476	o-Xylene	4.83E-05	5.52E-09
C12A	108952	Phenol	2.11E-04	2.41E-08
C12A	115071	Propylene	1.32E-03	1.51E-07
C12A	100425	Styrene	9.00E-05	1.03E-08
C12A	9960	SULFATES	1.31E-01	1.49E-05
C12A	108883	Toluene	1.87E-04	2.13E-08
C13A	106990	1,3-Butadiene	4.77E-04	5.44E-08
C13A	75070	Acetaldehyde	1.21E-03	1.38E-07

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C13A	107028	Acrolein	6.92E-04	7.90E-08
C13A	71432	Benzene	4.75E-04	5.42E-08
C13A	7440508	Copper	1.23E-03	1.40E-07
C13A	100414	Ethyl Benzene	4.92E-05	5.61E-09
C13A	50000	Formaldehyde	3.48E-03	3.97E-07
C13A	7782505	Chlorine	4.09E-04	4.67E-08
C13A	1330207	Xylenes	7.97E-05	9.09E-09
C13A	7439965	Manganese	1.04E-04	1.19E-08
C13A	67561	Methanol	5.10E-04	5.82E-08
C13A	91203	Naphthalene	1.53E-04	1.74E-08
C13A	7440020	Nickel	2.09E-04	2.39E-08
C13A	95476	o-Xylene	4.69E-05	5.35E-09
C13A	108952	Phenol	2.05E-04	2.34E-08
C13A	115071	Propylene	1.28E-03	1.46E-07
C13A	100425	Styrene	8.73E-05	9.96E-09
C13A	9960	SULFATES	1.31E-01	1.50E-05
C13A	108883	Toluene	1.81E-04	2.07E-08
C26A	106990	1,3-Butadiene	9.87E-03	1.13E-06
C26A	75070	Acetaldehyde	2.50E-02	2.85E-06
C26A	107028	Acrolein	1.43E-02	1.64E-06
C26A	71432	Benzene	9.83E-03	1.12E-06
C26A	7440508	Copper	3.16E-02	3.60E-06
C26A	100414	Ethyl Benzene	1.02E-03	1.16E-07
C26A	50000	Formaldehyde	7.20E-02	8.22E-06
C26A	7782505	Chlorine	1.05E-02	1.20E-06
C26A	1330207	Xylenes	1.65E-03	1.88E-07
C26A	7439965	Manganese	2.68E-03	3.06E-07
C26A	67561	Methanol	1.06E-02	1.21E-06
C26A	91203	Naphthalene	3.16E-03	3.61E-07
C26A	7440020	Nickel	5.37E-03	6.13E-07
C26A	95476	o-Xylene	9.71E-04	1.11E-07
C26A	108952	Phenol	4.25E-03	4.85E-07
C26A	115071	Propylene	2.65E-02	3.03E-06
C26A	100425	Styrene	1.81E-03	2.06E-07
C26A	9960	SULFATES	3.37E+00	3.84E-04
C26A	108883	Toluene	3.76E-03	4.29E-07
C27A	106990	1,3-Butadiene	2.23E-02	2.55E-06
C27A	75070	Acetaldehyde	5.66E-02	6.46E-06
C27A	107028	Acrolein	3.24E-02	3.70E-06
C27A	71432	Benzene	2.23E-02	2.54E-06
C27A	7440508	Copper	4.50E-02	5.14E-06
C27A	100414	Ethyl Benzene	2.31E-03	2.63E-07
C27A	50000	Formaldehyde	1.63E-01	1.86E-05
C27A	7782505	Chlorine	1.50E-02	1.71E-06
C27A	1330207	Xylenes	3.74E-03	4.26E-07
C27A	7439965	Manganese	3.82E-03	4.36E-07
C27A	67561	Methanol	2.39E-02	2.73E-06

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C27A	91203	Naphthalene	7.17E-03	8.18E-07
C27A	7440020	Nickel	7.67E-03	8.75E-07
C27A	95476	o-Xylene	2.20E-03	2.51E-07
C27A	108952	Phenol	9.62E-03	1.10E-06
C27A	115071	Propylene	6.01E-02	6.86E-06
C27A	100425	Styrene	4.09E-03	4.67E-07
C27A	9960	SULFATES	4.80E+00	5.48E-04
C27A	108883	Toluene	8.51E-03	9.71E-07
A1B	106990	1,3-Butadiene	1.21E+00	1.38E-04
A1B	75070	Acetaldehyde	3.09E+00	3.53E-04
A1B	107028	Acrolein	1.74E+00	1.99E-04
A1B	71432	Benzene	1.22E+00	1.39E-04
A1B	7440508	Copper	1.08E-02	1.23E-06
A1B	100414	Ethyl Benzene	1.24E-01	1.42E-05
A1B	50000	Formaldehyde	9.01E+00	1.03E-03
A1B	7782505	Chlorine	3.58E-03	4.09E-07
A1B	1330207	Xylenes	2.02E-01	2.31E-05
A1B	7439965	Manganese	9.12E-04	1.04E-07
A1B	67561	Methanol	1.19E+00	1.36E-04
A1B	91203	Naphthalene	3.89E-01	4.44E-05
A1B	7440020	Nickel	1.83E-03	2.09E-07
A1B	95476	o-Xylene	1.21E-01	1.38E-05
A1B	108952	Phenol	4.92E-01	5.62E-05
A1B	115071	Propylene	3.28E+00	3.74E-04
A1B	100425	Styrene	2.27E-01	2.59E-05
A1B	9960	SULFATES	1.15E+00	1.31E-04
A1B	108883	Toluene	4.54E-01	5.18E-05
A2B	106990	1,3-Butadiene	4.00E-01	4.56E-05
A2B	75070	Acetaldehyde	1.02E+00	1.16E-04
A2B	107028	Acrolein	5.76E-01	6.57E-05
A2B	71432	Benzene	4.03E-01	4.60E-05
A2B	7440508	Copper	3.64E-03	4.15E-07
A2B	100414	Ethyl Benzene	4.10E-02	4.68E-06
A2B	50000	Formaldehyde	2.97E+00	3.40E-04
A2B	7782505	Chlorine	1.21E-03	1.38E-07
A2B	1330207	Xylenes	6.68E-02	7.62E-06
A2B	7439965	Manganese	3.08E-04	3.52E-08
A2B	67561	Methanol	3.92E-01	4.47E-05
A2B	91203	Naphthalene	1.28E-01	1.47E-05
A2B	7440020	Nickel	6.19E-04	7.06E-08
A2B	95476	o-Xylene	3.99E-02	4.55E-06
A2B	108952	Phenol	1.62E-01	1.85E-05
A2B	115071	Propylene	1.08E+00	1.24E-04
A2B	100425	Styrene	7.50E-02	8.56E-06
A2B	9960	SULFATES	3.88E-01	4.43E-05
A2B	108883	Toluene	1.50E-01	1.71E-05
A15B	106990	1,3-Butadiene	3.57E+00	4.08E-04

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A15B	75070	Acetaldehyde	9.15E+00	1.05E-03
A15B	107028	Acrolein	5.12E+00	5.85E-04
A15B	71432	Benzene	3.63E+00	4.14E-04
A15B	7440508	Copper	3.28E-02	3.74E-06
A15B	100414	Ethyl Benzene	3.65E-01	4.17E-05
A15B	50000	Formaldehyde	2.69E+01	3.07E-03
A15B	7782505	Chlorine	1.09E-02	1.25E-06
A15B	1330207	Xylenes	5.97E-01	6.81E-05
A15B	7439965	Manganese	2.78E-03	3.18E-07
A15B	67561	Methanol	3.32E+00	3.79E-04
A15B	91203	Naphthalene	1.15E+00	1.31E-04
A15B	7440020	Nickel	5.58E-03	6.37E-07
A15B	95476	o-Xylene	3.59E-01	4.10E-05
A15B	108952	Phenol	1.40E+00	1.60E-04
A15B	115071	Propylene	9.72E+00	1.11E-03
A15B	100425	Styrene	6.80E-01	7.76E-05
A15B	9960	SULFATES	3.50E+00	3.99E-04
A15B	108883	Toluene	1.33E+00	1.52E-04
A16B	106990	1,3-Butadiene	4.77E+00	5.45E-04
A16B	75070	Acetaldehyde	1.22E+01	1.40E-03
A16B	107028	Acrolein	6.84E+00	7.81E-04
A16B	71432	Benzene	4.85E+00	5.53E-04
A16B	7440508	Copper	4.36E-02	4.98E-06
A16B	100414	Ethyl Benzene	4.87E-01	5.56E-05
A16B	50000	Formaldehyde	3.59E+01	4.10E-03
A16B	7782505	Chlorine	1.45E-02	1.66E-06
A16B	1330207	Xylenes	7.97E-01	9.09E-05
A16B	7439965	Manganese	3.70E-03	4.22E-07
A16B	67561	Methanol	4.43E+00	5.06E-04
A16B	91203	Naphthalene	1.53E+00	1.75E-04
A16B	7440020	Nickel	7.42E-03	8.47E-07
A16B	95476	o-Xylene	4.80E-01	5.48E-05
A16B	108952	Phenol	1.87E+00	2.13E-04
A16B	115071	Propylene	1.30E+01	1.48E-03
A16B	100425	Styrene	9.07E-01	1.04E-04
A16B	9960	SULFATES	4.65E+00	5.31E-04
A16B	108883	Toluene	1.77E+00	2.02E-04
A17B	106990	1,3-Butadiene	3.58E+00	4.09E-04
A17B	75070	Acetaldehyde	9.17E+00	1.05E-03
A17B	107028	Acrolein	5.13E+00	5.86E-04
A17B	71432	Benzene	3.63E+00	4.15E-04
A17B	7440508	Copper	3.27E-02	3.73E-06
A17B	100414	Ethyl Benzene	3.66E-01	4.17E-05
A17B	50000	Formaldehyde	2.69E+01	3.07E-03
A17B	7782505	Chlorine	1.09E-02	1.24E-06
A17B	1330207	Xylenes	5.98E-01	6.82E-05
A17B	7439965	Manganese	2.77E-03	3.17E-07

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A17B	67561	Methanol	3.32E+00	3.79E-04
A17B	91203	Naphthalene	1.15E+00	1.31E-04
A17B	7440020	Nickel	5.56E-03	6.35E-07
A17B	95476	o-Xylene	3.60E-01	4.11E-05
A17B	108952	Phenol	1.40E+00	1.60E-04
A17B	115071	Propylene	9.73E+00	1.11E-03
A17B	100425	Styrene	6.80E-01	7.77E-05
A17B	9960	SULFATES	3.49E+00	3.98E-04
A17B	108883	Toluene	1.33E+00	1.52E-04
A19B	106990	1,3-Butadiene	4.18E+01	4.77E-03
A19B	75070	Acetaldehyde	1.07E+02	1.22E-02
A19B	107028	Acrolein	5.98E+01	6.83E-03
A19B	71432	Benzene	4.24E+01	4.84E-03
A19B	7440508	Copper	3.81E-01	4.35E-05
A19B	100414	Ethyl Benzene	4.26E+00	4.87E-04
A19B	50000	Formaldehyde	3.14E+02	3.59E-02
A19B	7782505	Chlorine	1.27E-01	1.45E-05
A19B	1330207	Xylenes	6.97E+00	7.96E-04
A19B	7439965	Manganese	3.24E-02	3.69E-06
A19B	67561	Methanol	3.88E+01	4.42E-03
A19B	91203	Naphthalene	1.34E+01	1.53E-03
A19B	7440020	Nickel	6.49E-02	7.41E-06
A19B	95476	o-Xylene	4.20E+00	4.79E-04
A19B	108952	Phenol	1.64E+01	1.87E-03
A19B	115071	Propylene	1.14E+02	1.30E-02
A19B	100425	Styrene	7.94E+00	9.06E-04
A19B	9960	SULFATES	4.07E+01	4.64E-03
A19B	108883	Toluene	1.55E+01	1.77E-03
A20B	106990	1,3-Butadiene	5.95E+00	6.79E-04
A20B	75070	Acetaldehyde	1.52E+01	1.74E-03
A20B	107028	Acrolein	8.53E+00	9.74E-04
A20B	71432	Benzene	6.04E+00	6.90E-04
A20B	7440508	Copper	5.47E-02	6.25E-06
A20B	100414	Ethyl Benzene	6.08E-01	6.94E-05
A20B	50000	Formaldehyde	4.48E+01	5.11E-03
A20B	7782505	Chlorine	1.82E-02	2.08E-06
A20B	1330207	Xylenes	9.94E-01	1.13E-04
A20B	7439965	Manganese	4.64E-03	5.30E-07
A20B	67561	Methanol	5.52E+00	6.30E-04
A20B	91203	Naphthalene	1.91E+00	2.18E-04
A20B	7440020	Nickel	9.31E-03	1.06E-06
A20B	95476	o-Xylene	5.98E-01	6.83E-05
A20B	108952	Phenol	2.33E+00	2.66E-04
A20B	115071	Propylene	1.62E+01	1.85E-03
A20B	100425	Styrene	1.13E+00	1.29E-04
A20B	9960	SULFATES	5.83E+00	6.66E-04
A20B	108883	Toluene	2.21E+00	2.52E-04

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A8B	106990	1,3-Butadiene	1.54E-01	1.76E-05
A8B	75070	Acetaldehyde	4.24E-01	4.84E-05
A8B	107028	Acrolein	2.02E-01	2.31E-05
A8B	71432	Benzene	1.76E-01	2.01E-05
A8B	7440508	Copper	1.55E-04	1.76E-08
A8B	100414	Ethyl Benzene	1.47E-02	1.68E-06
A8B	50000	Formaldehyde	1.39E+00	1.58E-04
A8B	7782505	Chlorine	5.15E-05	5.88E-09
A8B	1330207	Xylenes	2.55E-02	2.91E-06
A8B	7439965	Manganese	1.31E-05	1.50E-09
A8B	67561	Methanol	1.56E-04	1.78E-08
A8B	91203	Naphthalene	5.01E-02	5.72E-06
A8B	7440020	Nickel	2.63E-05	3.00E-09
A8B	95476	o-Xylene	1.77E-02	2.02E-06
A8B	108952	Phenol	2.16E-02	2.47E-06
A8B	115071	Propylene	4.51E-01	5.15E-05
A8B	100425	Styrene	3.63E-02	4.15E-06
A8B	9960	SULFATES	1.65E-02	1.88E-06
A8B	108883	Toluene	4.81E-02	5.49E-06
A11B	106990	1,3-Butadiene	6.65E+00	7.59E-04
A11B	75070	Acetaldehyde	1.83E+01	2.09E-03
A11B	107028	Acrolein	8.73E+00	9.96E-04
A11B	71432	Benzene	7.58E+00	8.66E-04
A11B	7440508	Copper	1.94E-03	2.21E-07
A11B	100414	Ethyl Benzene	6.35E-01	7.25E-05
A11B	50000	Formaldehyde	5.99E+01	6.84E-03
A11B	7782505	Chlorine	6.45E-04	7.37E-08
A11B	1330207	Xylenes	1.10E+00	1.26E-04
A11B	7439965	Manganese	1.64E-04	1.88E-08
A11B	67561	Methanol	2.48E-03	2.83E-07
A11B	91203	Naphthalene	2.16E+00	2.47E-04
A11B	7440020	Nickel	3.30E-04	3.76E-08
A11B	95476	o-Xylene	7.62E-01	8.70E-05
A11B	108952	Phenol	9.33E-01	1.06E-04
A11B	115071	Propylene	1.94E+01	2.22E-03
A11B	100425	Styrene	1.57E+00	1.79E-04
A11B	9960	SULFATES	2.07E-01	2.36E-05
A11B	108883	Toluene	2.08E+00	2.37E-04
A1A	106990	1,3-Butadiene	2.85E+00	3.25E-04
A1A	75070	Acetaldehyde	7.25E+00	8.28E-04
A1A	107028	Acrolein	4.11E+00	4.69E-04
A1A	71432	Benzene	2.86E+00	3.27E-04
A1A	7440508	Copper	1.38E-02	1.58E-06
A1A	100414	Ethyl Benzene	2.92E-01	3.34E-05
A1A	50000	Formaldehyde	2.11E+01	2.41E-03
A1A	7782505	Chlorine	4.60E-03	5.25E-07
A1A	1330207	Xylenes	4.76E-01	5.43E-05

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A1A	7439965	Manganese	1.17E-03	1.34E-07
A1A	67561	Methanol	2.85E+00	3.25E-04
A1A	91203	Naphthalene	9.14E-01	1.04E-04
A1A	7440020	Nickel	2.35E-03	2.68E-07
A1A	95476	o-Xylene	2.83E-01	3.23E-05
A1A	108952	Phenol	1.17E+00	1.34E-04
A1A	115071	Propylene	7.70E+00	8.79E-04
A1A	100425	Styrene	5.31E-01	6.07E-05
A1A	9960	SULFATES	1.47E+00	1.68E-04
A1A	108883	Toluene	1.07E+00	1.22E-04
A2A	106990	1,3-Butadiene	9.46E-01	1.08E-04
A2A	75070	Acetaldehyde	2.41E+00	2.75E-04
A2A	107028	Acrolein	1.36E+00	1.56E-04
A2A	71432	Benzene	9.51E-01	1.09E-04
A2A	7440508	Copper	4.72E-03	5.39E-07
A2A	100414	Ethyl Benzene	9.71E-02	1.11E-05
A2A	50000	Formaldehyde	7.01E+00	8.00E-04
A2A	7782505	Chlorine	1.57E-03	1.80E-07
A2A	1330207	Xylenes	1.58E-01	1.80E-05
A2A	7439965	Manganese	4.01E-04	4.58E-08
A2A	67561	Methanol	9.46E-01	1.08E-04
A2A	91203	Naphthalene	3.04E-01	3.47E-05
A2A	7440020	Nickel	8.04E-04	9.18E-08
A2A	95476	o-Xylene	9.41E-02	1.07E-05
A2A	108952	Phenol	3.89E-01	4.44E-05
A2A	115071	Propylene	2.56E+00	2.92E-04
A2A	100425	Styrene	1.77E-01	2.01E-05
A2A	9960	SULFATES	5.04E-01	5.75E-05
A2A	108883	Toluene	3.56E-01	4.06E-05
A15A	106990	1,3-Butadiene	8.92E+00	1.02E-03
A15A	75070	Acetaldehyde	2.28E+01	2.60E-03
A15A	107028	Acrolein	1.28E+01	1.46E-03
A15A	71432	Benzene	9.01E+00	1.03E-03
A15A	7440508	Copper	4.23E-02	4.83E-06
A15A	100414	Ethyl Benzene	9.14E-01	1.04E-04
A15A	50000	Formaldehyde	6.66E+01	7.60E-03
A15A	7782505	Chlorine	1.41E-02	1.61E-06
A15A	1330207	Xylenes	1.49E+00	1.70E-04
A15A	7439965	Manganese	3.59E-03	4.10E-07
A15A	67561	Methanol	8.62E+00	9.84E-04
A15A	91203	Naphthalene	2.86E+00	3.27E-04
A15A	7440020	Nickel	7.20E-03	8.22E-07
A15A	95476	o-Xylene	8.92E-01	1.02E-04
A15A	108952	Phenol	3.59E+00	4.10E-04
A15A	115071	Propylene	2.42E+01	2.76E-03
A15A	100425	Styrene	1.68E+00	1.92E-04
A15A	9960	SULFATES	4.51E+00	5.15E-04

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A15A	108883	Toluene	3.34E+00	3.81E-04
A16A	106990	1,3-Butadiene	1.19E+01	1.36E-03
A16A	75070	Acetaldehyde	3.04E+01	3.47E-03
A16A	107028	Acrolein	1.71E+01	1.96E-03
A16A	71432	Benzene	1.20E+01	1.37E-03
A16A	7440508	Copper	5.60E-02	6.40E-06
A16A	100414	Ethyl Benzene	1.22E+00	1.39E-04
A16A	50000	Formaldehyde	8.90E+01	1.02E-02
A16A	7782505	Chlorine	1.87E-02	2.13E-06
A16A	1330207	Xylenes	1.99E+00	2.27E-04
A16A	7439965	Manganese	4.75E-03	5.43E-07
A16A	67561	Methanol	1.15E+01	1.31E-03
A16A	91203	Naphthalene	3.83E+00	4.37E-04
A16A	7440020	Nickel	9.53E-03	1.09E-06
A16A	95476	o-Xylene	1.19E+00	1.36E-04
A16A	108952	Phenol	4.79E+00	5.47E-04
A16A	115071	Propylene	3.23E+01	3.69E-03
A16A	100425	Styrene	2.24E+00	2.56E-04
A16A	9960	SULFATES	5.97E+00	6.82E-04
A16A	108883	Toluene	4.46E+00	5.09E-04
A17A	106990	1,3-Butadiene	8.91E+00	1.02E-03
A17A	75070	Acetaldehyde	2.28E+01	2.60E-03
A17A	107028	Acrolein	1.28E+01	1.46E-03
A17A	71432	Benzene	9.00E+00	1.03E-03
A17A	7440508	Copper	4.17E-02	4.76E-06
A17A	100414	Ethyl Benzene	9.13E-01	1.04E-04
A17A	50000	Formaldehyde	6.65E+01	7.59E-03
A17A	7782505	Chlorine	1.39E-02	1.59E-06
A17A	1330207	Xylenes	1.49E+00	1.70E-04
A17A	7439965	Manganese	3.54E-03	4.04E-07
A17A	67561	Methanol	8.61E+00	9.83E-04
A17A	91203	Naphthalene	2.86E+00	3.27E-04
A17A	7440020	Nickel	7.10E-03	8.10E-07
A17A	95476	o-Xylene	8.91E-01	1.02E-04
A17A	108952	Phenol	3.58E+00	4.09E-04
A17A	115071	Propylene	2.42E+01	2.76E-03
A17A	100425	Styrene	1.68E+00	1.92E-04
A17A	9960	SULFATES	4.45E+00	5.08E-04
A17A	108883	Toluene	3.33E+00	3.80E-04
A19A	106990	1,3-Butadiene	1.04E+02	1.19E-02
A19A	75070	Acetaldehyde	2.66E+02	3.04E-02
A19A	107028	Acrolein	1.50E+02	1.71E-02
A19A	71432	Benzene	1.05E+02	1.20E-02
A19A	7440508	Copper	4.84E-01	5.52E-05
A19A	100414	Ethyl Benzene	1.07E+01	1.22E-03
A19A	50000	Formaldehyde	7.77E+02	8.87E-02
A19A	7782505	Chlorine	1.61E-01	1.84E-05

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A19A	1330207	Xylenes	1.74E+01	1.99E-03
A19A	7439965	Manganese	4.10E-02	4.68E-06
A19A	67561	Methanol	1.01E+02	1.15E-02
A19A	91203	Naphthalene	3.34E+01	3.82E-03
A19A	7440020	Nickel	8.23E-02	9.39E-06
A19A	95476	o-Xylene	1.04E+01	1.19E-03
A19A	108952	Phenol	4.19E+01	4.78E-03
A19A	115071	Propylene	2.82E+02	3.22E-02
A19A	100425	Styrene	1.96E+01	2.24E-03
A19A	9960	SULFATES	5.16E+01	5.89E-03
A19A	108883	Toluene	3.90E+01	4.45E-03
A20A	106990	1,3-Butadiene	1.49E+01	1.70E-03
A20A	75070	Acetaldehyde	3.80E+01	4.34E-03
A20A	107028	Acrolein	2.14E+01	2.44E-03
A20A	71432	Benzene	1.50E+01	1.72E-03
A20A	7440508	Copper	6.91E-02	7.89E-06
A20A	100414	Ethyl Benzene	1.52E+00	1.74E-04
A20A	50000	Formaldehyde	1.11E+02	1.27E-02
A20A	7782505	Chlorine	2.30E-02	2.63E-06
A20A	1330207	Xylenes	2.49E+00	2.84E-04
A20A	7439965	Manganese	5.86E-03	6.69E-07
A20A	67561	Methanol	1.44E+01	1.64E-03
A20A	91203	Naphthalene	4.78E+00	5.45E-04
A20A	7440020	Nickel	1.18E-02	1.34E-06
A20A	95476	o-Xylene	1.49E+00	1.70E-04
A20A	108952	Phenol	5.98E+00	6.83E-04
A20A	115071	Propylene	4.03E+01	4.60E-03
A20A	100425	Styrene	2.80E+00	3.20E-04
A20A	9960	SULFATES	7.37E+00	8.41E-04
A20A	108883	Toluene	5.56E+00	6.35E-04
A8A	106990	1,3-Butadiene	2.83E-01	3.23E-05
A8A	75070	Acetaldehyde	7.80E-01	8.90E-05
A8A	107028	Acrolein	3.72E-01	4.24E-05
A8A	71432	Benzene	3.23E-01	3.69E-05
A8A	7440508	Copper	2.40E-04	2.74E-08
A8A	100414	Ethyl Benzene	2.71E-02	3.09E-06
A8A	50000	Formaldehyde	2.55E+00	2.91E-04
A8A	7782505	Chlorine	7.98E-05	9.12E-09
A8A	1330207	Xylenes	4.69E-02	5.36E-06
A8A	7439965	Manganese	2.03E-05	2.32E-09
A8A	67561	Methanol	2.65E-04	3.02E-08
A8A	91203	Naphthalene	9.21E-02	1.05E-05
A8A	7440020	Nickel	4.08E-05	4.66E-09
A8A	95476	o-Xylene	3.25E-02	3.71E-06
A8A	108952	Phenol	3.98E-02	4.54E-06
A8A	115071	Propylene	8.28E-01	9.46E-05
A8A	100425	Styrene	6.68E-02	7.62E-06

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A8A	9960	SULFATES	2.56E-02	2.92E-06
A8A	108883	Toluene	8.85E-02	1.01E-05
A11A	106990	1,3-Butadiene	1.22E+01	1.39E-03
A11A	75070	Acetaldehyde	3.35E+01	3.82E-03
A11A	107028	Acrolein	1.60E+01	1.82E-03
A11A	71432	Benzene	1.39E+01	1.58E-03
A11A	7440508	Copper	3.02E-03	3.45E-07
A11A	100414	Ethyl Benzene	1.16E+00	1.33E-04
A11A	50000	Formaldehyde	1.10E+02	1.25E-02
A11A	7782505	Chlorine	1.01E-03	1.15E-07
A11A	1330207	Xylenes	2.02E+00	2.30E-04
A11A	7439965	Manganese	2.56E-04	2.93E-08
A11A	67561	Methanol	4.36E-03	4.97E-07
A11A	91203	Naphthalene	3.95E+00	4.51E-04
A11A	7440020	Nickel	5.14E-04	5.87E-08
A11A	95476	o-Xylene	1.40E+00	1.59E-04
A11A	108952	Phenol	1.71E+00	1.95E-04
A11A	115071	Propylene	3.56E+01	4.06E-03
A11A	100425	Styrene	2.87E+00	3.28E-04
A11A	9960	SULFATES	3.22E-01	3.68E-05
A11A	108883	Toluene	3.80E+00	4.34E-04
T14A	106990	1,3-Butadiene	1.04E+01	1.19E-03
T14A	75070	Acetaldehyde	2.86E+01	3.27E-03
T14A	107028	Acrolein	1.37E+01	1.56E-03
T14A	71432	Benzene	1.19E+01	1.36E-03
T14A	7440508	Copper	0.00E+00	0.00E+00
T14A	100414	Ethyl Benzene	9.95E-01	1.14E-04
T14A	50000	Formaldehyde	9.38E+01	1.07E-02
T14A	7782505	Chlorine	0.00E+00	0.00E+00
T14A	1330207	Xylenes	1.72E+00	1.97E-04
T14A	7439965	Manganese	0.00E+00	0.00E+00
T14A	67561	Methanol	0.00E+00	0.00E+00
T14A	91203	Naphthalene	3.38E+00	3.86E-04
T14A	7440020	Nickel	0.00E+00	0.00E+00
T14A	95476	o-Xylene	1.19E+00	1.36E-04
T14A	108952	Phenol	1.46E+00	1.67E-04
T14A	115071	Propylene	3.04E+01	3.47E-03
T14A	100425	Styrene	2.45E+00	2.80E-04
T14A	9960	SULFATES	0.00E+00	0.00E+00
T14A	108883	Toluene	3.25E+00	3.71E-04
T10A	106990	1,3-Butadiene	2.12E-01	2.43E-05
T10A	75070	Acetaldehyde	5.85E-01	6.67E-05
T10A	107028	Acrolein	2.79E-01	3.18E-05
T10A	71432	Benzene	2.42E-01	2.77E-05
T10A	7440508	Copper	0.00E+00	0.00E+00
T10A	100414	Ethyl Benzene	2.03E-02	2.32E-06
T10A	50000	Formaldehyde	1.91E+00	2.18E-04

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
T10A	7782505	Chlorine	0.00E+00	0.00E+00
T10A	1330207	Xylenes	3.52E-02	4.02E-06
T10A	7439965	Manganese	0.00E+00	0.00E+00
T10A	67561	Methanol	0.00E+00	0.00E+00
T10A	91203	Naphthalene	6.90E-02	7.88E-06
T10A	7440020	Nickel	0.00E+00	0.00E+00
T10A	95476	o-Xylene	2.44E-02	2.78E-06
T10A	108952	Phenol	2.98E-02	3.40E-06
T10A	115071	Propylene	6.21E-01	7.09E-05
T10A	100425	Styrene	5.01E-02	5.72E-06
T10A	9960	SULFATES	0.00E+00	0.00E+00
T10A	108883	Toluene	6.63E-02	7.57E-06
H1	106990	1,3-Butadiene	1.48E+00	1.69E-04
H1	75070	Acetaldehyde	4.07E+00	4.65E-04
H1	107028	Acrolein	1.94E+00	2.22E-04
H1	71432	Benzene	1.69E+00	1.93E-04
H1	7440508	Copper	0.00E+00	0.00E+00
H1	100414	Ethyl Benzene	1.41E-01	1.61E-05
H1	50000	Formaldehyde	1.33E+01	1.52E-03
H1	7782505	Chlorine	0.00E+00	0.00E+00
H1	1330207	Xylenes	2.45E-01	2.80E-05
H1	7439965	Manganese	0.00E+00	0.00E+00
H1	67561	Methanol	0.00E+00	0.00E+00
H1	91203	Naphthalene	4.81E-01	5.49E-05
H1	7440020	Nickel	0.00E+00	0.00E+00
H1	95476	o-Xylene	1.70E-01	1.94E-05
H1	108952	Phenol	2.07E-01	2.37E-05
H1	115071	Propylene	4.33E+00	4.94E-04
H1	100425	Styrene	3.49E-01	3.98E-05
H1	9960	SULFATES	0.00E+00	0.00E+00
H1	108883	Toluene	4.62E-01	5.27E-05
H2	106990	1,3-Butadiene	1.48E+00	1.69E-04
H2	75070	Acetaldehyde	4.07E+00	4.65E-04
H2	107028	Acrolein	1.94E+00	2.22E-04
H2	71432	Benzene	1.69E+00	1.93E-04
H2	7440508	Copper	0.00E+00	0.00E+00
H2	100414	Ethyl Benzene	1.41E-01	1.61E-05
H2	50000	Formaldehyde	1.33E+01	1.52E-03
H2	7782505	Chlorine	0.00E+00	0.00E+00
H2	1330207	Xylenes	2.45E-01	2.80E-05
H2	7439965	Manganese	0.00E+00	0.00E+00
H2	67561	Methanol	0.00E+00	0.00E+00
H2	91203	Naphthalene	4.81E-01	5.49E-05
H2	7440020	Nickel	0.00E+00	0.00E+00
H2	95476	o-Xylene	1.70E-01	1.94E-05
H2	108952	Phenol	2.07E-01	2.37E-05
H2	115071	Propylene	4.33E+00	4.94E-04

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H2	100425	Styrene	3.49E-01	3.98E-05
H2	9960	SULFATES	0.00E+00	0.00E+00
H2	108883	Toluene	4.62E-01	5.27E-05
H4	106990	1,3-Butadiene	2.09E-02	2.38E-06
H4	75070	Acetaldehyde	5.74E-02	6.55E-06
H4	107028	Acrolein	2.74E-02	3.13E-06
H4	71432	Benzene	2.38E-02	2.72E-06
H4	7440508	Copper	0.00E+00	0.00E+00
H4	100414	Ethyl Benzene	1.99E-03	2.28E-07
H4	50000	Formaldehyde	1.88E-01	2.15E-05
H4	7782505	Chlorine	0.00E+00	0.00E+00
H4	1330207	Xylenes	3.46E-03	3.94E-07
H4	7439965	Manganese	0.00E+00	0.00E+00
H4	67561	Methanol	0.00E+00	0.00E+00
H4	91203	Naphthalene	6.78E-03	7.74E-07
H4	7440020	Nickel	0.00E+00	0.00E+00
H4	95476	o-Xylene	2.39E-03	2.73E-07
H4	108952	Phenol	2.92E-03	3.34E-07
H4	115071	Propylene	6.10E-02	6.96E-06
H4	100425	Styrene	4.92E-03	5.61E-07
H4	9960	SULFATES	0.00E+00	0.00E+00
H4	108883	Toluene	6.51E-03	7.43E-07
B45L	7439921	Lead	0.00E+00	0.00E+00
B46L	7439921	Lead	0.00E+00	0.00E+00
G45L	7439921	Lead	1.51E-02	1.72E-06
G47L	7439921	Lead	1.52E-02	1.73E-06
G48L	7439921	Lead	7.04E-01	8.03E-05
G46L	7439921	Lead	9.35E-01	1.07E-04
C45L	7439921	Lead	0.00E+00	0.00E+00
C47L	7439921	Lead	0.00E+00	0.00E+00
C48L	7439921	Lead	0.00E+00	0.00E+00
C46L	7439921	Lead	0.00E+00	0.00E+00
B45D	7439921	Lead	0.00E+00	0.00E+00
B46D	7439921	Lead	0.00E+00	0.00E+00
G45D	7439921	Lead	8.60E-02	9.81E-06
G47D	7439921	Lead	2.03E-02	2.32E-06
G48D	7439921	Lead	1.64E+00	1.88E-04
G46D	7439921	Lead	1.88E+00	2.15E-04
C45D	7439921	Lead	0.00E+00	0.00E+00
C47D	7439921	Lead	0.00E+00	0.00E+00
C48D	7439921	Lead	0.00E+00	0.00E+00
C46D	7439921	Lead	0.00E+00	0.00E+00
T47D	7439921	Lead	1.07E-02	1.22E-06
T48D	7439921	Lead	5.23E-01	5.98E-05
B4B	7439921	Lead	0.00E+00	0.00E+00
B26B	7439921	Lead	0.00E+00	0.00E+00
H33B	7439921	Lead	6.87E+00	7.85E-04

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H34B	7439921	Lead	6.86E+00	7.83E-04
H35B	7439921	Lead	6.37E+00	7.27E-04
H36B	7439921	Lead	6.40E+00	7.31E-04
H37B	7439921	Lead	6.85E+00	7.82E-04
H38B	7439921	Lead	6.91E+00	7.88E-04
H39B	7439921	Lead	6.41E+00	7.32E-04
H40B	7439921	Lead	6.34E+00	7.24E-04
H41B	7439921	Lead	3.64E+00	4.16E-04
H42B	7439921	Lead	3.62E+00	4.13E-04
H43B	7439921	Lead	3.64E+00	4.16E-04
H44B	7439921	Lead	3.60E+00	4.11E-04
H45B	7439921	Lead	6.71E+00	7.66E-04
H46B	7439921	Lead	6.80E+00	7.76E-04
G4B	7439921	Lead	3.74E-01	4.27E-05
G9B	7439921	Lead	9.61E-02	1.10E-05
G12B	7439921	Lead	3.55E+00	4.05E-04
G13B	7439921	Lead	3.56E+00	4.07E-04
G27B	7439921	Lead	7.69E+00	8.78E-04
T14D	7439921	Lead	4.42E+01	5.05E-03
T10D	7439921	Lead	8.49E-01	9.70E-05
C4B	7439921	Lead	0.00E+00	0.00E+00
C9B	7439921	Lead	0.00E+00	0.00E+00
C12B	7439921	Lead	0.00E+00	0.00E+00
C13B	7439921	Lead	0.00E+00	0.00E+00
C26B	7439921	Lead	0.00E+00	0.00E+00
C27B	7439921	Lead	0.00E+00	0.00E+00
B4A	7439921	Lead	0.00E+00	0.00E+00
B26A	7439921	Lead	0.00E+00	0.00E+00
G4A	7439921	Lead	7.74E-01	8.84E-05
G9A	7439921	Lead	2.34E-01	2.68E-05
G12A	7439921	Lead	8.56E+00	9.77E-04
G13A	7439921	Lead	8.56E+00	9.77E-04
G27A	7439921	Lead	1.79E+01	2.04E-03
C4A	7439921	Lead	0.00E+00	0.00E+00
C9A	7439921	Lead	0.00E+00	0.00E+00
C12A	7439921	Lead	0.00E+00	0.00E+00
C13A	7439921	Lead	0.00E+00	0.00E+00
C26A	7439921	Lead	0.00E+00	0.00E+00
C27A	7439921	Lead	0.00E+00	0.00E+00
A1B	7439921	Lead	2.06E-01	2.35E-05
A2B	7439921	Lead	6.86E-02	7.83E-06
A15B	7439921	Lead	9.64E-01	1.10E-04
A16B	7439921	Lead	1.29E+00	1.47E-04
A17B	7439921	Lead	9.64E-01	1.10E-04
A19B	7439921	Lead	1.12E+01	1.28E-03
A20B	7439921	Lead	1.61E+00	1.83E-04
A8B	7439921	Lead	3.29E-01	3.75E-05

Table C-2. Emission Rates for Speciated COPC (Proposed Project)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A11B	7439921	Lead	1.46E+01	1.67E-03
A1A	7439921	Lead	3.71E-01	4.23E-05
A2A	7439921	Lead	1.23E-01	1.41E-05
A15A	7439921	Lead	1.73E+00	1.97E-04
A16A	7439921	Lead	2.31E+00	2.63E-04
A17A	7439921	Lead	1.73E+00	1.97E-04
A19A	7439921	Lead	2.02E+01	2.31E-03
A20A	7439921	Lead	2.89E+00	3.30E-04
A8A	7439921	Lead	5.94E-01	6.78E-05
A11A	7439921	Lead	2.63E+01	3.00E-03
T14A	7439921	Lead	2.54E+01	2.90E-03
T10A	7439921	Lead	5.18E-01	5.91E-05
H1	7439921	Lead	2.63E+00	3.01E-04
H2	7439921	Lead	2.63E+00	3.01E-04
H4	7439921	Lead	3.06E+00	3.50E-04

Abbreviations:
COPC - chemicals of potential concern
lb - pound
hr - hour

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
AVGAS	110543	Hexane	7.17E-01	8.19E-05
AVGAS	71432	Benzene	1.29E+00	1.47E-04
AVGAS	108883	Toluene	5.02E+00	5.73E-04
AVGAS	100414	Ethyl Benzene	1.00E+00	1.15E-04
AVGAS	1330207	Xylenes	5.02E+00	5.73E-04
AVGAS	95636	1,2,4TriMeBenze	1.79E+00	2.05E-04
AVGAS	110827	Cyclohexane	1.72E-01	1.96E-05
AVGAS_R	110543	Hexane	2.22E-01	2.53E-05
AVGAS_R	71432	Benzene	3.99E-01	4.56E-05
AVGAS_R	108883	Toluene	1.55E+00	1.77E-04
AVGAS_R	100414	Ethyl Benzene	3.10E-01	3.54E-05
AVGAS_R	1330207	Xylenes	1.55E+00	1.77E-04
AVGAS_R	95636	1,2,4TriMeBenze	5.54E-01	6.33E-05
AVGAS_R	110827	Cyclohexane	5.32E-02	6.08E-06
AVGAS_S	110543	Hexane	2.89E-01	3.30E-05
AVGAS_S	71432	Benzene	5.21E-01	5.94E-05
AVGAS_S	108883	Toluene	2.02E+00	2.31E-04
AVGAS_S	100414	Ethyl Benzene	4.05E-01	4.62E-05
AVGAS_S	1330207	Xylenes	2.02E+00	2.31E-04
AVGAS_S	95636	1,2,4TriMeBenze	7.23E-01	8.26E-05
AVGAS_S	110827	Cyclohexane	6.94E-02	7.93E-06
GSE_APU	9901	DieselExhPM	2.64E+01	6.50E-03
GSE_APU	75070	Acetaldehyde	3.77E+02	5.10E-02
GSE_APU	107028	Acrolein	2.16E+02	2.93E-02
GSE_APU	71432	Benzene	1.48E+02	2.01E-02
GSE_APU	100414	Ethyl Benzene	1.54E+01	2.08E-03
GSE_APU	50000	Formaldehyde	1.09E+03	1.47E-01
GSE_APU	106990	1,3-Butadiene	1.49E+02	2.02E-02
GSE_APU	1330207	Xylenes	2.49E+01	3.37E-03
GSE_APU	67561	Methanol	1.59E+02	2.16E-02
GSE_APU	91203	Naphthalene	4.77E+01	6.46E-03
GSE_APU	95476	o-Xylene	1.46E+01	1.98E-03
GSE_APU	108952	Phenol	6.41E+01	8.67E-03
GSE_APU	115071	Propylene	4.00E+02	5.42E-02
GSE_APU	100425	Styrene	2.73E+01	3.69E-03
GSE_APU	108883	Toluene	5.66E+01	7.67E-03
GSE_APU	7782505	Chlorine	3.04E-01	2.56E-04
GSE_APU	7440508	Copper	9.14E-01	7.69E-04
GSE_APU	7439965	Manganese	7.75E-02	6.53E-05
GSE_APU	7440020	Nickel	1.55E-01	1.31E-04
GSE_APU	9960	SULFATES	9.74E+01	8.20E-02
Taxiway	75070	Acetaldehyde	2.22E+03	2.54E-01
Taxiway	107028	Acrolein	1.26E+03	1.44E-01
Taxiway	71432	Benzene	8.78E+02	1.00E-01
Taxiway	100414	Ethyl Benzene	8.96E+01	1.02E-02
Taxiway	50000	Formaldehyde	6.47E+03	7.39E-01
Taxiway	106990	1,3-Butadiene	8.73E+02	9.96E-02

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
Taxiway	1330207	Xylenes	1.46E+02	1.66E-02
Taxiway	67561	Methanol	8.71E+02	9.94E-02
Taxiway	91203	Naphthalene	2.80E+02	3.20E-02
Taxiway	95476	o-Xylene	8.68E+01	9.91E-03
Taxiway	108952	Phenol	3.58E+02	4.09E-02
Taxiway	115071	Propylene	2.36E+03	2.69E-01
Taxiway	100425	Styrene	1.63E+02	1.86E-02
Taxiway	108883	Toluene	3.28E+02	3.75E-02
Taxiway	7782505	Chlorine	3.86E-01	4.41E-05
Taxiway	7440508	Copper	1.16E+00	1.32E-04
Taxiway	7439965	Manganese	9.84E-02	1.12E-05
Taxiway	7440020	Nickel	1.97E-01	2.25E-05
Taxiway	9960	SULFATES	1.24E+02	1.41E-02
Taxiway	7439921	Lead	2.63E+01	3.00E-03
B45L	106990	1,3-Butadiene	2.15E-01	2.46E-05
B45L	75070	Acetaldehyde	5.45E-01	6.22E-05
B45L	107028	Acrolein	3.12E-01	3.57E-05
B45L	71432	Benzene	2.14E-01	2.45E-05
B45L	7440508	Copper	2.45E-03	2.79E-07
B45L	100414	Ethyl Benzene	2.22E-02	2.53E-06
B45L	50000	Formaldehyde	1.57E+00	1.79E-04
B45L	7782505	Chlorine	8.15E-04	9.30E-08
B45L	1330207	Xylenes	3.60E-02	4.11E-06
B45L	7439965	Manganese	2.08E-04	2.37E-08
B45L	67561	Methanol	2.30E-01	2.63E-05
B45L	91203	Naphthalene	6.90E-02	7.88E-06
B45L	7440020	Nickel	4.16E-04	4.75E-08
B45L	95476	o-Xylene	2.12E-02	2.42E-06
B45L	108952	Phenol	9.26E-02	1.06E-05
B45L	115071	Propylene	5.79E-01	6.60E-05
B45L	100425	Styrene	3.94E-02	4.50E-06
B45L	9960	SULFATES	2.61E-01	2.98E-05
B45L	108883	Toluene	8.19E-02	9.35E-06
B46L	106990	1,3-Butadiene	8.21E+00	9.37E-04
B46L	75070	Acetaldehyde	2.08E+01	2.37E-03
B46L	107028	Acrolein	1.19E+01	1.36E-03
B46L	71432	Benzene	8.18E+00	9.34E-04
B46L	7440508	Copper	9.26E-02	1.06E-05
B46L	100414	Ethyl Benzene	8.47E-01	9.67E-05
B46L	50000	Formaldehyde	5.99E+01	6.84E-03
B46L	7782505	Chlorine	3.09E-02	3.52E-06
B46L	1330207	Xylenes	1.37E+00	1.57E-04
B46L	7439965	Manganese	7.86E-03	8.97E-07
B46L	67561	Methanol	8.78E+00	1.00E-03
B46L	91203	Naphthalene	2.63E+00	3.01E-04
B46L	7440020	Nickel	1.58E-02	1.80E-06
B46L	95476	o-Xylene	8.08E-01	9.22E-05

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
B46L	108952	Phenol	3.53E+00	4.03E-04
B46L	115071	Propylene	2.21E+01	2.52E-03
B46L	100425	Styrene	1.50E+00	1.72E-04
B46L	9960	SULFATES	9.88E+00	1.13E-03
B46L	108883	Toluene	3.12E+00	3.57E-04
G45L	106990	1,3-Butadiene	7.33E-03	8.37E-07
G45L	75070	Acetaldehyde	2.02E-02	2.30E-06
G45L	107028	Acrolein	9.62E-03	1.10E-06
G45L	71432	Benzene	8.36E-03	9.55E-07
G45L	7440508	Copper	0.00E+00	0.00E+00
G45L	100414	Ethyl Benzene	7.01E-04	8.00E-08
G45L	50000	Formaldehyde	6.61E-02	7.54E-06
G45L	7782505	Chlorine	0.00E+00	0.00E+00
G45L	1330207	Xylenes	1.21E-03	1.39E-07
G45L	7439965	Manganese	0.00E+00	0.00E+00
G45L	67561	Methanol	0.00E+00	0.00E+00
G45L	91203	Naphthalene	2.38E-03	2.72E-07
G45L	7440020	Nickel	0.00E+00	0.00E+00
G45L	95476	o-Xylene	8.41E-04	9.60E-08
G45L	108952	Phenol	1.03E-03	1.17E-07
G45L	115071	Propylene	2.14E-02	2.45E-06
G45L	100425	Styrene	1.73E-03	1.97E-07
G45L	9960	SULFATES	0.00E+00	0.00E+00
G45L	108883	Toluene	2.29E-03	2.61E-07
G47L	106990	1,3-Butadiene	6.99E-03	7.98E-07
G47L	75070	Acetaldehyde	1.92E-02	2.20E-06
G47L	107028	Acrolein	9.17E-03	1.05E-06
G47L	71432	Benzene	7.97E-03	9.10E-07
G47L	7440508	Copper	0.00E+00	0.00E+00
G47L	100414	Ethyl Benzene	6.68E-04	7.62E-08
G47L	50000	Formaldehyde	6.30E-02	7.19E-06
G47L	7782505	Chlorine	0.00E+00	0.00E+00
G47L	1330207	Xylenes	1.16E-03	1.32E-07
G47L	7439965	Manganese	0.00E+00	0.00E+00
G47L	67561	Methanol	0.00E+00	0.00E+00
G47L	91203	Naphthalene	2.27E-03	2.59E-07
G47L	7440020	Nickel	0.00E+00	0.00E+00
G47L	95476	o-Xylene	8.01E-04	9.15E-08
G47L	108952	Phenol	9.79E-04	1.12E-07
G47L	115071	Propylene	2.04E-02	2.33E-06
G47L	100425	Styrene	1.65E-03	1.88E-07
G47L	9960	SULFATES	0.00E+00	0.00E+00
G47L	108883	Toluene	2.18E-03	2.49E-07
G48L	106990	1,3-Butadiene	3.16E-01	3.61E-05
G48L	75070	Acetaldehyde	8.70E-01	9.93E-05
G48L	107028	Acrolein	4.15E-01	4.74E-05
G48L	71432	Benzene	3.61E-01	4.12E-05

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
G48L	7440508	Copper	0.00E+00	0.00E+00
G48L	100414	Ethyl Benzene	3.02E-02	3.45E-06
G48L	50000	Formaldehyde	2.85E+00	3.25E-04
G48L	7782505	Chlorine	0.00E+00	0.00E+00
G48L	1330207	Xylenes	5.24E-02	5.98E-06
G48L	7439965	Manganese	0.00E+00	0.00E+00
G48L	67561	Methanol	0.00E+00	0.00E+00
G48L	91203	Naphthalene	1.03E-01	1.17E-05
G48L	7440020	Nickel	0.00E+00	0.00E+00
G48L	95476	o-Xylene	3.63E-02	4.14E-06
G48L	108952	Phenol	4.43E-02	5.06E-06
G48L	115071	Propylene	9.25E-01	1.06E-04
G48L	100425	Styrene	7.45E-02	8.51E-06
G48L	9960	SULFATES	0.00E+00	0.00E+00
G48L	108883	Toluene	9.87E-02	1.13E-05
G46L	106990	1,3-Butadiene	4.59E-01	5.24E-05
G46L	75070	Acetaldehyde	1.26E+00	1.44E-04
G46L	107028	Acrolein	6.03E-01	6.88E-05
G46L	71432	Benzene	5.24E-01	5.98E-05
G46L	7440508	Copper	0.00E+00	0.00E+00
G46L	100414	Ethyl Benzene	4.39E-02	5.01E-06
G46L	50000	Formaldehyde	4.14E+00	4.72E-04
G46L	7782505	Chlorine	0.00E+00	0.00E+00
G46L	1330207	Xylenes	7.61E-02	8.68E-06
G46L	7439965	Manganese	0.00E+00	0.00E+00
G46L	67561	Methanol	0.00E+00	0.00E+00
G46L	91203	Naphthalene	1.49E-01	1.70E-05
G46L	7440020	Nickel	0.00E+00	0.00E+00
G46L	95476	o-Xylene	5.27E-02	6.01E-06
G46L	108952	Phenol	6.44E-02	7.35E-06
G46L	115071	Propylene	1.34E+00	1.53E-04
G46L	100425	Styrene	1.08E-01	1.24E-05
G46L	9960	SULFATES	0.00E+00	0.00E+00
G46L	108883	Toluene	1.43E-01	1.64E-05
C45L	106990	1,3-Butadiene	5.06E-04	5.78E-08
C45L	75070	Acetaldehyde	1.28E-03	1.46E-07
C45L	107028	Acrolein	7.35E-04	8.39E-08
C45L	71432	Benzene	5.04E-04	5.76E-08
C45L	7440508	Copper	1.53E-04	1.75E-08
C45L	100414	Ethyl Benzene	5.22E-05	5.96E-09
C45L	50000	Formaldehyde	3.69E-03	4.22E-07
C45L	7782505	Chlorine	5.11E-05	5.83E-09
C45L	1330207	Xylenes	8.46E-05	9.66E-09
C45L	7439965	Manganese	1.30E-05	1.49E-09
C45L	67561	Methanol	5.41E-04	6.18E-08
C45L	91203	Naphthalene	1.62E-04	1.85E-08
C45L	7440020	Nickel	2.61E-05	2.98E-09

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C45L	95476	o-Xylene	4.98E-05	5.68E-09
C45L	108952	Phenol	2.18E-04	2.49E-08
C45L	115071	Propylene	1.36E-03	1.55E-07
C45L	100425	Styrene	9.27E-05	1.06E-08
C45L	9960	SULFATES	1.64E-02	1.87E-06
C45L	108883	Toluene	1.93E-04	2.20E-08
C47L	106990	1,3-Butadiene	5.41E-06	6.18E-10
C47L	75070	Acetaldehyde	1.37E-05	1.56E-09
C47L	107028	Acrolein	7.86E-06	8.97E-10
C47L	71432	Benzene	5.39E-06	6.16E-10
C47L	7440508	Copper	8.33E-06	9.51E-10
C47L	100414	Ethyl Benzene	5.58E-07	6.37E-11
C47L	50000	Formaldehyde	3.95E-05	4.51E-09
C47L	7782505	Chlorine	2.77E-06	3.17E-10
C47L	1330207	Xylenes	9.05E-07	1.03E-10
C47L	7439965	Manganese	7.07E-07	8.07E-11
C47L	67561	Methanol	5.79E-06	6.61E-10
C47L	91203	Naphthalene	1.74E-06	1.98E-10
C47L	7440020	Nickel	1.42E-06	1.62E-10
C47L	95476	o-Xylene	5.33E-07	6.08E-11
C47L	108952	Phenol	2.33E-06	2.66E-10
C47L	115071	Propylene	1.45E-05	1.66E-09
C47L	100425	Styrene	9.91E-07	1.13E-10
C47L	9960	SULFATES	8.88E-04	1.01E-07
C47L	108883	Toluene	2.06E-06	2.35E-10
C48L	106990	1,3-Butadiene	1.11E-04	1.27E-08
C48L	75070	Acetaldehyde	2.81E-04	3.21E-08
C48L	107028	Acrolein	1.61E-04	1.84E-08
C48L	71432	Benzene	1.11E-04	1.26E-08
C48L	7440508	Copper	1.13E-04	1.29E-08
C48L	100414	Ethyl Benzene	1.14E-05	1.31E-09
C48L	50000	Formaldehyde	8.10E-04	9.24E-08
C48L	7782505	Chlorine	3.78E-05	4.31E-09
C48L	1330207	Xylenes	1.85E-05	2.12E-09
C48L	7439965	Manganese	9.62E-06	1.10E-09
C48L	67561	Methanol	1.19E-04	1.36E-08
C48L	91203	Naphthalene	3.56E-05	4.06E-09
C48L	7440020	Nickel	1.93E-05	2.20E-09
C48L	95476	o-Xylene	1.09E-05	1.25E-09
C48L	108952	Phenol	4.78E-05	5.45E-09
C48L	115071	Propylene	2.98E-04	3.40E-08
C48L	100425	Styrene	2.03E-05	2.32E-09
C48L	9960	SULFATES	1.21E-02	1.38E-06
C48L	108883	Toluene	4.22E-05	4.82E-09
C46L	106990	1,3-Butadiene	1.24E-02	1.42E-06
C46L	75070	Acetaldehyde	3.14E-02	3.59E-06
C46L	107028	Acrolein	1.80E-02	2.06E-06

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C46L	71432	Benzene	1.24E-02	1.41E-06
C46L	7440508	Copper	5.64E-03	6.44E-07
C46L	100414	Ethyl Benzene	1.28E-03	1.46E-07
C46L	50000	Formaldehyde	9.06E-02	1.03E-05
C46L	7782505	Chlorine	1.88E-03	2.15E-07
C46L	1330207	Xylenes	2.08E-03	2.37E-07
C46L	7439965	Manganese	4.79E-04	5.46E-08
C46L	67561	Methanol	1.33E-02	1.52E-06
C46L	91203	Naphthalene	3.98E-03	4.55E-07
C46L	7440020	Nickel	9.60E-04	1.10E-07
C46L	95476	o-Xylene	1.22E-03	1.39E-07
C46L	108952	Phenol	5.34E-03	6.10E-07
C46L	115071	Propylene	3.34E-02	3.81E-06
C46L	100425	Styrene	2.27E-03	2.60E-07
C46L	9960	SULFATES	6.02E-01	6.87E-05
C46L	108883	Toluene	4.73E-03	5.39E-07
B45D	106990	1,3-Butadiene	2.17E-01	2.48E-05
B45D	75070	Acetaldehyde	5.50E-01	6.28E-05
B45D	107028	Acrolein	3.15E-01	3.60E-05
B45D	71432	Benzene	2.16E-01	2.47E-05
B45D	7440508	Copper	1.61E-02	1.84E-06
B45D	100414	Ethyl Benzene	2.24E-02	2.56E-06
B45D	50000	Formaldehyde	1.58E+00	1.81E-04
B45D	7782505	Chlorine	5.37E-03	6.13E-07
B45D	1330207	Xylenes	3.63E-02	4.14E-06
B45D	7439965	Manganese	1.37E-03	1.56E-07
B45D	67561	Methanol	2.32E-01	2.65E-05
B45D	91203	Naphthalene	6.97E-02	7.95E-06
B45D	7440020	Nickel	2.74E-03	3.13E-07
B45D	95476	o-Xylene	2.14E-02	2.44E-06
B45D	108952	Phenol	9.35E-02	1.07E-05
B45D	115071	Propylene	5.84E-01	6.66E-05
B45D	100425	Styrene	3.98E-02	4.54E-06
B45D	9960	SULFATES	1.72E+00	1.96E-04
B45D	108883	Toluene	8.27E-02	9.44E-06
B46D	106990	1,3-Butadiene	6.30E+00	7.20E-04
B46D	75070	Acetaldehyde	1.60E+01	1.82E-03
B46D	107028	Acrolein	9.15E+00	1.04E-03
B46D	71432	Benzene	6.28E+00	7.17E-04
B46D	7440508	Copper	5.11E-01	5.83E-05
B46D	100414	Ethyl Benzene	6.50E-01	7.42E-05
B46D	50000	Formaldehyde	4.60E+01	5.25E-03
B46D	7782505	Chlorine	1.70E-01	1.94E-05
B46D	1330207	Xylenes	1.05E+00	1.20E-04
B46D	7439965	Manganese	4.34E-02	4.95E-06
B46D	67561	Methanol	6.74E+00	7.70E-04
B46D	91203	Naphthalene	2.02E+00	2.31E-04

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
B46D	7440020	Nickel	8.70E-02	9.93E-06
B46D	95476	o-Xylene	6.20E-01	7.08E-05
B46D	108952	Phenol	2.71E+00	3.10E-04
B46D	115071	Propylene	1.69E+01	1.93E-03
B46D	100425	Styrene	1.15E+00	1.32E-04
B46D	9960	SULFATES	5.45E+01	6.22E-03
B46D	108883	Toluene	2.40E+00	2.74E-04
G45D	106990	1,3-Butadiene	4.03E-02	4.60E-06
G45D	75070	Acetaldehyde	1.11E-01	1.27E-05
G45D	107028	Acrolein	5.28E-02	6.03E-06
G45D	71432	Benzene	4.59E-02	5.24E-06
G45D	7440508	Copper	0.00E+00	0.00E+00
G45D	100414	Ethyl Benzene	3.85E-03	4.39E-07
G45D	50000	Formaldehyde	3.63E-01	4.14E-05
G45D	7782505	Chlorine	0.00E+00	0.00E+00
G45D	1330207	Xylenes	6.67E-03	7.61E-07
G45D	7439965	Manganese	0.00E+00	0.00E+00
G45D	67561	Methanol	0.00E+00	0.00E+00
G45D	91203	Naphthalene	1.31E-02	1.49E-06
G45D	7440020	Nickel	0.00E+00	0.00E+00
G45D	95476	o-Xylene	4.62E-03	5.27E-07
G45D	108952	Phenol	5.64E-03	6.44E-07
G45D	115071	Propylene	1.18E-01	1.34E-05
G45D	100425	Styrene	9.49E-03	1.08E-06
G45D	9960	SULFATES	0.00E+00	0.00E+00
G45D	108883	Toluene	1.26E-02	1.43E-06
G47D	106990	1,3-Butadiene	9.64E-03	1.10E-06
G47D	75070	Acetaldehyde	2.65E-02	3.03E-06
G47D	107028	Acrolein	1.26E-02	1.44E-06
G47D	71432	Benzene	1.10E-02	1.25E-06
G47D	7440508	Copper	0.00E+00	0.00E+00
G47D	100414	Ethyl Benzene	9.21E-04	1.05E-07
G47D	50000	Formaldehyde	8.68E-02	9.91E-06
G47D	7782505	Chlorine	0.00E+00	0.00E+00
G47D	1330207	Xylenes	1.60E-03	1.82E-07
G47D	7439965	Manganese	0.00E+00	0.00E+00
G47D	67561	Methanol	0.00E+00	0.00E+00
G47D	91203	Naphthalene	3.13E-03	3.57E-07
G47D	7440020	Nickel	0.00E+00	0.00E+00
G47D	95476	o-Xylene	1.11E-03	1.26E-07
G47D	108952	Phenol	1.35E-03	1.54E-07
G47D	115071	Propylene	2.82E-02	3.22E-06
G47D	100425	Styrene	2.27E-03	2.59E-07
G47D	9960	SULFATES	0.00E+00	0.00E+00
G47D	108883	Toluene	3.01E-03	3.43E-07
G48D	106990	1,3-Butadiene	7.54E-01	8.61E-05
G48D	75070	Acetaldehyde	2.07E+00	2.37E-04

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
G48D	107028	Acrolein	9.89E-01	1.13E-04
G48D	71432	Benzene	8.60E-01	9.81E-05
G48D	7440508	Copper	0.00E+00	0.00E+00
G48D	100414	Ethyl Benzene	7.20E-02	8.22E-06
G48D	50000	Formaldehyde	6.79E+00	7.75E-04
G48D	7782505	Chlorine	0.00E+00	0.00E+00
G48D	1330207	Xylenes	1.25E-01	1.43E-05
G48D	7439965	Manganese	0.00E+00	0.00E+00
G48D	67561	Methanol	0.00E+00	0.00E+00
G48D	91203	Naphthalene	2.45E-01	2.80E-05
G48D	7440020	Nickel	0.00E+00	0.00E+00
G48D	95476	o-Xylene	8.64E-02	9.87E-06
G48D	108952	Phenol	1.06E-01	1.21E-05
G48D	115071	Propylene	2.20E+00	2.52E-04
G48D	100425	Styrene	1.78E-01	2.03E-05
G48D	9960	SULFATES	0.00E+00	0.00E+00
G48D	108883	Toluene	2.35E-01	2.69E-05
G46D	106990	1,3-Butadiene	8.94E-01	1.02E-04
G46D	75070	Acetaldehyde	2.46E+00	2.81E-04
G46D	107028	Acrolein	1.17E+00	1.34E-04
G46D	71432	Benzene	1.02E+00	1.16E-04
G46D	7440508	Copper	0.00E+00	0.00E+00
G46D	100414	Ethyl Benzene	8.54E-02	9.75E-06
G46D	50000	Formaldehyde	8.05E+00	9.19E-04
G46D	7782505	Chlorine	0.00E+00	0.00E+00
G46D	1330207	Xylenes	1.48E-01	1.69E-05
G46D	7439965	Manganese	0.00E+00	0.00E+00
G46D	67561	Methanol	0.00E+00	0.00E+00
G46D	91203	Naphthalene	2.90E-01	3.32E-05
G46D	7440020	Nickel	0.00E+00	0.00E+00
G46D	95476	o-Xylene	1.03E-01	1.17E-05
G46D	108952	Phenol	1.25E-01	1.43E-05
G46D	115071	Propylene	2.61E+00	2.98E-04
G46D	100425	Styrene	2.11E-01	2.41E-05
G46D	9960	SULFATES	0.00E+00	0.00E+00
G46D	108883	Toluene	2.79E-01	3.19E-05
C45D	106990	1,3-Butadiene	7.14E-04	8.15E-08
C45D	75070	Acetaldehyde	1.81E-03	2.06E-07
C45D	107028	Acrolein	1.04E-03	1.18E-07
C45D	71432	Benzene	7.12E-04	8.12E-08
C45D	7440508	Copper	7.65E-04	8.74E-08
C45D	100414	Ethyl Benzene	7.37E-05	8.41E-09
C45D	50000	Formaldehyde	5.21E-03	5.95E-07
C45D	7782505	Chlorine	2.55E-04	2.91E-08
C45D	1330207	Xylenes	1.19E-04	1.36E-08
C45D	7439965	Manganese	6.49E-05	7.41E-09
C45D	67561	Methanol	7.64E-04	8.72E-08

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C45D	91203	Naphthalene	2.29E-04	2.61E-08
C45D	7440020	Nickel	1.30E-04	1.49E-08
C45D	95476	o-Xylene	7.03E-05	8.02E-09
C45D	108952	Phenol	3.07E-04	3.51E-08
C45D	115071	Propylene	1.92E-03	2.19E-07
C45D	100425	Styrene	1.31E-04	1.49E-08
C45D	9960	SULFATES	8.16E-02	9.32E-06
C45D	108883	Toluene	2.72E-04	3.10E-08
C47D	106990	1,3-Butadiene	2.84E-05	3.24E-09
C47D	75070	Acetaldehyde	7.18E-05	8.20E-09
C47D	107028	Acrolein	4.12E-05	4.70E-09
C47D	71432	Benzene	2.83E-05	3.23E-09
C47D	7440508	Copper	2.57E-05	2.94E-09
C47D	100414	Ethyl Benzene	2.92E-06	3.34E-10
C47D	50000	Formaldehyde	2.07E-04	2.36E-08
C47D	7782505	Chlorine	8.57E-06	9.79E-10
C47D	1330207	Xylenes	4.74E-06	5.41E-10
C47D	7439965	Manganese	2.18E-06	2.49E-10
C47D	67561	Methanol	3.03E-05	3.46E-09
C47D	91203	Naphthalene	9.09E-06	1.04E-09
C47D	7440020	Nickel	4.38E-06	5.00E-10
C47D	95476	o-Xylene	2.79E-06	3.18E-10
C47D	108952	Phenol	1.22E-05	1.39E-09
C47D	115071	Propylene	7.62E-05	8.70E-09
C47D	100425	Styrene	5.19E-06	5.93E-10
C47D	9960	SULFATES	2.74E-03	3.13E-07
C47D	108883	Toluene	1.08E-05	1.23E-09
C48D	106990	1,3-Butadiene	5.07E-04	5.78E-08
C48D	75070	Acetaldehyde	1.28E-03	1.46E-07
C48D	107028	Acrolein	7.36E-04	8.40E-08
C48D	71432	Benzene	5.05E-04	5.76E-08
C48D	7440508	Copper	5.21E-04	5.95E-08
C48D	100414	Ethyl Benzene	5.23E-05	5.97E-09
C48D	50000	Formaldehyde	3.70E-03	4.22E-07
C48D	7782505	Chlorine	1.74E-04	1.98E-08
C48D	1330207	Xylenes	8.47E-05	9.67E-09
C48D	7439965	Manganese	4.42E-05	5.05E-09
C48D	67561	Methanol	5.42E-04	6.19E-08
C48D	91203	Naphthalene	1.62E-04	1.85E-08
C48D	7440020	Nickel	8.87E-05	1.01E-08
C48D	95476	o-Xylene	4.99E-05	5.69E-09
C48D	108952	Phenol	2.18E-04	2.49E-08
C48D	115071	Propylene	1.36E-03	1.55E-07
C48D	100425	Styrene	9.28E-05	1.06E-08
C48D	9960	SULFATES	5.56E-02	6.35E-06
C48D	108883	Toluene	1.93E-04	2.20E-08
C46D	106990	1,3-Butadiene	1.63E-02	1.86E-06

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C46D	75070	Acetaldehyde	4.13E-02	4.72E-06
C46D	107028	Acrolein	2.37E-02	2.70E-06
C46D	71432	Benzene	1.63E-02	1.86E-06
C46D	7440508	Copper	1.72E-02	1.96E-06
C46D	100414	Ethyl Benzene	1.68E-03	1.92E-07
C46D	50000	Formaldehyde	1.19E-01	1.36E-05
C46D	7782505	Chlorine	5.71E-03	6.52E-07
C46D	1330207	Xylenes	2.73E-03	3.11E-07
C46D	7439965	Manganese	1.46E-03	1.66E-07
C46D	67561	Methanol	1.75E-02	1.99E-06
C46D	91203	Naphthalene	5.23E-03	5.97E-07
C46D	7440020	Nickel	2.92E-03	3.33E-07
C46D	95476	o-Xylene	1.61E-03	1.83E-07
C46D	108952	Phenol	7.02E-03	8.02E-07
C46D	115071	Propylene	4.39E-02	5.01E-06
C46D	100425	Styrene	2.99E-03	3.41E-07
C46D	9960	SULFATES	1.83E+00	2.09E-04
C46D	108883	Toluene	6.21E-03	7.09E-07
T47D	106990	1,3-Butadiene	5.06E-03	5.78E-07
T47D	75070	Acetaldehyde	1.39E-02	1.59E-06
T47D	107028	Acrolein	6.64E-03	7.58E-07
T47D	71432	Benzene	5.77E-03	6.59E-07
T47D	7440508	Copper	0.00E+00	0.00E+00
T47D	100414	Ethyl Benzene	4.83E-04	5.52E-08
T47D	50000	Formaldehyde	4.56E-02	5.20E-06
T47D	7782505	Chlorine	0.00E+00	0.00E+00
T47D	1330207	Xylenes	8.38E-04	9.57E-08
T47D	7439965	Manganese	0.00E+00	0.00E+00
T47D	67561	Methanol	0.00E+00	0.00E+00
T47D	91203	Naphthalene	1.64E-03	1.88E-07
T47D	7440020	Nickel	0.00E+00	0.00E+00
T47D	95476	o-Xylene	5.80E-04	6.62E-08
T47D	108952	Phenol	7.09E-04	8.09E-08
T47D	115071	Propylene	1.48E-02	1.69E-06
T47D	100425	Styrene	1.19E-03	1.36E-07
T47D	9960	SULFATES	0.00E+00	0.00E+00
T47D	108883	Toluene	1.58E-03	1.80E-07
T48D	106990	1,3-Butadiene	2.62E-01	2.99E-05
T48D	75070	Acetaldehyde	7.20E-01	8.22E-05
T48D	107028	Acrolein	3.43E-01	3.92E-05
T48D	71432	Benzene	2.98E-01	3.41E-05
T48D	7440508	Copper	0.00E+00	0.00E+00
T48D	100414	Ethyl Benzene	2.50E-02	2.85E-06
T48D	50000	Formaldehyde	2.36E+00	2.69E-04
T48D	7782505	Chlorine	0.00E+00	0.00E+00
T48D	1330207	Xylenes	4.33E-02	4.95E-06
T48D	7439965	Manganese	0.00E+00	0.00E+00

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
T48D	67561	Methanol	0.00E+00	0.00E+00
T48D	91203	Naphthalene	8.50E-02	9.70E-06
T48D	7440020	Nickel	0.00E+00	0.00E+00
T48D	95476	o-Xylene	3.00E-02	3.43E-06
T48D	108952	Phenol	3.67E-02	4.19E-06
T48D	115071	Propylene	7.65E-01	8.73E-05
T48D	100425	Styrene	6.17E-02	7.04E-06
T48D	9960	SULFATES	0.00E+00	0.00E+00
T48D	108883	Toluene	8.17E-02	9.32E-06
B4B	106990	1,3-Butadiene	1.16E-01	1.32E-05
B4B	75070	Acetaldehyde	2.93E-01	3.35E-05
B4B	107028	Acrolein	1.68E-01	1.92E-05
B4B	71432	Benzene	1.15E-01	1.32E-05
B4B	7440508	Copper	9.52E-03	1.09E-06
B4B	100414	Ethyl Benzene	1.20E-02	1.36E-06
B4B	50000	Formaldehyde	8.46E-01	9.65E-05
B4B	7782505	Chlorine	3.17E-03	3.62E-07
B4B	1330207	Xylenes	1.94E-02	2.21E-06
B4B	7439965	Manganese	8.08E-04	9.22E-08
B4B	67561	Methanol	1.24E-01	1.42E-05
B4B	91203	Naphthalene	3.72E-02	4.24E-06
B4B	7440020	Nickel	1.62E-03	1.85E-07
B4B	95476	o-Xylene	1.14E-02	1.30E-06
B4B	108952	Phenol	4.99E-02	5.69E-06
B4B	115071	Propylene	3.11E-01	3.56E-05
B4B	100425	Styrene	2.12E-02	2.42E-06
B4B	9960	SULFATES	1.01E+00	1.16E-04
B4B	108883	Toluene	4.41E-02	5.03E-06
B26B	106990	1,3-Butadiene	4.10E+00	4.68E-04
B26B	75070	Acetaldehyde	1.04E+01	1.18E-03
B26B	107028	Acrolein	5.95E+00	6.79E-04
B26B	71432	Benzene	4.08E+00	4.66E-04
B26B	7440508	Copper	3.09E-01	3.53E-05
B26B	100414	Ethyl Benzene	4.23E-01	4.82E-05
B26B	50000	Formaldehyde	2.99E+01	3.41E-03
B26B	7782505	Chlorine	1.03E-01	1.18E-05
B26B	1330207	Xylenes	6.85E-01	7.82E-05
B26B	7439965	Manganese	2.62E-02	3.00E-06
B26B	67561	Methanol	4.38E+00	5.00E-04
B26B	91203	Naphthalene	1.31E+00	1.50E-04
B26B	7440020	Nickel	5.26E-02	6.01E-06
B26B	95476	o-Xylene	4.03E-01	4.60E-05
B26B	108952	Phenol	1.76E+00	2.01E-04
B26B	115071	Propylene	1.10E+01	1.26E-03
B26B	100425	Styrene	7.51E-01	8.57E-05
B26B	9960	SULFATES	3.30E+01	3.77E-03
B26B	108883	Toluene	1.56E+00	1.78E-04

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H33B	106990	1,3-Butadiene	3.91E+00	4.46E-04
H33B	75070	Acetaldehyde	1.08E+01	1.23E-03
H33B	107028	Acrolein	5.13E+00	5.86E-04
H33B	71432	Benzene	4.46E+00	5.09E-04
H33B	7440508	Copper	0.00E+00	0.00E+00
H33B	100414	Ethyl Benzene	3.74E-01	4.26E-05
H33B	50000	Formaldehyde	3.52E+01	4.02E-03
H33B	7782505	Chlorine	0.00E+00	0.00E+00
H33B	1330207	Xylenes	6.48E-01	7.39E-05
H33B	7439965	Manganese	0.00E+00	0.00E+00
H33B	67561	Methanol	0.00E+00	0.00E+00
H33B	91203	Naphthalene	1.27E+00	1.45E-04
H33B	7440020	Nickel	0.00E+00	0.00E+00
H33B	95476	o-Xylene	4.48E-01	5.12E-05
H33B	108952	Phenol	5.48E-01	6.26E-05
H33B	115071	Propylene	1.14E+01	1.31E-03
H33B	100425	Styrene	9.22E-01	1.05E-04
H33B	9960	SULFATES	0.00E+00	0.00E+00
H33B	108883	Toluene	1.22E+00	1.39E-04
H34B	106990	1,3-Butadiene	3.90E+00	4.46E-04
H34B	75070	Acetaldehyde	1.07E+01	1.23E-03
H34B	107028	Acrolein	5.12E+00	5.85E-04
H34B	71432	Benzene	4.45E+00	5.08E-04
H34B	7440508	Copper	0.00E+00	0.00E+00
H34B	100414	Ethyl Benzene	3.73E-01	4.26E-05
H34B	50000	Formaldehyde	3.52E+01	4.01E-03
H34B	7782505	Chlorine	0.00E+00	0.00E+00
H34B	1330207	Xylenes	6.47E-01	7.38E-05
H34B	7439965	Manganese	0.00E+00	0.00E+00
H34B	67561	Methanol	0.00E+00	0.00E+00
H34B	91203	Naphthalene	1.27E+00	1.45E-04
H34B	7440020	Nickel	0.00E+00	0.00E+00
H34B	95476	o-Xylene	4.48E-01	5.11E-05
H34B	108952	Phenol	5.47E-01	6.25E-05
H34B	115071	Propylene	1.14E+01	1.30E-03
H34B	100425	Styrene	9.20E-01	1.05E-04
H34B	9960	SULFATES	0.00E+00	0.00E+00
H34B	108883	Toluene	1.22E+00	1.39E-04
H35B	106990	1,3-Butadiene	3.63E+00	4.14E-04
H35B	75070	Acetaldehyde	9.98E+00	1.14E-03
H35B	107028	Acrolein	4.76E+00	5.43E-04
H35B	71432	Benzene	4.14E+00	4.72E-04
H35B	7440508	Copper	0.00E+00	0.00E+00
H35B	100414	Ethyl Benzene	3.47E-01	3.96E-05
H35B	50000	Formaldehyde	3.27E+01	3.73E-03
H35B	7782505	Chlorine	0.00E+00	0.00E+00
H35B	1330207	Xylenes	6.01E-01	6.86E-05

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H35B	7439965	Manganese	0.00E+00	0.00E+00
H35B	67561	Methanol	0.00E+00	0.00E+00
H35B	91203	Naphthalene	1.18E+00	1.35E-04
H35B	7440020	Nickel	0.00E+00	0.00E+00
H35B	95476	o-Xylene	4.16E-01	4.75E-05
H35B	108952	Phenol	5.08E-01	5.80E-05
H35B	115071	Propylene	1.06E+01	1.21E-03
H35B	100425	Styrene	8.55E-01	9.76E-05
H35B	9960	SULFATES	0.00E+00	0.00E+00
H35B	108883	Toluene	1.13E+00	1.29E-04
H36B	106990	1,3-Butadiene	3.65E+00	4.16E-04
H36B	75070	Acetaldehyde	1.00E+01	1.15E-03
H36B	107028	Acrolein	4.78E+00	5.46E-04
H36B	71432	Benzene	4.16E+00	4.74E-04
H36B	7440508	Copper	0.00E+00	0.00E+00
H36B	100414	Ethyl Benzene	3.48E-01	3.98E-05
H36B	50000	Formaldehyde	3.28E+01	3.75E-03
H36B	7782505	Chlorine	0.00E+00	0.00E+00
H36B	1330207	Xylenes	6.04E-01	6.89E-05
H36B	7439965	Manganese	0.00E+00	0.00E+00
H36B	67561	Methanol	0.00E+00	0.00E+00
H36B	91203	Naphthalene	1.18E+00	1.35E-04
H36B	7440020	Nickel	0.00E+00	0.00E+00
H36B	95476	o-Xylene	4.18E-01	4.77E-05
H36B	108952	Phenol	5.11E-01	5.83E-05
H36B	115071	Propylene	1.07E+01	1.22E-03
H36B	100425	Styrene	8.59E-01	9.81E-05
H36B	9960	SULFATES	0.00E+00	0.00E+00
H36B	108883	Toluene	1.14E+00	1.30E-04
H37B	106990	1,3-Butadiene	3.90E+00	4.45E-04
H37B	75070	Acetaldehyde	1.07E+01	1.22E-03
H37B	107028	Acrolein	5.11E+00	5.84E-04
H37B	71432	Benzene	4.44E+00	5.07E-04
H37B	7440508	Copper	0.00E+00	0.00E+00
H37B	100414	Ethyl Benzene	3.72E-01	4.25E-05
H37B	50000	Formaldehyde	3.51E+01	4.01E-03
H37B	7782505	Chlorine	0.00E+00	0.00E+00
H37B	1330207	Xylenes	6.46E-01	7.37E-05
H37B	7439965	Manganese	0.00E+00	0.00E+00
H37B	67561	Methanol	0.00E+00	0.00E+00
H37B	91203	Naphthalene	1.27E+00	1.45E-04
H37B	7440020	Nickel	0.00E+00	0.00E+00
H37B	95476	o-Xylene	4.47E-01	5.10E-05
H37B	108952	Phenol	5.46E-01	6.24E-05
H37B	115071	Propylene	1.14E+01	1.30E-03
H37B	100425	Styrene	9.19E-01	1.05E-04
H37B	9960	SULFATES	0.00E+00	0.00E+00

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H37B	108883	Toluene	1.22E+00	1.39E-04
H38B	106990	1,3-Butadiene	3.93E+00	4.48E-04
H38B	75070	Acetaldehyde	1.08E+01	1.23E-03
H38B	107028	Acrolein	5.15E+00	5.88E-04
H38B	71432	Benzene	4.48E+00	5.11E-04
H38B	7440508	Copper	0.00E+00	0.00E+00
H38B	100414	Ethyl Benzene	3.75E-01	4.28E-05
H38B	50000	Formaldehyde	3.54E+01	4.04E-03
H38B	7782505	Chlorine	0.00E+00	0.00E+00
H38B	1330207	Xylenes	6.51E-01	7.43E-05
H38B	7439965	Manganese	0.00E+00	0.00E+00
H38B	67561	Methanol	0.00E+00	0.00E+00
H38B	91203	Naphthalene	1.28E+00	1.46E-04
H38B	7440020	Nickel	0.00E+00	0.00E+00
H38B	95476	o-Xylene	4.50E-01	5.14E-05
H38B	108952	Phenol	5.51E-01	6.28E-05
H38B	115071	Propylene	1.15E+01	1.31E-03
H38B	100425	Styrene	9.26E-01	1.06E-04
H38B	9960	SULFATES	0.00E+00	0.00E+00
H38B	108883	Toluene	1.23E+00	1.40E-04
H39B	106990	1,3-Butadiene	3.65E+00	4.17E-04
H39B	75070	Acetaldehyde	1.00E+01	1.15E-03
H39B	107028	Acrolein	4.79E+00	5.47E-04
H39B	71432	Benzene	4.16E+00	4.75E-04
H39B	7440508	Copper	0.00E+00	0.00E+00
H39B	100414	Ethyl Benzene	3.49E-01	3.98E-05
H39B	50000	Formaldehyde	3.29E+01	3.75E-03
H39B	7782505	Chlorine	0.00E+00	0.00E+00
H39B	1330207	Xylenes	6.05E-01	6.90E-05
H39B	7439965	Manganese	0.00E+00	0.00E+00
H39B	67561	Methanol	0.00E+00	0.00E+00
H39B	91203	Naphthalene	1.19E+00	1.35E-04
H39B	7440020	Nickel	0.00E+00	0.00E+00
H39B	95476	o-Xylene	4.19E-01	4.78E-05
H39B	108952	Phenol	5.12E-01	5.84E-05
H39B	115071	Propylene	1.07E+01	1.22E-03
H39B	100425	Styrene	8.61E-01	9.82E-05
H39B	9960	SULFATES	0.00E+00	0.00E+00
H39B	108883	Toluene	1.14E+00	1.30E-04
H40B	106990	1,3-Butadiene	3.61E+00	4.12E-04
H40B	75070	Acetaldehyde	9.93E+00	1.13E-03
H40B	107028	Acrolein	4.74E+00	5.41E-04
H40B	71432	Benzene	4.11E+00	4.70E-04
H40B	7440508	Copper	0.00E+00	0.00E+00
H40B	100414	Ethyl Benzene	3.45E-01	3.94E-05
H40B	50000	Formaldehyde	3.25E+01	3.71E-03
H40B	7782505	Chlorine	0.00E+00	0.00E+00

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H40B	1330207	Xylenes	5.98E-01	6.82E-05
H40B	7439965	Manganese	0.00E+00	0.00E+00
H40B	67561	Methanol	0.00E+00	0.00E+00
H40B	91203	Naphthalene	1.17E+00	1.34E-04
H40B	7440020	Nickel	0.00E+00	0.00E+00
H40B	95476	o-Xylene	4.14E-01	4.72E-05
H40B	108952	Phenol	5.06E-01	5.77E-05
H40B	115071	Propylene	1.06E+01	1.20E-03
H40B	100425	Styrene	8.50E-01	9.71E-05
H40B	9960	SULFATES	0.00E+00	0.00E+00
H40B	108883	Toluene	1.13E+00	1.29E-04
H41B	106990	1,3-Butadiene	2.52E-02	2.88E-06
H41B	75070	Acetaldehyde	6.94E-02	7.92E-06
H41B	107028	Acrolein	3.31E-02	3.78E-06
H41B	71432	Benzene	2.87E-02	3.28E-06
H41B	7440508	Copper	0.00E+00	0.00E+00
H41B	100414	Ethyl Benzene	2.41E-03	2.75E-07
H41B	50000	Formaldehyde	2.27E-01	2.59E-05
H41B	7782505	Chlorine	0.00E+00	0.00E+00
H41B	1330207	Xylenes	4.17E-03	4.76E-07
H41B	7439965	Manganese	0.00E+00	0.00E+00
H41B	67561	Methanol	0.00E+00	0.00E+00
H41B	91203	Naphthalene	8.19E-03	9.35E-07
H41B	7440020	Nickel	0.00E+00	0.00E+00
H41B	95476	o-Xylene	2.89E-03	3.30E-07
H41B	108952	Phenol	3.53E-03	4.03E-07
H41B	115071	Propylene	7.37E-02	8.41E-06
H41B	100425	Styrene	5.94E-03	6.78E-07
H41B	9960	SULFATES	0.00E+00	0.00E+00
H41B	108883	Toluene	7.87E-03	8.98E-07
H42B	106990	1,3-Butadiene	2.50E-02	2.86E-06
H42B	75070	Acetaldehyde	6.89E-02	7.86E-06
H42B	107028	Acrolein	3.29E-02	3.75E-06
H42B	71432	Benzene	2.85E-02	3.26E-06
H42B	7440508	Copper	0.00E+00	0.00E+00
H42B	100414	Ethyl Benzene	2.39E-03	2.73E-07
H42B	50000	Formaldehyde	2.26E-01	2.57E-05
H42B	7782505	Chlorine	0.00E+00	0.00E+00
H42B	1330207	Xylenes	4.15E-03	4.73E-07
H42B	7439965	Manganese	0.00E+00	0.00E+00
H42B	67561	Methanol	0.00E+00	0.00E+00
H42B	91203	Naphthalene	8.13E-03	9.29E-07
H42B	7440020	Nickel	0.00E+00	0.00E+00
H42B	95476	o-Xylene	2.87E-03	3.28E-07
H42B	108952	Phenol	3.51E-03	4.01E-07
H42B	115071	Propylene	7.32E-02	8.36E-06
H42B	100425	Styrene	5.90E-03	6.74E-07

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H42B	9960	SULFATES	0.00E+00	0.00E+00
H42B	108883	Toluene	7.81E-03	8.92E-07
H43B	106990	1,3-Butadiene	2.52E-02	2.88E-06
H43B	75070	Acetaldehyde	6.94E-02	7.92E-06
H43B	107028	Acrolein	3.31E-02	3.78E-06
H43B	71432	Benzene	2.87E-02	3.28E-06
H43B	7440508	Copper	0.00E+00	0.00E+00
H43B	100414	Ethyl Benzene	2.41E-03	2.75E-07
H43B	50000	Formaldehyde	2.27E-01	2.59E-05
H43B	7782505	Chlorine	0.00E+00	0.00E+00
H43B	1330207	Xylenes	4.17E-03	4.76E-07
H43B	7439965	Manganese	0.00E+00	0.00E+00
H43B	67561	Methanol	0.00E+00	0.00E+00
H43B	91203	Naphthalene	8.19E-03	9.35E-07
H43B	7440020	Nickel	0.00E+00	0.00E+00
H43B	95476	o-Xylene	2.89E-03	3.30E-07
H43B	108952	Phenol	3.53E-03	4.03E-07
H43B	115071	Propylene	7.37E-02	8.41E-06
H43B	100425	Styrene	5.94E-03	6.78E-07
H43B	9960	SULFATES	0.00E+00	0.00E+00
H43B	108883	Toluene	7.87E-03	8.98E-07
H44B	106990	1,3-Butadiene	2.49E-02	2.84E-06
H44B	75070	Acetaldehyde	6.84E-02	7.81E-06
H44B	107028	Acrolein	3.26E-02	3.73E-06
H44B	71432	Benzene	2.84E-02	3.24E-06
H44B	7440508	Copper	0.00E+00	0.00E+00
H44B	100414	Ethyl Benzene	2.38E-03	2.71E-07
H44B	50000	Formaldehyde	2.24E-01	2.56E-05
H44B	7782505	Chlorine	0.00E+00	0.00E+00
H44B	1330207	Xylenes	4.12E-03	4.70E-07
H44B	7439965	Manganese	0.00E+00	0.00E+00
H44B	67561	Methanol	0.00E+00	0.00E+00
H44B	91203	Naphthalene	8.08E-03	9.22E-07
H44B	7440020	Nickel	0.00E+00	0.00E+00
H44B	95476	o-Xylene	2.85E-03	3.26E-07
H44B	108952	Phenol	3.49E-03	3.98E-07
H44B	115071	Propylene	7.27E-02	8.30E-06
H44B	100425	Styrene	5.86E-03	6.69E-07
H44B	9960	SULFATES	0.00E+00	0.00E+00
H44B	108883	Toluene	7.76E-03	8.86E-07
H45B	106990	1,3-Butadiene	4.66E-02	5.32E-06
H45B	75070	Acetaldehyde	1.28E-01	1.46E-05
H45B	107028	Acrolein	6.11E-02	6.97E-06
H45B	71432	Benzene	5.31E-02	6.06E-06
H45B	7440508	Copper	0.00E+00	0.00E+00
H45B	100414	Ethyl Benzene	4.45E-03	5.08E-07
H45B	50000	Formaldehyde	4.19E-01	4.79E-05

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H45B	7782505	Chlorine	0.00E+00	0.00E+00
H45B	1330207	Xylenes	7.71E-03	8.80E-07
H45B	7439965	Manganese	0.00E+00	0.00E+00
H45B	67561	Methanol	0.00E+00	0.00E+00
H45B	91203	Naphthalene	1.51E-02	1.73E-06
H45B	7440020	Nickel	0.00E+00	0.00E+00
H45B	95476	o-Xylene	5.34E-03	6.09E-07
H45B	108952	Phenol	6.52E-03	7.45E-07
H45B	115071	Propylene	1.36E-01	1.55E-05
H45B	100425	Styrene	1.10E-02	1.25E-06
H45B	9960	SULFATES	0.00E+00	0.00E+00
H45B	108883	Toluene	1.45E-02	1.66E-06
H46B	106990	1,3-Butadiene	4.71E-02	5.38E-06
H46B	75070	Acetaldehyde	1.30E-01	1.48E-05
H46B	107028	Acrolein	6.18E-02	7.06E-06
H46B	71432	Benzene	5.37E-02	6.13E-06
H46B	7440508	Copper	0.00E+00	0.00E+00
H46B	100414	Ethyl Benzene	4.50E-03	5.14E-07
H46B	50000	Formaldehyde	4.24E-01	4.84E-05
H46B	7782505	Chlorine	0.00E+00	0.00E+00
H46B	1330207	Xylenes	7.80E-03	8.91E-07
H46B	7439965	Manganese	0.00E+00	0.00E+00
H46B	67561	Methanol	0.00E+00	0.00E+00
H46B	91203	Naphthalene	1.53E-02	1.75E-06
H46B	7440020	Nickel	0.00E+00	0.00E+00
H46B	95476	o-Xylene	5.40E-03	6.17E-07
H46B	108952	Phenol	6.60E-03	7.54E-07
H46B	115071	Propylene	1.38E-01	1.57E-05
H46B	100425	Styrene	1.11E-02	1.27E-06
H46B	9960	SULFATES	0.00E+00	0.00E+00
H46B	108883	Toluene	1.47E-02	1.68E-06
G4B	106990	1,3-Butadiene	1.70E-01	1.94E-05
G4B	75070	Acetaldehyde	4.68E-01	5.34E-05
G4B	107028	Acrolein	2.23E-01	2.55E-05
G4B	71432	Benzene	1.94E-01	2.21E-05
G4B	7440508	Copper	0.00E+00	0.00E+00
G4B	100414	Ethyl Benzene	1.62E-02	1.85E-06
G4B	50000	Formaldehyde	1.53E+00	1.75E-04
G4B	7782505	Chlorine	0.00E+00	0.00E+00
G4B	1330207	Xylenes	2.82E-02	3.21E-06
G4B	7439965	Manganese	0.00E+00	0.00E+00
G4B	67561	Methanol	0.00E+00	0.00E+00
G4B	91203	Naphthalene	5.52E-02	6.30E-06
G4B	7440020	Nickel	0.00E+00	0.00E+00
G4B	95476	o-Xylene	1.95E-02	2.23E-06
G4B	108952	Phenol	2.38E-02	2.72E-06
G4B	115071	Propylene	4.97E-01	5.67E-05

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
G4B	100425	Styrene	4.01E-02	4.57E-06
G4B	9960	SULFATES	0.00E+00	0.00E+00
G4B	108883	Toluene	5.31E-02	6.06E-06
G9B	106990	1,3-Butadiene	4.44E-02	5.07E-06
G9B	75070	Acetaldehyde	1.22E-01	1.40E-05
G9B	107028	Acrolein	5.83E-02	6.65E-06
G9B	71432	Benzene	5.07E-02	5.78E-06
G9B	7440508	Copper	0.00E+00	0.00E+00
G9B	100414	Ethyl Benzene	4.24E-03	4.85E-07
G9B	50000	Formaldehyde	4.00E-01	4.57E-05
G9B	7782505	Chlorine	0.00E+00	0.00E+00
G9B	1330207	Xylenes	7.36E-03	8.40E-07
G9B	7439965	Manganese	0.00E+00	0.00E+00
G9B	67561	Methanol	0.00E+00	0.00E+00
G9B	91203	Naphthalene	1.44E-02	1.65E-06
G9B	7440020	Nickel	0.00E+00	0.00E+00
G9B	95476	o-Xylene	5.09E-03	5.81E-07
G9B	108952	Phenol	6.23E-03	7.11E-07
G9B	115071	Propylene	1.30E-01	1.48E-05
G9B	100425	Styrene	1.05E-02	1.20E-06
G9B	9960	SULFATES	0.00E+00	0.00E+00
G9B	108883	Toluene	1.39E-02	1.58E-06
G12B	106990	1,3-Butadiene	1.57E+00	1.79E-04
G12B	75070	Acetaldehyde	4.32E+00	4.94E-04
G12B	107028	Acrolein	2.06E+00	2.35E-04
G12B	71432	Benzene	1.79E+00	2.04E-04
G12B	7440508	Copper	0.00E+00	0.00E+00
G12B	100414	Ethyl Benzene	1.50E-01	1.71E-05
G12B	50000	Formaldehyde	1.42E+01	1.62E-03
G12B	7782505	Chlorine	0.00E+00	0.00E+00
G12B	1330207	Xylenes	2.60E-01	2.97E-05
G12B	7439965	Manganese	0.00E+00	0.00E+00
G12B	67561	Methanol	0.00E+00	0.00E+00
G12B	91203	Naphthalene	5.10E-01	5.83E-05
G12B	7440020	Nickel	0.00E+00	0.00E+00
G12B	95476	o-Xylene	1.80E-01	2.06E-05
G12B	108952	Phenol	2.20E-01	2.51E-05
G12B	115071	Propylene	4.59E+00	5.24E-04
G12B	100425	Styrene	3.70E-01	4.23E-05
G12B	9960	SULFATES	0.00E+00	0.00E+00
G12B	108883	Toluene	4.90E-01	5.60E-05
G13B	106990	1,3-Butadiene	1.58E+00	1.80E-04
G13B	75070	Acetaldehyde	4.35E+00	4.96E-04
G13B	107028	Acrolein	2.07E+00	2.37E-04
G13B	71432	Benzene	1.80E+00	2.06E-04
G13B	7440508	Copper	0.00E+00	0.00E+00
G13B	100414	Ethyl Benzene	1.51E-01	1.72E-05

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
G13B	50000	Formaldehyde	1.42E+01	1.62E-03
G13B	7782505	Chlorine	0.00E+00	0.00E+00
G13B	1330207	Xylenes	2.62E-01	2.99E-05
G13B	7439965	Manganese	0.00E+00	0.00E+00
G13B	67561	Methanol	0.00E+00	0.00E+00
G13B	91203	Naphthalene	5.13E-01	5.86E-05
G13B	7440020	Nickel	0.00E+00	0.00E+00
G13B	95476	o-Xylene	1.81E-01	2.07E-05
G13B	108952	Phenol	2.21E-01	2.53E-05
G13B	115071	Propylene	4.62E+00	5.27E-04
G13B	100425	Styrene	3.72E-01	4.25E-05
G13B	9960	SULFATES	0.00E+00	0.00E+00
G13B	108883	Toluene	4.93E-01	5.63E-05
G27B	106990	1,3-Butadiene	3.43E+00	3.92E-04
G27B	75070	Acetaldehyde	9.44E+00	1.08E-03
G27B	107028	Acrolein	4.50E+00	5.14E-04
G27B	71432	Benzene	3.91E+00	4.47E-04
G27B	7440508	Copper	0.00E+00	0.00E+00
G27B	100414	Ethyl Benzene	3.28E-01	3.74E-05
G27B	50000	Formaldehyde	3.09E+01	3.53E-03
G27B	7782505	Chlorine	0.00E+00	0.00E+00
G27B	1330207	Xylenes	5.68E-01	6.49E-05
G27B	7439965	Manganese	0.00E+00	0.00E+00
G27B	67561	Methanol	0.00E+00	0.00E+00
G27B	91203	Naphthalene	1.11E+00	1.27E-04
G27B	7440020	Nickel	0.00E+00	0.00E+00
G27B	95476	o-Xylene	3.94E-01	4.49E-05
G27B	108952	Phenol	4.81E-01	5.49E-05
G27B	115071	Propylene	1.00E+01	1.15E-03
G27B	100425	Styrene	8.09E-01	9.23E-05
G27B	9960	SULFATES	0.00E+00	0.00E+00
G27B	108883	Toluene	1.07E+00	1.22E-04
T14D	106990	1,3-Butadiene	1.82E+01	2.08E-03
T14D	75070	Acetaldehyde	5.00E+01	5.71E-03
T14D	107028	Acrolein	2.39E+01	2.72E-03
T14D	71432	Benzene	2.07E+01	2.37E-03
T14D	7440508	Copper	0.00E+00	0.00E+00
T14D	100414	Ethyl Benzene	1.74E+00	1.98E-04
T14D	50000	Formaldehyde	1.64E+02	1.87E-02
T14D	7782505	Chlorine	0.00E+00	0.00E+00
T14D	1330207	Xylenes	3.01E+00	3.44E-04
T14D	7439965	Manganese	0.00E+00	0.00E+00
T14D	67561	Methanol	0.00E+00	0.00E+00
T14D	91203	Naphthalene	5.91E+00	6.74E-04
T14D	7440020	Nickel	0.00E+00	0.00E+00
T14D	95476	o-Xylene	2.08E+00	2.38E-04
T14D	108952	Phenol	2.55E+00	2.91E-04

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
T14D	115071	Propylene	5.32E+01	6.07E-03
T14D	100425	Styrene	4.28E+00	4.89E-04
T14D	9960	SULFATES	0.00E+00	0.00E+00
T14D	108883	Toluene	5.67E+00	6.48E-04
T10D	106990	1,3-Butadiene	3.50E-01	4.00E-05
T10D	75070	Acetaldehyde	9.64E-01	1.10E-04
T10D	107028	Acrolein	4.60E-01	5.25E-05
T10D	71432	Benzene	3.99E-01	4.56E-05
T10D	7440508	Copper	0.00E+00	0.00E+00
T10D	100414	Ethyl Benzene	3.35E-02	3.82E-06
T10D	50000	Formaldehyde	3.15E+00	3.60E-04
T10D	7782505	Chlorine	0.00E+00	0.00E+00
T10D	1330207	Xylenes	5.80E-02	6.62E-06
T10D	7439965	Manganese	0.00E+00	0.00E+00
T10D	67561	Methanol	0.00E+00	0.00E+00
T10D	91203	Naphthalene	1.14E-01	1.30E-05
T10D	7440020	Nickel	0.00E+00	0.00E+00
T10D	95476	o-Xylene	4.02E-02	4.58E-06
T10D	108952	Phenol	4.91E-02	5.60E-06
T10D	115071	Propylene	1.02E+00	1.17E-04
T10D	100425	Styrene	8.25E-02	9.42E-06
T10D	9960	SULFATES	0.00E+00	0.00E+00
T10D	108883	Toluene	1.09E-01	1.25E-05
C4B	106990	1,3-Butadiene	2.24E-04	2.56E-08
C4B	75070	Acetaldehyde	5.68E-04	6.49E-08
C4B	107028	Acrolein	3.26E-04	3.72E-08
C4B	71432	Benzene	2.24E-04	2.55E-08
C4B	7440508	Copper	1.39E-03	1.59E-07
C4B	100414	Ethyl Benzene	2.31E-05	2.64E-09
C4B	50000	Formaldehyde	1.64E-03	1.87E-07
C4B	7782505	Chlorine	4.63E-04	5.28E-08
C4B	1330207	Xylenes	3.75E-05	4.28E-09
C4B	7439965	Manganese	1.18E-04	1.35E-08
C4B	67561	Methanol	2.40E-04	2.74E-08
C4B	91203	Naphthalene	7.20E-05	8.21E-09
C4B	7440020	Nickel	2.36E-04	2.70E-08
C4B	95476	o-Xylene	2.21E-05	2.52E-09
C4B	108952	Phenol	9.66E-05	1.10E-08
C4B	115071	Propylene	6.03E-04	6.88E-08
C4B	100425	Styrene	4.11E-05	4.69E-09
C4B	9960	SULFATES	1.48E-01	1.69E-05
C4B	108883	Toluene	8.54E-05	9.75E-09
C9B	106990	1,3-Butadiene	2.74E-05	3.12E-09
C9B	75070	Acetaldehyde	6.93E-05	7.91E-09
C9B	107028	Acrolein	3.97E-05	4.53E-09
C9B	71432	Benzene	2.73E-05	3.11E-09
C9B	7440508	Copper	7.22E-05	8.24E-09

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C9B	100414	Ethyl Benzene	2.82E-06	3.22E-10
C9B	50000	Formaldehyde	2.00E-04	2.28E-08
C9B	7782505	Chlorine	2.40E-05	2.74E-09
C9B	1330207	Xylenes	4.57E-06	5.22E-10
C9B	7439965	Manganese	6.12E-06	6.99E-10
C9B	67561	Methanol	2.93E-05	3.34E-09
C9B	91203	Naphthalene	8.77E-06	1.00E-09
C9B	7440020	Nickel	1.23E-05	1.40E-09
C9B	95476	o-Xylene	2.69E-06	3.07E-10
C9B	108952	Phenol	1.18E-05	1.34E-09
C9B	115071	Propylene	7.35E-05	8.39E-09
C9B	100425	Styrene	5.01E-06	5.72E-10
C9B	9960	SULFATES	7.69E-03	8.78E-07
C9B	108883	Toluene	1.04E-05	1.19E-09
C12B	106990	1,3-Butadiene	2.85E-04	3.25E-08
C12B	75070	Acetaldehyde	7.21E-04	8.23E-08
C12B	107028	Acrolein	4.13E-04	4.72E-08
C12B	71432	Benzene	2.84E-04	3.24E-08
C12B	7440508	Copper	7.44E-04	8.50E-08
C12B	100414	Ethyl Benzene	2.93E-05	3.35E-09
C12B	50000	Formaldehyde	2.08E-03	2.37E-07
C12B	7782505	Chlorine	2.48E-04	2.83E-08
C12B	1330207	Xylenes	4.76E-05	5.43E-09
C12B	7439965	Manganese	6.32E-05	7.21E-09
C12B	67561	Methanol	3.04E-04	3.48E-08
C12B	91203	Naphthalene	9.12E-05	1.04E-08
C12B	7440020	Nickel	1.27E-04	1.45E-08
C12B	95476	o-Xylene	2.80E-05	3.20E-09
C12B	108952	Phenol	1.22E-04	1.40E-08
C12B	115071	Propylene	7.65E-04	8.73E-08
C12B	100425	Styrene	5.21E-05	5.95E-09
C12B	9960	SULFATES	7.94E-02	9.06E-06
C12B	108883	Toluene	1.08E-04	1.24E-08
C13B	106990	1,3-Butadiene	2.98E-04	3.40E-08
C13B	75070	Acetaldehyde	7.55E-04	8.62E-08
C13B	107028	Acrolein	4.33E-04	4.94E-08
C13B	71432	Benzene	2.97E-04	3.39E-08
C13B	7440508	Copper	7.56E-04	8.63E-08
C13B	100414	Ethyl Benzene	3.07E-05	3.51E-09
C13B	50000	Formaldehyde	2.18E-03	2.48E-07
C13B	7782505	Chlorine	2.52E-04	2.88E-08
C13B	1330207	Xylenes	4.98E-05	5.69E-09
C13B	7439965	Manganese	6.42E-05	7.32E-09
C13B	67561	Methanol	3.19E-04	3.64E-08
C13B	91203	Naphthalene	9.56E-05	1.09E-08
C13B	7440020	Nickel	1.29E-04	1.47E-08
C13B	95476	o-Xylene	2.93E-05	3.35E-09

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C13B	108952	Phenol	1.28E-04	1.46E-08
C13B	115071	Propylene	8.01E-04	9.15E-08
C13B	100425	Styrene	5.46E-05	6.23E-09
C13B	9960	SULFATES	8.06E-02	9.20E-06
C13B	108883	Toluene	1.13E-04	1.29E-08
C26B	106990	1,3-Butadiene	3.87E-03	4.41E-07
C26B	75070	Acetaldehyde	9.79E-03	1.12E-06
C26B	107028	Acrolein	5.61E-03	6.41E-07
C26B	71432	Benzene	3.85E-03	4.40E-07
C26B	7440508	Copper	1.30E-02	1.49E-06
C26B	100414	Ethyl Benzene	3.99E-04	4.55E-08
C26B	50000	Formaldehyde	2.82E-02	3.22E-06
C26B	7782505	Chlorine	4.34E-03	4.96E-07
C26B	1330207	Xylenes	6.46E-04	7.38E-08
C26B	7439965	Manganese	1.11E-03	1.26E-07
C26B	67561	Methanol	4.14E-03	4.72E-07
C26B	91203	Naphthalene	1.24E-03	1.42E-07
C26B	7440020	Nickel	2.22E-03	2.53E-07
C26B	95476	o-Xylene	3.80E-04	4.34E-08
C26B	108952	Phenol	1.66E-03	1.90E-07
C26B	115071	Propylene	1.04E-02	1.19E-06
C26B	100425	Styrene	7.08E-04	8.08E-08
C26B	9960	SULFATES	1.39E+00	1.59E-04
C26B	108883	Toluene	1.47E-03	1.68E-07
C27B	106990	1,3-Butadiene	6.55E-03	7.48E-07
C27B	75070	Acetaldehyde	1.66E-02	1.89E-06
C27B	107028	Acrolein	9.51E-03	1.09E-06
C27B	71432	Benzene	6.53E-03	7.45E-07
C27B	7440508	Copper	1.60E-02	1.83E-06
C27B	100414	Ethyl Benzene	6.76E-04	7.72E-08
C27B	50000	Formaldehyde	4.78E-02	5.46E-06
C27B	7782505	Chlorine	5.33E-03	6.08E-07
C27B	1330207	Xylenes	1.10E-03	1.25E-07
C27B	7439965	Manganese	1.36E-03	1.55E-07
C27B	67561	Methanol	7.01E-03	8.00E-07
C27B	91203	Naphthalene	2.10E-03	2.40E-07
C27B	7440020	Nickel	2.72E-03	3.11E-07
C27B	95476	o-Xylene	6.45E-04	7.36E-08
C27B	108952	Phenol	2.82E-03	3.22E-07
C27B	115071	Propylene	1.76E-02	2.01E-06
C27B	100425	Styrene	1.20E-03	1.37E-07
C27B	9960	SULFATES	1.71E+00	1.95E-04
C27B	108883	Toluene	2.49E-03	2.85E-07
B4A	106990	1,3-Butadiene	3.99E-01	4.56E-05
B4A	75070	Acetaldehyde	1.01E+00	1.15E-04
B4A	107028	Acrolein	5.80E-01	6.62E-05
B4A	71432	Benzene	3.98E-01	4.54E-05

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
B4A	7440508	Copper	2.23E-02	2.55E-06
B4A	100414	Ethyl Benzene	4.12E-02	4.70E-06
B4A	50000	Formaldehyde	2.91E+00	3.33E-04
B4A	7782505	Chlorine	7.44E-03	8.50E-07
B4A	1330207	Xylenes	6.67E-02	7.62E-06
B4A	7439965	Manganese	1.90E-03	2.16E-07
B4A	67561	Methanol	4.27E-01	4.88E-05
B4A	91203	Naphthalene	1.28E-01	1.46E-05
B4A	7440020	Nickel	3.80E-03	4.34E-07
B4A	95476	o-Xylene	3.93E-02	4.48E-06
B4A	108952	Phenol	1.72E-01	1.96E-05
B4A	115071	Propylene	1.07E+00	1.22E-04
B4A	100425	Styrene	7.31E-02	8.35E-06
B4A	9960	SULFATES	2.38E+00	2.72E-04
B4A	108883	Toluene	1.52E-01	1.73E-05
B26A	106990	1,3-Butadiene	1.02E+01	1.16E-03
B26A	75070	Acetaldehyde	2.58E+01	2.94E-03
B26A	107028	Acrolein	1.48E+01	1.69E-03
B26A	71432	Benzene	1.01E+01	1.16E-03
B26A	7440508	Copper	6.52E-01	7.44E-05
B26A	100414	Ethyl Benzene	1.05E+00	1.20E-04
B26A	50000	Formaldehyde	7.43E+01	8.48E-03
B26A	7782505	Chlorine	2.17E-01	2.48E-05
B26A	1330207	Xylenes	1.70E+00	1.94E-04
B26A	7439965	Manganese	5.53E-02	6.32E-06
B26A	67561	Methanol	1.09E+01	1.24E-03
B26A	91203	Naphthalene	3.27E+00	3.73E-04
B26A	7440020	Nickel	1.11E-01	1.27E-05
B26A	95476	o-Xylene	1.00E+00	1.14E-04
B26A	108952	Phenol	4.38E+00	5.00E-04
B26A	115071	Propylene	2.74E+01	3.12E-03
B26A	100425	Styrene	1.87E+00	2.13E-04
B26A	9960	SULFATES	6.95E+01	7.94E-03
B26A	108883	Toluene	3.88E+00	4.42E-04
G4A	106990	1,3-Butadiene	3.64E-01	4.16E-05
G4A	75070	Acetaldehyde	1.00E+00	1.14E-04
G4A	107028	Acrolein	4.78E-01	5.46E-05
G4A	71432	Benzene	4.15E-01	4.74E-05
G4A	7440508	Copper	0.00E+00	0.00E+00
G4A	100414	Ethyl Benzene	3.48E-02	3.97E-06
G4A	50000	Formaldehyde	3.28E+00	3.75E-04
G4A	7782505	Chlorine	0.00E+00	0.00E+00
G4A	1330207	Xylenes	6.03E-02	6.89E-06
G4A	7439965	Manganese	0.00E+00	0.00E+00
G4A	67561	Methanol	0.00E+00	0.00E+00
G4A	91203	Naphthalene	1.18E-01	1.35E-05
G4A	7440020	Nickel	0.00E+00	0.00E+00

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
G4A	95476	o-Xylene	4.18E-02	4.77E-06
G4A	108952	Phenol	5.11E-02	5.83E-06
G4A	115071	Propylene	1.07E+00	1.22E-04
G4A	100425	Styrene	8.59E-02	9.80E-06
G4A	9960	SULFATES	0.00E+00	0.00E+00
G4A	108883	Toluene	1.14E-01	1.30E-05
G9A	106990	1,3-Butadiene	1.08E-01	1.23E-05
G9A	75070	Acetaldehyde	2.98E-01	3.40E-05
G9A	107028	Acrolein	1.42E-01	1.62E-05
G9A	71432	Benzene	1.23E-01	1.41E-05
G9A	7440508	Copper	0.00E+00	0.00E+00
G9A	100414	Ethyl Benzene	1.03E-02	1.18E-06
G9A	50000	Formaldehyde	9.74E-01	1.11E-04
G9A	7782505	Chlorine	0.00E+00	0.00E+00
G9A	1330207	Xylenes	1.79E-02	2.04E-06
G9A	7439965	Manganese	0.00E+00	0.00E+00
G9A	67561	Methanol	0.00E+00	0.00E+00
G9A	91203	Naphthalene	3.51E-02	4.01E-06
G9A	7440020	Nickel	0.00E+00	0.00E+00
G9A	95476	o-Xylene	1.24E-02	1.42E-06
G9A	108952	Phenol	1.52E-02	1.73E-06
G9A	115071	Propylene	3.16E-01	3.61E-05
G9A	100425	Styrene	2.55E-02	2.91E-06
G9A	9960	SULFATES	0.00E+00	0.00E+00
G9A	108883	Toluene	3.37E-02	3.85E-06
G12A	106990	1,3-Butadiene	3.84E+00	4.39E-04
G12A	75070	Acetaldehyde	1.06E+01	1.21E-03
G12A	107028	Acrolein	5.04E+00	5.76E-04
G12A	71432	Benzene	4.38E+00	5.00E-04
G12A	7440508	Copper	0.00E+00	0.00E+00
G12A	100414	Ethyl Benzene	3.67E-01	4.19E-05
G12A	50000	Formaldehyde	3.46E+01	3.95E-03
G12A	7782505	Chlorine	0.00E+00	0.00E+00
G12A	1330207	Xylenes	6.36E-01	7.27E-05
G12A	7439965	Manganese	0.00E+00	0.00E+00
G12A	67561	Methanol	0.00E+00	0.00E+00
G12A	91203	Naphthalene	1.25E+00	1.43E-04
G12A	7440020	Nickel	0.00E+00	0.00E+00
G12A	95476	o-Xylene	4.41E-01	5.03E-05
G12A	108952	Phenol	5.39E-01	6.15E-05
G12A	115071	Propylene	1.12E+01	1.28E-03
G12A	100425	Styrene	9.06E-01	1.03E-04
G12A	9960	SULFATES	0.00E+00	0.00E+00
G12A	108883	Toluene	1.20E+00	1.37E-04
G13A	106990	1,3-Butadiene	3.85E+00	4.39E-04
G13A	75070	Acetaldehyde	1.06E+01	1.21E-03
G13A	107028	Acrolein	5.05E+00	5.76E-04

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
G13A	71432	Benzene	4.39E+00	5.01E-04
G13A	7440508	Copper	0.00E+00	0.00E+00
G13A	100414	Ethyl Benzene	3.68E-01	4.20E-05
G13A	50000	Formaldehyde	3.47E+01	3.96E-03
G13A	7782505	Chlorine	0.00E+00	0.00E+00
G13A	1330207	Xylenes	6.37E-01	7.28E-05
G13A	7439965	Manganese	0.00E+00	0.00E+00
G13A	67561	Methanol	0.00E+00	0.00E+00
G13A	91203	Naphthalene	1.25E+00	1.43E-04
G13A	7440020	Nickel	0.00E+00	0.00E+00
G13A	95476	o-Xylene	4.41E-01	5.04E-05
G13A	108952	Phenol	5.39E-01	6.16E-05
G13A	115071	Propylene	1.13E+01	1.28E-03
G13A	100425	Styrene	9.07E-01	1.04E-04
G13A	9960	SULFATES	0.00E+00	0.00E+00
G13A	108883	Toluene	1.20E+00	1.37E-04
G27A	106990	1,3-Butadiene	8.36E+00	9.54E-04
G27A	75070	Acetaldehyde	2.30E+01	2.63E-03
G27A	107028	Acrolein	1.10E+01	1.25E-03
G27A	71432	Benzene	9.53E+00	1.09E-03
G27A	7440508	Copper	0.00E+00	0.00E+00
G27A	100414	Ethyl Benzene	7.99E-01	9.12E-05
G27A	50000	Formaldehyde	7.53E+01	8.60E-03
G27A	7782505	Chlorine	0.00E+00	0.00E+00
G27A	1330207	Xylenes	1.38E+00	1.58E-04
G27A	7439965	Manganese	0.00E+00	0.00E+00
G27A	67561	Methanol	0.00E+00	0.00E+00
G27A	91203	Naphthalene	2.72E+00	3.10E-04
G27A	7440020	Nickel	0.00E+00	0.00E+00
G27A	95476	o-Xylene	9.58E-01	1.09E-04
G27A	108952	Phenol	1.17E+00	1.34E-04
G27A	115071	Propylene	2.44E+01	2.79E-03
G27A	100425	Styrene	1.97E+00	2.25E-04
G27A	9960	SULFATES	0.00E+00	0.00E+00
G27A	108883	Toluene	2.61E+00	2.98E-04
C4A	106990	1,3-Butadiene	1.43E-03	1.63E-07
C4A	75070	Acetaldehyde	3.62E-03	4.14E-07
C4A	107028	Acrolein	2.08E-03	2.37E-07
C4A	71432	Benzene	1.43E-03	1.63E-07
C4A	7440508	Copper	4.03E-03	4.60E-07
C4A	100414	Ethyl Benzene	1.48E-04	1.69E-08
C4A	50000	Formaldehyde	1.04E-02	1.19E-06
C4A	7782505	Chlorine	1.34E-03	1.53E-07
C4A	1330207	Xylenes	2.39E-04	2.73E-08
C4A	7439965	Manganese	3.42E-04	3.90E-08
C4A	67561	Methanol	1.53E-03	1.75E-07
C4A	91203	Naphthalene	4.59E-04	5.24E-08

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C4A	7440020	Nickel	6.86E-04	7.83E-08
C4A	95476	o-Xylene	1.41E-04	1.61E-08
C4A	108952	Phenol	6.16E-04	7.03E-08
C4A	115071	Propylene	3.85E-03	4.39E-07
C4A	100425	Styrene	2.62E-04	2.99E-08
C4A	9960	SULFATES	4.30E-01	4.90E-05
C4A	108883	Toluene	5.45E-04	6.22E-08
C9A	106990	1,3-Butadiene	4.33E-05	4.94E-09
C9A	75070	Acetaldehyde	1.10E-04	1.25E-08
C9A	107028	Acrolein	6.28E-05	7.17E-09
C9A	71432	Benzene	4.31E-05	4.92E-09
C9A	7440508	Copper	1.21E-04	1.38E-08
C9A	100414	Ethyl Benzene	4.46E-06	5.10E-10
C9A	50000	Formaldehyde	3.16E-04	3.61E-08
C9A	7782505	Chlorine	4.03E-05	4.60E-09
C9A	1330207	Xylenes	7.24E-06	8.26E-10
C9A	7439965	Manganese	1.03E-05	1.17E-09
C9A	67561	Methanol	4.63E-05	5.29E-09
C9A	91203	Naphthalene	1.39E-05	1.58E-09
C9A	7440020	Nickel	2.06E-05	2.35E-09
C9A	95476	o-Xylene	4.26E-06	4.86E-10
C9A	108952	Phenol	1.86E-05	2.13E-09
C9A	115071	Propylene	1.16E-04	1.33E-08
C9A	100425	Styrene	7.93E-06	9.05E-10
C9A	9960	SULFATES	1.29E-02	1.47E-06
C9A	108883	Toluene	1.65E-05	1.88E-09
C12A	106990	1,3-Butadiene	4.53E-04	5.18E-08
C12A	75070	Acetaldehyde	1.15E-03	1.31E-07
C12A	107028	Acrolein	6.58E-04	7.51E-08
C12A	71432	Benzene	4.52E-04	5.16E-08
C12A	7440508	Copper	1.13E-03	1.29E-07
C12A	100414	Ethyl Benzene	4.68E-05	5.34E-09
C12A	50000	Formaldehyde	3.31E-03	3.78E-07
C12A	7782505	Chlorine	3.77E-04	4.30E-08
C12A	1330207	Xylenes	7.58E-05	8.65E-09
C12A	7439965	Manganese	9.60E-05	1.10E-08
C12A	67561	Methanol	4.85E-04	5.54E-08
C12A	91203	Naphthalene	1.45E-04	1.66E-08
C12A	7440020	Nickel	1.92E-04	2.20E-08
C12A	95476	o-Xylene	4.46E-05	5.09E-09
C12A	108952	Phenol	1.95E-04	2.23E-08
C12A	115071	Propylene	1.22E-03	1.39E-07
C12A	100425	Styrene	8.31E-05	9.48E-09
C12A	9960	SULFATES	1.21E-01	1.38E-05
C12A	108883	Toluene	1.73E-04	1.97E-08
C13A	106990	1,3-Butadiene	4.40E-04	5.02E-08
C13A	75070	Acetaldehyde	1.11E-03	1.27E-07

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C13A	107028	Acrolein	6.39E-04	7.29E-08
C13A	71432	Benzene	4.38E-04	5.00E-08
C13A	7440508	Copper	1.13E-03	1.29E-07
C13A	100414	Ethyl Benzene	4.54E-05	5.18E-09
C13A	50000	Formaldehyde	3.21E-03	3.66E-07
C13A	7782505	Chlorine	3.78E-04	4.31E-08
C13A	1330207	Xylenes	7.35E-05	8.39E-09
C13A	7439965	Manganese	9.62E-05	1.10E-08
C13A	67561	Methanol	4.71E-04	5.37E-08
C13A	91203	Naphthalene	1.41E-04	1.61E-08
C13A	7440020	Nickel	1.93E-04	2.20E-08
C13A	95476	o-Xylene	4.33E-05	4.94E-09
C13A	108952	Phenol	1.89E-04	2.16E-08
C13A	115071	Propylene	1.18E-03	1.35E-07
C13A	100425	Styrene	8.06E-05	9.20E-09
C13A	9960	SULFATES	1.21E-01	1.38E-05
C13A	108883	Toluene	1.67E-04	1.91E-08
C26A	106990	1,3-Butadiene	9.11E-03	1.04E-06
C26A	75070	Acetaldehyde	2.31E-02	2.63E-06
C26A	107028	Acrolein	1.32E-02	1.51E-06
C26A	71432	Benzene	9.08E-03	1.04E-06
C26A	7440508	Copper	2.91E-02	3.33E-06
C26A	100414	Ethyl Benzene	9.40E-04	1.07E-07
C26A	50000	Formaldehyde	6.65E-02	7.59E-06
C26A	7782505	Chlorine	9.71E-03	1.11E-06
C26A	1330207	Xylenes	1.52E-03	1.74E-07
C26A	7439965	Manganese	2.47E-03	2.82E-07
C26A	67561	Methanol	9.75E-03	1.11E-06
C26A	91203	Naphthalene	2.92E-03	3.33E-07
C26A	7440020	Nickel	4.96E-03	5.66E-07
C26A	95476	o-Xylene	8.96E-04	1.02E-07
C26A	108952	Phenol	3.92E-03	4.47E-07
C26A	115071	Propylene	2.45E-02	2.79E-06
C26A	100425	Styrene	1.67E-03	1.90E-07
C26A	9960	SULFATES	3.11E+00	3.55E-04
C26A	108883	Toluene	3.47E-03	3.96E-07
C27A	106990	1,3-Butadiene	2.06E-02	2.36E-06
C27A	75070	Acetaldehyde	5.22E-02	5.96E-06
C27A	107028	Acrolein	2.99E-02	3.42E-06
C27A	71432	Benzene	2.06E-02	2.35E-06
C27A	7440508	Copper	4.16E-02	4.75E-06
C27A	100414	Ethyl Benzene	2.13E-03	2.43E-07
C27A	50000	Formaldehyde	1.51E-01	1.72E-05
C27A	7782505	Chlorine	1.39E-02	1.58E-06
C27A	1330207	Xylenes	3.45E-03	3.94E-07
C27A	7439965	Manganese	3.53E-03	4.03E-07
C27A	67561	Methanol	2.21E-02	2.52E-06

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
C27A	91203	Naphthalene	6.62E-03	7.55E-07
C27A	7440020	Nickel	7.08E-03	8.08E-07
C27A	95476	o-Xylene	2.03E-03	2.32E-07
C27A	108952	Phenol	8.88E-03	1.01E-06
C27A	115071	Propylene	5.54E-02	6.33E-06
C27A	100425	Styrene	3.78E-03	4.31E-07
C27A	9960	SULFATES	4.43E+00	5.06E-04
C27A	108883	Toluene	7.85E-03	8.96E-07
A1B	106990	1,3-Butadiene	1.24E+00	1.41E-04
A1B	75070	Acetaldehyde	3.16E+00	3.61E-04
A1B	107028	Acrolein	1.78E+00	2.04E-04
A1B	71432	Benzene	1.25E+00	1.43E-04
A1B	7440508	Copper	1.09E-02	1.24E-06
A1B	100414	Ethyl Benzene	1.27E-01	1.45E-05
A1B	50000	Formaldehyde	9.21E+00	1.05E-03
A1B	7782505	Chlorine	3.62E-03	4.14E-07
A1B	1330207	Xylenes	2.07E-01	2.36E-05
A1B	7439965	Manganese	9.23E-04	1.05E-07
A1B	67561	Methanol	1.22E+00	1.39E-04
A1B	91203	Naphthalene	3.98E-01	4.54E-05
A1B	7440020	Nickel	1.85E-03	2.11E-07
A1B	95476	o-Xylene	1.24E-01	1.41E-05
A1B	108952	Phenol	5.04E-01	5.75E-05
A1B	115071	Propylene	3.35E+00	3.83E-04
A1B	100425	Styrene	2.32E-01	2.65E-05
A1B	9960	SULFATES	1.16E+00	1.32E-04
A1B	108883	Toluene	4.65E-01	5.30E-05
A2B	106990	1,3-Butadiene	4.09E-01	4.67E-05
A2B	75070	Acetaldehyde	1.04E+00	1.19E-04
A2B	107028	Acrolein	5.89E-01	6.72E-05
A2B	71432	Benzene	4.12E-01	4.71E-05
A2B	7440508	Copper	3.68E-03	4.20E-07
A2B	100414	Ethyl Benzene	4.19E-02	4.78E-06
A2B	50000	Formaldehyde	3.04E+00	3.47E-04
A2B	7782505	Chlorine	1.23E-03	1.40E-07
A2B	1330207	Xylenes	6.83E-02	7.80E-06
A2B	7439965	Manganese	3.12E-04	3.56E-08
A2B	67561	Methanol	4.01E-01	4.58E-05
A2B	91203	Naphthalene	1.31E-01	1.50E-05
A2B	7440020	Nickel	6.26E-04	7.15E-08
A2B	95476	o-Xylene	4.08E-02	4.66E-06
A2B	108952	Phenol	1.66E-01	1.90E-05
A2B	115071	Propylene	1.11E+00	1.26E-04
A2B	100425	Styrene	7.67E-02	8.75E-06
A2B	9960	SULFATES	3.92E-01	4.48E-05
A2B	108883	Toluene	1.53E-01	1.75E-05
A15B	106990	1,3-Butadiene	3.65E+00	4.17E-04

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A15B	75070	Acetaldehyde	9.35E+00	1.07E-03
A15B	107028	Acrolein	5.24E+00	5.98E-04
A15B	71432	Benzene	3.71E+00	4.23E-04
A15B	7440508	Copper	3.32E-02	3.79E-06
A15B	100414	Ethyl Benzene	3.73E-01	4.26E-05
A15B	50000	Formaldehyde	2.75E+01	3.14E-03
A15B	7782505	Chlorine	1.11E-02	1.26E-06
A15B	1330207	Xylenes	6.10E-01	6.96E-05
A15B	7439965	Manganese	2.82E-03	3.21E-07
A15B	67561	Methanol	3.40E+00	3.88E-04
A15B	91203	Naphthalene	1.17E+00	1.34E-04
A15B	7440020	Nickel	5.65E-03	6.45E-07
A15B	95476	o-Xylene	3.67E-01	4.19E-05
A15B	108952	Phenol	1.43E+00	1.64E-04
A15B	115071	Propylene	9.93E+00	1.13E-03
A15B	100425	Styrene	6.94E-01	7.92E-05
A15B	9960	SULFATES	3.54E+00	4.04E-04
A15B	108883	Toluene	1.36E+00	1.55E-04
A16B	106990	1,3-Butadiene	4.88E+00	5.57E-04
A16B	75070	Acetaldehyde	1.25E+01	1.43E-03
A16B	107028	Acrolein	6.99E+00	7.98E-04
A16B	71432	Benzene	4.95E+00	5.65E-04
A16B	7440508	Copper	4.41E-02	5.04E-06
A16B	100414	Ethyl Benzene	4.98E-01	5.69E-05
A16B	50000	Formaldehyde	3.67E+01	4.19E-03
A16B	7782505	Chlorine	1.47E-02	1.68E-06
A16B	1330207	Xylenes	8.14E-01	9.29E-05
A16B	7439965	Manganese	3.74E-03	4.27E-07
A16B	67561	Methanol	4.54E+00	5.18E-04
A16B	91203	Naphthalene	1.57E+00	1.79E-04
A16B	7440020	Nickel	7.51E-03	8.57E-07
A16B	95476	o-Xylene	4.90E-01	5.60E-05
A16B	108952	Phenol	1.91E+00	2.18E-04
A16B	115071	Propylene	1.33E+01	1.51E-03
A16B	100425	Styrene	9.27E-01	1.06E-04
A16B	9960	SULFATES	4.71E+00	5.37E-04
A16B	108883	Toluene	1.81E+00	2.07E-04
A17B	106990	1,3-Butadiene	3.66E+00	4.18E-04
A17B	75070	Acetaldehyde	9.37E+00	1.07E-03
A17B	107028	Acrolein	5.24E+00	5.98E-04
A17B	71432	Benzene	3.71E+00	4.24E-04
A17B	7440508	Copper	3.31E-02	3.78E-06
A17B	100414	Ethyl Benzene	3.74E-01	4.26E-05
A17B	50000	Formaldehyde	2.75E+01	3.14E-03
A17B	7782505	Chlorine	1.10E-02	1.26E-06
A17B	1330207	Xylenes	6.11E-01	6.97E-05
A17B	7439965	Manganese	2.81E-03	3.21E-07

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A17B	67561	Methanol	3.40E+00	3.88E-04
A17B	91203	Naphthalene	1.17E+00	1.34E-04
A17B	7440020	Nickel	5.63E-03	6.43E-07
A17B	95476	o-Xylene	3.68E-01	4.20E-05
A17B	108952	Phenol	1.44E+00	1.64E-04
A17B	115071	Propylene	9.94E+00	1.13E-03
A17B	100425	Styrene	6.95E-01	7.93E-05
A17B	9960	SULFATES	3.53E+00	4.03E-04
A17B	108883	Toluene	1.36E+00	1.55E-04
A19B	106990	1,3-Butadiene	4.27E+01	4.87E-03
A19B	75070	Acetaldehyde	1.09E+02	1.25E-02
A19B	107028	Acrolein	6.12E+01	6.98E-03
A19B	71432	Benzene	4.33E+01	4.94E-03
A19B	7440508	Copper	3.86E-01	4.41E-05
A19B	100414	Ethyl Benzene	4.36E+00	4.98E-04
A19B	50000	Formaldehyde	3.21E+02	3.66E-02
A19B	7782505	Chlorine	1.29E-01	1.47E-05
A19B	1330207	Xylenes	7.12E+00	8.13E-04
A19B	7439965	Manganese	3.28E-02	3.74E-06
A19B	67561	Methanol	3.97E+01	4.53E-03
A19B	91203	Naphthalene	1.37E+01	1.56E-03
A19B	7440020	Nickel	6.57E-02	7.50E-06
A19B	95476	o-Xylene	4.29E+00	4.90E-04
A19B	108952	Phenol	1.67E+01	1.91E-03
A19B	115071	Propylene	1.16E+02	1.32E-02
A19B	100425	Styrene	8.11E+00	9.26E-04
A19B	9960	SULFATES	4.12E+01	4.70E-03
A19B	108883	Toluene	1.59E+01	1.81E-03
A20B	106990	1,3-Butadiene	6.08E+00	6.94E-04
A20B	75070	Acetaldehyde	1.56E+01	1.78E-03
A20B	107028	Acrolein	8.72E+00	9.95E-04
A20B	71432	Benzene	6.17E+00	7.05E-04
A20B	7440508	Copper	5.54E-02	6.32E-06
A20B	100414	Ethyl Benzene	6.21E-01	7.09E-05
A20B	50000	Formaldehyde	4.57E+01	5.22E-03
A20B	7782505	Chlorine	1.85E-02	2.11E-06
A20B	1330207	Xylenes	1.02E+00	1.16E-04
A20B	7439965	Manganese	4.70E-03	5.36E-07
A20B	67561	Methanol	5.66E+00	6.46E-04
A20B	91203	Naphthalene	1.95E+00	2.23E-04
A20B	7440020	Nickel	9.43E-03	1.08E-06
A20B	95476	o-Xylene	6.11E-01	6.98E-05
A20B	108952	Phenol	2.39E+00	2.72E-04
A20B	115071	Propylene	1.65E+01	1.89E-03
A20B	100425	Styrene	1.16E+00	1.32E-04
A20B	9960	SULFATES	5.91E+00	6.74E-04
A20B	108883	Toluene	2.26E+00	2.58E-04

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A8B	106990	1,3-Butadiene	1.55E-01	1.77E-05
A8B	75070	Acetaldehyde	4.26E-01	4.87E-05
A8B	107028	Acrolein	2.03E-01	2.32E-05
A8B	71432	Benzene	1.77E-01	2.02E-05
A8B	7440508	Copper	1.43E-04	1.63E-08
A8B	100414	Ethyl Benzene	1.48E-02	1.69E-06
A8B	50000	Formaldehyde	1.40E+00	1.59E-04
A8B	7782505	Chlorine	4.75E-05	5.42E-09
A8B	1330207	Xylenes	2.57E-02	2.93E-06
A8B	7439965	Manganese	1.21E-05	1.38E-09
A8B	67561	Methanol	1.44E-04	1.64E-08
A8B	91203	Naphthalene	5.04E-02	5.75E-06
A8B	7440020	Nickel	2.43E-05	2.77E-09
A8B	95476	o-Xylene	1.78E-02	2.03E-06
A8B	108952	Phenol	2.18E-02	2.48E-06
A8B	115071	Propylene	4.53E-01	5.17E-05
A8B	100425	Styrene	3.65E-02	4.17E-06
A8B	9960	SULFATES	1.52E-02	1.74E-06
A8B	108883	Toluene	4.84E-02	5.52E-06
A11B	106990	1,3-Butadiene	6.69E+00	7.63E-04
A11B	75070	Acetaldehyde	1.84E+01	2.10E-03
A11B	107028	Acrolein	8.77E+00	1.00E-03
A11B	71432	Benzene	7.62E+00	8.70E-04
A11B	7440508	Copper	1.79E-03	2.04E-07
A11B	100414	Ethyl Benzene	6.39E-01	7.29E-05
A11B	50000	Formaldehyde	6.02E+01	6.87E-03
A11B	7782505	Chlorine	5.96E-04	6.80E-08
A11B	1330207	Xylenes	1.11E+00	1.26E-04
A11B	7439965	Manganese	1.52E-04	1.73E-08
A11B	67561	Methanol	2.29E-03	2.61E-07
A11B	91203	Naphthalene	2.17E+00	2.48E-04
A11B	7440020	Nickel	3.04E-04	3.47E-08
A11B	95476	o-Xylene	7.67E-01	8.75E-05
A11B	108952	Phenol	9.38E-01	1.07E-04
A11B	115071	Propylene	1.95E+01	2.23E-03
A11B	100425	Styrene	1.58E+00	1.80E-04
A11B	9960	SULFATES	1.91E-01	2.18E-05
A11B	108883	Toluene	2.09E+00	2.38E-04
A1A	106990	1,3-Butadiene	2.91E+00	3.33E-04
A1A	75070	Acetaldehyde	7.42E+00	8.47E-04
A1A	107028	Acrolein	4.20E+00	4.80E-04
A1A	71432	Benzene	2.93E+00	3.35E-04
A1A	7440508	Copper	1.39E-02	1.59E-06
A1A	100414	Ethyl Benzene	2.99E-01	3.42E-05
A1A	50000	Formaldehyde	2.16E+01	2.46E-03
A1A	7782505	Chlorine	4.64E-03	5.29E-07
A1A	1330207	Xylenes	4.87E-01	5.56E-05

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A1A	7439965	Manganese	1.18E-03	1.35E-07
A1A	67561	Methanol	2.92E+00	3.33E-04
A1A	91203	Naphthalene	9.35E-01	1.07E-04
A1A	7440020	Nickel	2.37E-03	2.70E-07
A1A	95476	o-Xylene	2.90E-01	3.31E-05
A1A	108952	Phenol	1.20E+00	1.37E-04
A1A	115071	Propylene	7.88E+00	8.99E-04
A1A	100425	Styrene	5.44E-01	6.20E-05
A1A	9960	SULFATES	1.48E+00	1.69E-04
A1A	108883	Toluene	1.10E+00	1.25E-04
A2A	106990	1,3-Butadiene	9.68E-01	1.11E-04
A2A	75070	Acetaldehyde	2.46E+00	2.81E-04
A2A	107028	Acrolein	1.40E+00	1.59E-04
A2A	71432	Benzene	9.73E-01	1.11E-04
A2A	7440508	Copper	4.76E-03	5.44E-07
A2A	100414	Ethyl Benzene	9.94E-02	1.13E-05
A2A	50000	Formaldehyde	7.17E+00	8.18E-04
A2A	7782505	Chlorine	1.59E-03	1.81E-07
A2A	1330207	Xylenes	1.62E-01	1.85E-05
A2A	7439965	Manganese	4.04E-04	4.61E-08
A2A	67561	Methanol	9.70E-01	1.11E-04
A2A	91203	Naphthalene	3.11E-01	3.55E-05
A2A	7440020	Nickel	8.11E-04	9.25E-08
A2A	95476	o-Xylene	9.63E-02	1.10E-05
A2A	108952	Phenol	3.99E-01	4.55E-05
A2A	115071	Propylene	2.62E+00	2.99E-04
A2A	100425	Styrene	1.81E-01	2.06E-05
A2A	9960	SULFATES	5.08E-01	5.80E-05
A2A	108883	Toluene	3.64E-01	4.16E-05
A15A	106990	1,3-Butadiene	9.12E+00	1.04E-03
A15A	75070	Acetaldehyde	2.33E+01	2.66E-03
A15A	107028	Acrolein	1.31E+01	1.50E-03
A15A	71432	Benzene	9.22E+00	1.05E-03
A15A	7440508	Copper	4.27E-02	4.88E-06
A15A	100414	Ethyl Benzene	9.34E-01	1.07E-04
A15A	50000	Formaldehyde	6.81E+01	7.77E-03
A15A	7782505	Chlorine	1.42E-02	1.62E-06
A15A	1330207	Xylenes	1.52E+00	1.74E-04
A15A	7439965	Manganese	3.62E-03	4.14E-07
A15A	67561	Methanol	8.83E+00	1.01E-03
A15A	91203	Naphthalene	2.93E+00	3.34E-04
A15A	7440020	Nickel	7.27E-03	8.30E-07
A15A	95476	o-Xylene	9.12E-01	1.04E-04
A15A	108952	Phenol	3.67E+00	4.19E-04
A15A	115071	Propylene	2.47E+01	2.82E-03
A15A	100425	Styrene	1.72E+00	1.96E-04
A15A	9960	SULFATES	4.55E+00	5.20E-04

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A15A	108883	Toluene	3.41E+00	3.90E-04
A16A	106990	1,3-Butadiene	1.22E+01	1.39E-03
A16A	75070	Acetaldehyde	3.11E+01	3.55E-03
A16A	107028	Acrolein	1.75E+01	2.00E-03
A16A	71432	Benzene	1.23E+01	1.41E-03
A16A	7440508	Copper	5.65E-02	6.45E-06
A16A	100414	Ethyl Benzene	1.25E+00	1.43E-04
A16A	50000	Formaldehyde	9.09E+01	1.04E-02
A16A	7782505	Chlorine	1.88E-02	2.15E-06
A16A	1330207	Xylenes	2.04E+00	2.32E-04
A16A	7439965	Manganese	4.79E-03	5.47E-07
A16A	67561	Methanol	1.18E+01	1.35E-03
A16A	91203	Naphthalene	3.91E+00	4.47E-04
A16A	7440020	Nickel	9.62E-03	1.10E-06
A16A	95476	o-Xylene	1.22E+00	1.39E-04
A16A	108952	Phenol	4.91E+00	5.60E-04
A16A	115071	Propylene	3.30E+01	3.77E-03
A16A	100425	Styrene	2.29E+00	2.62E-04
A16A	9960	SULFATES	6.03E+00	6.88E-04
A16A	108883	Toluene	4.56E+00	5.20E-04
A17A	106990	1,3-Butadiene	9.11E+00	1.04E-03
A17A	75070	Acetaldehyde	2.33E+01	2.66E-03
A17A	107028	Acrolein	1.31E+01	1.50E-03
A17A	71432	Benzene	9.21E+00	1.05E-03
A17A	7440508	Copper	4.21E-02	4.80E-06
A17A	100414	Ethyl Benzene	9.33E-01	1.07E-04
A17A	50000	Formaldehyde	6.80E+01	7.76E-03
A17A	7782505	Chlorine	1.40E-02	1.60E-06
A17A	1330207	Xylenes	1.52E+00	1.74E-04
A17A	7439965	Manganese	3.57E-03	4.07E-07
A17A	67561	Methanol	8.82E+00	1.01E-03
A17A	91203	Naphthalene	2.93E+00	3.34E-04
A17A	7440020	Nickel	7.16E-03	8.17E-07
A17A	95476	o-Xylene	9.11E-01	1.04E-04
A17A	108952	Phenol	3.67E+00	4.19E-04
A17A	115071	Propylene	2.47E+01	2.82E-03
A17A	100425	Styrene	1.72E+00	1.96E-04
A17A	9960	SULFATES	4.49E+00	5.12E-04
A17A	108883	Toluene	3.41E+00	3.89E-04
A19A	106990	1,3-Butadiene	1.07E+02	1.22E-02
A19A	75070	Acetaldehyde	2.72E+02	3.11E-02
A19A	107028	Acrolein	1.53E+02	1.75E-02
A19A	71432	Benzene	1.08E+02	1.23E-02
A19A	7440508	Copper	4.88E-01	5.57E-05
A19A	100414	Ethyl Benzene	1.09E+01	1.25E-03
A19A	50000	Formaldehyde	7.95E+02	9.07E-02
A19A	7782505	Chlorine	1.62E-01	1.85E-05

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A19A	1330207	Xylenes	1.78E+01	2.03E-03
A19A	7439965	Manganese	4.14E-02	4.72E-06
A19A	67561	Methanol	1.03E+02	1.18E-02
A19A	91203	Naphthalene	3.42E+01	3.90E-03
A19A	7440020	Nickel	8.30E-02	9.47E-06
A19A	95476	o-Xylene	1.06E+01	1.22E-03
A19A	108952	Phenol	4.29E+01	4.90E-03
A19A	115071	Propylene	2.89E+02	3.30E-02
A19A	100425	Styrene	2.00E+01	2.29E-03
A19A	9960	SULFATES	5.20E+01	5.94E-03
A19A	108883	Toluene	3.98E+01	4.55E-03
A20A	106990	1,3-Butadiene	1.52E+01	1.74E-03
A20A	75070	Acetaldehyde	3.89E+01	4.44E-03
A20A	107028	Acrolein	2.19E+01	2.50E-03
A20A	71432	Benzene	1.54E+01	1.75E-03
A20A	7440508	Copper	6.97E-02	7.95E-06
A20A	100414	Ethyl Benzene	1.56E+00	1.78E-04
A20A	50000	Formaldehyde	1.14E+02	1.30E-02
A20A	7782505	Chlorine	2.32E-02	2.65E-06
A20A	1330207	Xylenes	2.54E+00	2.90E-04
A20A	7439965	Manganese	5.91E-03	6.75E-07
A20A	67561	Methanol	1.47E+01	1.68E-03
A20A	91203	Naphthalene	4.89E+00	5.58E-04
A20A	7440020	Nickel	1.19E-02	1.35E-06
A20A	95476	o-Xylene	1.52E+00	1.74E-04
A20A	108952	Phenol	6.13E+00	7.00E-04
A20A	115071	Propylene	4.12E+01	4.71E-03
A20A	100425	Styrene	2.86E+00	3.27E-04
A20A	9960	SULFATES	7.43E+00	8.48E-04
A20A	108883	Toluene	5.69E+00	6.50E-04
A8A	106990	1,3-Butadiene	2.85E-01	3.25E-05
A8A	75070	Acetaldehyde	7.84E-01	8.95E-05
A8A	107028	Acrolein	3.74E-01	4.27E-05
A8A	71432	Benzene	3.25E-01	3.71E-05
A8A	7440508	Copper	2.21E-04	2.53E-08
A8A	100414	Ethyl Benzene	2.72E-02	3.11E-06
A8A	50000	Formaldehyde	2.57E+00	2.93E-04
A8A	7782505	Chlorine	7.37E-05	8.41E-09
A8A	1330207	Xylenes	4.72E-02	5.39E-06
A8A	7439965	Manganese	1.88E-05	2.14E-09
A8A	67561	Methanol	2.45E-04	2.79E-08
A8A	91203	Naphthalene	9.25E-02	1.06E-05
A8A	7440020	Nickel	3.76E-05	4.30E-09
A8A	95476	o-Xylene	3.27E-02	3.73E-06
A8A	108952	Phenol	4.00E-02	4.56E-06
A8A	115071	Propylene	8.33E-01	9.51E-05
A8A	100425	Styrene	6.71E-02	7.66E-06

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A8A	9960	SULFATES	2.36E-02	2.69E-06
A8A	108883	Toluene	8.89E-02	1.02E-05
A11A	106990	1,3-Butadiene	1.22E+01	1.40E-03
A11A	75070	Acetaldehyde	3.37E+01	3.84E-03
A11A	107028	Acrolein	1.61E+01	1.83E-03
A11A	71432	Benzene	1.40E+01	1.59E-03
A11A	7440508	Copper	2.79E-03	3.18E-07
A11A	100414	Ethyl Benzene	1.17E+00	1.34E-04
A11A	50000	Formaldehyde	1.10E+02	1.26E-02
A11A	7782505	Chlorine	9.29E-04	1.06E-07
A11A	1330207	Xylenes	2.03E+00	2.31E-04
A11A	7439965	Manganese	2.37E-04	2.70E-08
A11A	67561	Methanol	4.02E-03	4.59E-07
A11A	91203	Naphthalene	3.98E+00	4.54E-04
A11A	7440020	Nickel	4.75E-04	5.42E-08
A11A	95476	o-Xylene	1.40E+00	1.60E-04
A11A	108952	Phenol	1.72E+00	1.96E-04
A11A	115071	Propylene	3.58E+01	4.08E-03
A11A	100425	Styrene	2.88E+00	3.29E-04
A11A	9960	SULFATES	2.97E-01	3.39E-05
A11A	108883	Toluene	3.82E+00	4.36E-04
T14A	106990	1,3-Butadiene	1.05E+01	1.19E-03
T14A	75070	Acetaldehyde	2.88E+01	3.29E-03
T14A	107028	Acrolein	1.37E+01	1.57E-03
T14A	71432	Benzene	1.19E+01	1.36E-03
T14A	7440508	Copper	0.00E+00	0.00E+00
T14A	100414	Ethyl Benzene	1.00E+00	1.14E-04
T14A	50000	Formaldehyde	9.43E+01	1.08E-02
T14A	7782505	Chlorine	0.00E+00	0.00E+00
T14A	1330207	Xylenes	1.73E+00	1.98E-04
T14A	7439965	Manganese	0.00E+00	0.00E+00
T14A	67561	Methanol	0.00E+00	0.00E+00
T14A	91203	Naphthalene	3.40E+00	3.88E-04
T14A	7440020	Nickel	0.00E+00	0.00E+00
T14A	95476	o-Xylene	1.20E+00	1.37E-04
T14A	108952	Phenol	1.47E+00	1.67E-04
T14A	115071	Propylene	3.06E+01	3.49E-03
T14A	100425	Styrene	2.47E+00	2.82E-04
T14A	9960	SULFATES	0.00E+00	0.00E+00
T14A	108883	Toluene	3.27E+00	3.73E-04
T10A	106990	1,3-Butadiene	2.14E-01	2.44E-05
T10A	75070	Acetaldehyde	5.88E-01	6.71E-05
T10A	107028	Acrolein	2.80E-01	3.20E-05
T10A	71432	Benzene	2.44E-01	2.78E-05
T10A	7440508	Copper	0.00E+00	0.00E+00
T10A	100414	Ethyl Benzene	2.04E-02	2.33E-06
T10A	50000	Formaldehyde	1.92E+00	2.20E-04

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
T10A	7782505	Chlorine	0.00E+00	0.00E+00
T10A	1330207	Xylenes	3.54E-02	4.04E-06
T10A	7439965	Manganese	0.00E+00	0.00E+00
T10A	67561	Methanol	0.00E+00	0.00E+00
T10A	91203	Naphthalene	6.94E-02	7.92E-06
T10A	7440020	Nickel	0.00E+00	0.00E+00
T10A	95476	o-Xylene	2.45E-02	2.80E-06
T10A	108952	Phenol	2.99E-02	3.42E-06
T10A	115071	Propylene	6.25E-01	7.13E-05
T10A	100425	Styrene	5.03E-02	5.75E-06
T10A	9960	SULFATES	0.00E+00	0.00E+00
T10A	108883	Toluene	6.67E-02	7.61E-06
H1	106990	1,3-Butadiene	1.48E+00	1.69E-04
H1	75070	Acetaldehyde	4.07E+00	4.65E-04
H1	107028	Acrolein	1.94E+00	2.22E-04
H1	71432	Benzene	1.69E+00	1.93E-04
H1	7440508	Copper	0.00E+00	0.00E+00
H1	100414	Ethyl Benzene	1.41E-01	1.61E-05
H1	50000	Formaldehyde	1.33E+01	1.52E-03
H1	7782505	Chlorine	0.00E+00	0.00E+00
H1	1330207	Xylenes	2.45E-01	2.80E-05
H1	7439965	Manganese	0.00E+00	0.00E+00
H1	67561	Methanol	0.00E+00	0.00E+00
H1	91203	Naphthalene	4.81E-01	5.49E-05
H1	7440020	Nickel	0.00E+00	0.00E+00
H1	95476	o-Xylene	1.70E-01	1.94E-05
H1	108952	Phenol	2.07E-01	2.37E-05
H1	115071	Propylene	4.33E+00	4.94E-04
H1	100425	Styrene	3.49E-01	3.98E-05
H1	9960	SULFATES	0.00E+00	0.00E+00
H1	108883	Toluene	4.62E-01	5.27E-05
H2	106990	1,3-Butadiene	1.48E+00	1.69E-04
H2	75070	Acetaldehyde	4.07E+00	4.65E-04
H2	107028	Acrolein	1.94E+00	2.22E-04
H2	71432	Benzene	1.69E+00	1.93E-04
H2	7440508	Copper	0.00E+00	0.00E+00
H2	100414	Ethyl Benzene	1.41E-01	1.61E-05
H2	50000	Formaldehyde	1.33E+01	1.52E-03
H2	7782505	Chlorine	0.00E+00	0.00E+00
H2	1330207	Xylenes	2.45E-01	2.80E-05
H2	7439965	Manganese	0.00E+00	0.00E+00
H2	67561	Methanol	0.00E+00	0.00E+00
H2	91203	Naphthalene	4.81E-01	5.49E-05
H2	7440020	Nickel	0.00E+00	0.00E+00
H2	95476	o-Xylene	1.70E-01	1.94E-05
H2	108952	Phenol	2.07E-01	2.37E-05
H2	115071	Propylene	4.33E+00	4.94E-04

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H2	100425	Styrene	3.49E-01	3.98E-05
H2	9960	SULFATES	0.00E+00	0.00E+00
H2	108883	Toluene	4.62E-01	5.27E-05
H4	106990	1,3-Butadiene	2.09E-02	2.38E-06
H4	75070	Acetaldehyde	5.74E-02	6.55E-06
H4	107028	Acrolein	2.74E-02	3.13E-06
H4	71432	Benzene	2.38E-02	2.72E-06
H4	7440508	Copper	0.00E+00	0.00E+00
H4	100414	Ethyl Benzene	1.99E-03	2.28E-07
H4	50000	Formaldehyde	1.88E-01	2.15E-05
H4	7782505	Chlorine	0.00E+00	0.00E+00
H4	1330207	Xylenes	3.46E-03	3.94E-07
H4	7439965	Manganese	0.00E+00	0.00E+00
H4	67561	Methanol	0.00E+00	0.00E+00
H4	91203	Naphthalene	6.78E-03	7.74E-07
H4	7440020	Nickel	0.00E+00	0.00E+00
H4	95476	o-Xylene	2.39E-03	2.73E-07
H4	108952	Phenol	2.92E-03	3.34E-07
H4	115071	Propylene	6.10E-02	6.96E-06
H4	100425	Styrene	4.92E-03	5.61E-07
H4	9960	SULFATES	0.00E+00	0.00E+00
H4	108883	Toluene	6.51E-03	7.43E-07
B45L	7439921	Lead	0.00E+00	0.00E+00
B46L	7439921	Lead	0.00E+00	0.00E+00
G45L	7439921	Lead	1.51E-02	1.73E-06
G47L	7439921	Lead	1.52E-02	1.74E-06
G48L	7439921	Lead	7.07E-01	8.07E-05
G46L	7439921	Lead	9.40E-01	1.07E-04
C45L	7439921	Lead	0.00E+00	0.00E+00
C47L	7439921	Lead	0.00E+00	0.00E+00
C48L	7439921	Lead	0.00E+00	0.00E+00
C46L	7439921	Lead	0.00E+00	0.00E+00
B45D	7439921	Lead	0.00E+00	0.00E+00
B46D	7439921	Lead	0.00E+00	0.00E+00
G45D	7439921	Lead	8.64E-02	9.86E-06
G47D	7439921	Lead	2.04E-02	2.33E-06
G48D	7439921	Lead	1.65E+00	1.89E-04
G46D	7439921	Lead	1.89E+00	2.16E-04
C45D	7439921	Lead	0.00E+00	0.00E+00
C47D	7439921	Lead	0.00E+00	0.00E+00
C48D	7439921	Lead	0.00E+00	0.00E+00
C46D	7439921	Lead	0.00E+00	0.00E+00
T47D	7439921	Lead	1.07E-02	1.23E-06
T48D	7439921	Lead	5.26E-01	6.01E-05
B4B	7439921	Lead	0.00E+00	0.00E+00
B26B	7439921	Lead	0.00E+00	0.00E+00
H33B	7439921	Lead	6.87E+00	7.84E-04

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
H34B	7439921	Lead	6.86E+00	7.83E-04
H35B	7439921	Lead	6.37E+00	7.27E-04
H36B	7439921	Lead	6.40E+00	7.31E-04
H37B	7439921	Lead	6.85E+00	7.82E-04
H38B	7439921	Lead	6.90E+00	7.88E-04
H39B	7439921	Lead	6.41E+00	7.32E-04
H40B	7439921	Lead	6.34E+00	7.23E-04
H41B	7439921	Lead	3.64E+00	4.16E-04
H42B	7439921	Lead	3.61E+00	4.13E-04
H43B	7439921	Lead	3.64E+00	4.16E-04
H44B	7439921	Lead	3.60E+00	4.10E-04
H45B	7439921	Lead	6.71E+00	7.66E-04
H46B	7439921	Lead	6.80E+00	7.76E-04
G4B	7439921	Lead	3.76E-01	4.30E-05
G9B	7439921	Lead	9.66E-02	1.10E-05
G12B	7439921	Lead	3.57E+00	4.07E-04
G13B	7439921	Lead	3.58E+00	4.09E-04
G27B	7439921	Lead	7.73E+00	8.82E-04
T14D	7439921	Lead	4.45E+01	5.08E-03
T10D	7439921	Lead	8.54E-01	9.75E-05
C4B	7439921	Lead	0.00E+00	0.00E+00
C9B	7439921	Lead	0.00E+00	0.00E+00
C12B	7439921	Lead	0.00E+00	0.00E+00
C13B	7439921	Lead	0.00E+00	0.00E+00
C26B	7439921	Lead	0.00E+00	0.00E+00
C27B	7439921	Lead	0.00E+00	0.00E+00
B4A	7439921	Lead	0.00E+00	0.00E+00
B26A	7439921	Lead	0.00E+00	0.00E+00
G4A	7439921	Lead	7.78E-01	8.88E-05
G9A	7439921	Lead	2.36E-01	2.69E-05
G12A	7439921	Lead	8.60E+00	9.82E-04
G13A	7439921	Lead	8.60E+00	9.82E-04
G27A	7439921	Lead	1.80E+01	2.05E-03
C4A	7439921	Lead	0.00E+00	0.00E+00
C9A	7439921	Lead	0.00E+00	0.00E+00
C12A	7439921	Lead	0.00E+00	0.00E+00
C13A	7439921	Lead	0.00E+00	0.00E+00
C26A	7439921	Lead	0.00E+00	0.00E+00
C27A	7439921	Lead	0.00E+00	0.00E+00
A1B	7439921	Lead	2.07E-01	2.36E-05
A2B	7439921	Lead	6.90E-02	7.88E-06
A15B	7439921	Lead	9.69E-01	1.11E-04
A16B	7439921	Lead	1.29E+00	1.47E-04
A17B	7439921	Lead	9.69E-01	1.11E-04
A19B	7439921	Lead	1.13E+01	1.29E-03
A20B	7439921	Lead	1.62E+00	1.84E-04
A8B	7439921	Lead	3.30E-01	3.77E-05

Table C-3. Emission Rates for Speciated COPC (Alternative 1)
John Wayne Airport General Aviation Improvement Program
Orange County, California

Source Group	Pollutant ID	Pollutant Name	Annual Emissions (lb/year)	Max Hour Emission (lb/hr)
A11B	7439921	Lead	1.47E+01	1.67E-03
A1A	7439921	Lead	3.73E-01	4.26E-05
A2A	7439921	Lead	1.24E-01	1.42E-05
A15A	7439921	Lead	1.74E+00	1.98E-04
A16A	7439921	Lead	2.32E+00	2.65E-04
A17A	7439921	Lead	1.74E+00	1.98E-04
A19A	7439921	Lead	2.03E+01	2.32E-03
A20A	7439921	Lead	2.90E+00	3.31E-04
A8A	7439921	Lead	5.97E-01	6.82E-05
A11A	7439921	Lead	2.64E+01	3.01E-03
T14A	7439921	Lead	2.55E+01	2.91E-03
T10A	7439921	Lead	5.21E-01	5.95E-05
H1	7439921	Lead	2.63E+00	3.01E-04
H2	7439921	Lead	2.63E+00	3.01E-04
H4	7439921	Lead	3.06E+00	3.50E-04

Abbreviations:
COPC - chemicals of potential concern
lb - pound
hr - hour

APPENDIX D
HARP2 MODEL FILES (ELECTRONIC)

The computer output files are available electronically upon request from John Wayne Airport.

Please contact:

Lea Choum
Email: LChoum@OCAir.com
Phone: 949-252-5123

APPENDIX E
HEALTH RISK ASSESSMENT RESULTS

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
1	417450.00	3724450.00	Resident	0.63	0.52	0.53	-0.11	-0.10	3.22E-03	3.84E-03	3.92E-03
2	417450.00	3724700.00	Resident	0.66	0.55	0.56	-0.11	-0.10	3.39E-03	4.05E-03	4.13E-03
3	417450.00	3724950.00	Resident	0.69	0.57	0.58	-0.12	-0.11	3.55E-03	4.24E-03	4.32E-03
4	417450.00	3725200.00	Sensitive	0.71	0.59	0.61	-0.12	-0.11	3.69E-03	4.40E-03	4.49E-03
5	417450.00	3725450.00	Sensitive	0.73	0.61	0.62	-0.12	-0.11	3.78E-03	4.51E-03	4.61E-03
6	417513.72	3724591.85	Sensitive	0.67	0.56	0.57	-0.12	-0.11	3.45E-03	4.12E-03	4.20E-03
7	417617.42	3724864.54	Sensitive	0.77	0.63	0.64	-0.14	-0.13	3.93E-03	4.70E-03	4.79E-03
8	417668.01	3724420.76	Sensitive	0.71	0.59	0.60	-0.13	-0.12	3.64E-03	4.34E-03	4.43E-03
9	417700.00	3724200.00	Sensitive	0.68	0.56	0.57	-0.12	-0.11	3.48E-03	4.15E-03	4.23E-03
10	417700.00	3724450.00	Resident	0.74	0.60	0.61	-0.13	-0.12	3.74E-03	4.46E-03	4.55E-03
11	417700.00	3724700.00	Resident	0.79	0.64	0.66	-0.14	-0.13	4.01E-03	4.79E-03	4.88E-03
12	417700.00	3724900.00	Resident	0.83	0.68	0.69	-0.15	-0.14	4.21E-03	5.03E-03	5.13E-03
13	417700.00	3724950.00	Sensitive	0.84	0.69	0.70	-0.15	-0.14	4.27E-03	5.10E-03	5.20E-03
14	417700.00	3725000.00	Worker	0.29	0.23	0.24	-0.05	-0.05	4.31E-03	5.15E-03	5.26E-03
15	417700.00	3725200.00	Sensitive	0.88	0.73	0.74	-0.16	-0.14	4.52E-03	5.40E-03	5.51E-03
16	417700.00	3725450.00	Sensitive	0.91	0.75	0.77	-0.16	-0.14	4.68E-03	5.60E-03	5.71E-03
17	417700.00	3725700.00	Sensitive	0.93	0.77	0.79	-0.16	-0.15	4.79E-03	5.73E-03	5.84E-03
18	417727.85	3724357.62	Sensitive	0.73	0.59	0.61	-0.13	-0.12	3.70E-03	4.41E-03	4.50E-03
19	417746.00	3724391.00	Sensitive	0.74	0.61	0.62	-0.14	-0.12	3.78E-03	4.51E-03	4.60E-03
20	417753.07	3724308.09	Sensitive	0.73	0.59	0.61	-0.13	-0.12	3.69E-03	4.41E-03	4.50E-03
21	417800.00	3724600.00	Resident	0.83	0.67	0.68	-0.15	-0.14	4.18E-03	4.99E-03	5.09E-03
22	417800.00	3724700.00	Resident	0.85	0.69	0.71	-0.16	-0.15	4.31E-03	5.14E-03	5.25E-03
23	417800.00	3724800.00	Resident	0.88	0.71	0.73	-0.16	-0.15	4.44E-03	5.30E-03	5.41E-03
24	417800.00	3724900.00	Resident	0.90	0.73	0.75	-0.17	-0.15	4.56E-03	5.45E-03	5.56E-03
25	417800.00	3725000.00	Resident	0.93	0.76	0.77	-0.17	-0.16	4.71E-03	5.63E-03	5.74E-03
26	417800.00	3725100.00	Worker	0.32	0.26	0.27	-0.06	-0.05	4.84E-03	5.79E-03	5.91E-03
27	417800.00	3725200.00	Worker	0.33	0.27	0.27	-0.06	-0.06	4.94E-03	5.91E-03	6.03E-03
28	417900.00	3724600.00	Resident	0.90	0.73	0.74	-0.17	-0.16	4.52E-03	5.40E-03	5.51E-03
29	417900.00	3724700.00	Resident	0.92	0.75	0.76	-0.18	-0.16	4.64E-03	5.54E-03	5.66E-03
30	417900.00	3724800.00	Resident	0.96	0.77	0.79	-0.18	-0.17	4.82E-03	5.76E-03	5.87E-03
31	417900.00	3724900.00	Resident	0.99	0.80	0.81	-0.19	-0.17	4.97E-03	5.94E-03	6.06E-03
32	417900.00	3725000.00	Resident	1.02	0.83	0.84	-0.19	-0.18	5.16E-03	6.17E-03	6.29E-03
33	417900.00	3725100.00	Resident	1.05	0.85	0.87	-0.20	-0.18	5.31E-03	6.34E-03	6.47E-03
34	417900.00	3725200.00	Sensitive	1.08	0.87	0.89	-0.20	-0.19	5.44E-03	6.50E-03	6.63E-03
35	417900.00	3725300.00	Worker	0.37	0.30	0.30	-0.07	-0.06	5.50E-03	6.58E-03	6.71E-03
36	417900.00	3725400.00	Worker	0.38	0.31	0.31	-0.07	-0.06	5.65E-03	6.76E-03	6.90E-03
37	417902.00	3724079.00	Sensitive	0.71	0.58	0.59	-0.13	-0.12	3.62E-03	4.31E-03	4.40E-03
38	417950.00	3724200.00	Worker	0.26	0.21	0.22	-0.05	-0.04	3.91E-03	4.66E-03	4.76E-03
39	417950.00	3724450.00	Resident	0.87	0.70	0.72	-0.16	-0.15	4.37E-03	5.22E-03	5.32E-03
40	417950.00	3725450.00	Sensitive	1.19	0.97	0.98	-0.22	-0.21	6.01E-03	7.19E-03	7.33E-03
41	417950.00	3725700.00	Worker	0.41	0.33	0.33	-0.08	-0.07	6.01E-03	7.19E-03	7.34E-03
42	417950.00	3725950.00	Worker	0.43	0.35	0.35	-0.08	-0.08	6.38E-03	7.63E-03	7.79E-03
43	417950.00	3726200.00	Worker	0.43	0.35	0.36	-0.08	-0.08	6.44E-03	7.71E-03	7.87E-03
44	417950.00	3726450.00	Worker	0.43	0.35	0.36	-0.08	-0.07	6.50E-03	7.79E-03	7.94E-03
45	418000.00	3724500.00	Resident	0.91	0.73	0.75	-0.17	-0.16	4.55E-03	5.44E-03	5.55E-03
46	418000.00	3724600.00	Resident	0.94	0.75	0.77	-0.18	-0.17	4.69E-03	5.60E-03	5.71E-03
47	418000.00	3724700.00	Resident	1.01	0.81	0.82	-0.20	-0.18	5.04E-03	6.02E-03	6.14E-03

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
48	418000.00	3724800.00	Resident	1.05	0.84	0.86	-0.21	-0.19	5.25E-03	6.27E-03	6.39E-03
49	418000.00	3724900.00	Resident	1.09	0.87	0.89	-0.21	-0.20	5.44E-03	6.50E-03	6.63E-03
50	418000.00	3725000.00	Resident	1.13	0.91	0.92	-0.22	-0.20	5.65E-03	6.76E-03	6.89E-03
51	418000.00	3725100.00	Resident	1.17	0.94	0.96	-0.23	-0.21	5.84E-03	6.98E-03	7.12E-03
52	418000.00	3725200.00	Resident	1.20	0.97	0.98	-0.23	-0.21	6.01E-03	7.19E-03	7.34E-03
53	418000.00	3725300.00	Sensitive	1.21	0.98	1.00	-0.23	-0.22	6.09E-03	7.28E-03	7.43E-03
54	418000.00	3725400.00	Sensitive	1.25	1.01	1.03	-0.24	-0.22	6.29E-03	7.53E-03	7.68E-03
55	418000.00	3725500.00	Worker	0.43	0.35	0.35	-0.08	-0.08	6.40E-03	7.66E-03	7.82E-03
56	418100.00	3724400.00	Worker	0.30	0.24	0.25	-0.06	-0.06	4.50E-03	5.37E-03	5.48E-03
57	418100.00	3724500.00	Sensitive	0.96	0.77	0.78	-0.19	-0.17	4.78E-03	5.71E-03	5.83E-03
58	418100.00	3724600.00	Sensitive	1.02	0.81	0.83	-0.20	-0.19	5.06E-03	6.05E-03	6.17E-03
59	418100.00	3724700.00	Sensitive	1.06	0.85	0.86	-0.21	-0.20	5.28E-03	6.31E-03	6.44E-03
60	418100.00	3724800.00	Resident	1.14	0.91	0.93	-0.23	-0.21	5.68E-03	6.78E-03	6.92E-03
61	418100.00	3724900.00	Resident	1.20	0.95	0.97	-0.24	-0.23	5.94E-03	7.10E-03	7.25E-03
62	418100.00	3725000.00	Resident	1.25	1.00	1.02	-0.26	-0.24	6.21E-03	7.42E-03	7.57E-03
63	418100.00	3725100.00	Resident	1.30	1.04	1.06	-0.27	-0.25	6.46E-03	7.72E-03	7.88E-03
64	418100.00	3725200.00	Resident	1.35	1.07	1.10	-0.27	-0.25	6.69E-03	8.00E-03	8.17E-03
65	418100.00	3725300.00	Resident	1.37	1.10	1.12	-0.28	-0.26	6.82E-03	8.16E-03	8.32E-03
66	418100.00	3725400.00	Worker	0.48	0.38	0.39	-0.10	-0.09	7.01E-03	8.39E-03	8.56E-03
67	418100.00	3725500.00	Worker	0.49	0.39	0.40	-0.10	-0.09	7.22E-03	8.65E-03	8.82E-03
68	418100.00	3725600.00	Worker	0.50	0.40	0.41	-0.10	-0.10	7.36E-03	8.81E-03	8.99E-03
69	418100.00	3725700.00	Worker	0.51	0.41	0.41	-0.11	-0.10	7.48E-03	8.95E-03	9.13E-03
70	418103.18	3725420.16	Sensitive	1.42	1.13	1.16	-0.29	-0.26	7.05E-03	8.44E-03	8.61E-03
71	418200.00	3723950.00	Sensitive	0.71	0.58	0.59	-0.13	-0.12	3.59E-03	4.27E-03	4.36E-03
72	418200.00	3724200.00	Resident	0.84	0.68	0.69	-0.16	-0.15	4.20E-03	5.01E-03	5.11E-03
73	418200.00	3724300.00	Resident	0.89	0.71	0.73	-0.17	-0.16	4.45E-03	5.30E-03	5.41E-03
74	418200.00	3724400.00	Worker	0.32	0.25	0.26	-0.06	-0.06	4.68E-03	5.58E-03	5.70E-03
75	418200.00	3724500.00	Sensitive	1.02	0.82	0.83	-0.20	-0.19	5.08E-03	6.07E-03	6.19E-03
76	418200.00	3724600.00	Sensitive	1.09	0.87	0.89	-0.22	-0.20	5.41E-03	6.47E-03	6.60E-03
77	418200.00	3724700.00	Sensitive	1.15	0.91	0.93	-0.24	-0.22	5.66E-03	6.76E-03	6.89E-03
78	418200.00	3724800.00	Worker	0.42	0.33	0.33	-0.09	-0.08	6.05E-03	7.22E-03	7.37E-03
79	418200.00	3724900.00	Resident	1.32	1.04	1.06	-0.28	-0.26	6.47E-03	7.74E-03	7.89E-03
80	418200.00	3725000.00	Resident	1.39	1.10	1.12	-0.30	-0.28	6.83E-03	8.16E-03	8.33E-03
81	418200.00	3725100.00	Resident	1.46	1.15	1.17	-0.31	-0.29	7.17E-03	8.57E-03	8.75E-03
82	418200.00	3725200.00	Resident	1.53	1.20	1.23	-0.32	-0.30	7.50E-03	8.97E-03	9.15E-03
83	418200.00	3725300.00	Resident	1.57	1.24	1.26	-0.33	-0.31	7.71E-03	9.22E-03	9.41E-03
84	418200.00	3725400.00	Worker	0.55	0.43	0.44	-0.12	-0.11	7.99E-03	9.56E-03	9.76E-03
85	418200.00	3725500.00	Worker	0.57	0.45	0.46	-0.12	-0.11	8.25E-03	9.87E-03	1.01E-02
86	418200.00	3725600.00	Worker	0.59	0.46	0.47	-0.13	-0.12	8.44E-03	1.01E-02	1.03E-02
87	418200.00	3725700.00	Worker	0.60	0.47	0.48	-0.13	-0.12	8.60E-03	1.03E-02	1.05E-02
88	418200.00	3725800.00	Worker	0.61	0.48	0.49	-0.13	-0.12	8.74E-03	1.05E-02	1.07E-02
89	418200.00	3725900.00	Worker	0.62	0.48	0.49	-0.13	-0.12	8.89E-03	1.06E-02	1.09E-02
90	418200.00	3725950.00	Worker	0.62	0.49	0.49	-0.13	-0.12	8.90E-03	1.07E-02	1.09E-02
91	418200.00	3726000.00	Worker	0.62	0.49	0.50	-0.13	-0.12	8.96E-03	1.07E-02	1.09E-02
92	418200.00	3726100.00	Worker	0.62	0.49	0.50	-0.13	-0.12	9.01E-03	1.08E-02	1.10E-02
93	418200.00	3726200.00	Worker	0.62	0.49	0.50	-0.12	-0.11	9.04E-03	1.08E-02	1.11E-02
94	418200.00	3726300.00	Worker	0.61	0.49	0.50	-0.12	-0.11	9.00E-03	1.08E-02	1.10E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
95	418200.00	3726450.00	Worker	0.59	0.48	0.49	-0.11	-0.10	8.82E-03	1.06E-02	1.08E-02
96	418200.00	3726700.00	Worker	0.55	0.45	0.46	-0.10	-0.09	8.36E-03	1.00E-02	1.02E-02
97	418200.00	3726950.00	Resident	1.51	1.26	1.29	-0.25	-0.23	7.86E-03	9.42E-03	9.61E-03
98	418274.62	3725141.19	Sensitive	1.64	1.28	1.30	-0.36	-0.34	7.95E-03	9.51E-03	9.70E-03
99	418300.00	3724300.00	Resident	0.91	0.73	0.74	-0.18	-0.17	4.54E-03	5.41E-03	5.52E-03
100	418300.00	3724400.00	Sensitive	0.98	0.78	0.80	-0.20	-0.18	4.86E-03	5.80E-03	5.92E-03
101	418300.00	3724500.00	Worker	0.36	0.29	0.29	-0.07	-0.07	5.30E-03	6.33E-03	6.46E-03
102	418300.00	3724600.00	Sensitive	1.15	0.91	0.93	-0.24	-0.22	5.66E-03	6.75E-03	6.89E-03
103	418300.00	3724700.00	Sensitive	1.23	0.97	0.99	-0.26	-0.24	6.04E-03	7.21E-03	7.36E-03
104	418300.00	3724800.00	Sensitive	1.32	1.04	1.06	-0.28	-0.26	6.47E-03	7.73E-03	7.88E-03
105	418300.00	3724900.00	Worker	0.49	0.38	0.39	-0.11	-0.10	6.97E-03	8.33E-03	8.50E-03
106	418300.00	3725000.00	Worker	0.53	0.41	0.42	-0.12	-0.11	7.51E-03	8.97E-03	9.16E-03
107	418300.00	3725100.00	Resident	1.65	1.28	1.31	-0.37	-0.35	7.99E-03	9.56E-03	9.75E-03
108	418300.00	3725200.00	Resident	1.75	1.36	1.38	-0.39	-0.37	8.46E-03	1.01E-02	1.03E-02
109	418300.00	3725300.00	Resident	1.77	1.37	1.40	-0.40	-0.38	8.52E-03	1.02E-02	1.04E-02
110	418300.00	3725400.00	Worker	0.65	0.50	0.51	-0.15	-0.14	9.25E-03	1.11E-02	1.13E-02
111	418300.00	3725500.00	Worker	0.68	0.52	0.53	-0.15	-0.14	9.58E-03	1.15E-02	1.17E-02
112	418300.00	3725600.00	Worker	0.69	0.53	0.54	-0.16	-0.15	9.79E-03	1.17E-02	1.20E-02
113	418300.00	3725700.00	Worker	0.71	0.54	0.56	-0.16	-0.15	9.98E-03	1.19E-02	1.22E-02
114	418300.00	3725800.00	Worker	0.73	0.56	0.57	-0.17	-0.15	1.03E-02	1.23E-02	1.26E-02
115	418300.00	3725900.00	Worker	0.73	0.57	0.58	-0.16	-0.15	1.04E-02	1.25E-02	1.28E-02
116	418300.00	3726000.00	Worker	0.73	0.57	0.59	-0.16	-0.15	1.05E-02	1.26E-02	1.29E-02
117	418300.00	3726100.00	Worker	0.73	0.58	0.59	-0.15	-0.14	1.06E-02	1.26E-02	1.29E-02
118	418300.00	3726200.00	Sensitive	2.13	1.69	1.73	-0.43	-0.40	1.05E-02	1.26E-02	1.29E-02
119	418300.00	3726300.00	Worker	0.71	0.57	0.58	-0.14	-0.13	1.04E-02	1.25E-02	1.27E-02
120	418300.00	3726400.00	Worker	0.69	0.56	0.57	-0.14	-0.13	1.02E-02	1.23E-02	1.25E-02
121	418304.91	3724964.72	Worker	0.51	0.40	0.41	-0.11	-0.11	7.34E-03	8.77E-03	8.95E-03
122	418337.69	3725042.43	Worker	0.57	0.44	0.44	-0.13	-0.12	8.00E-03	9.57E-03	9.76E-03
123	418346.37	3726332.45	Sensitive	2.23	1.79	1.82	-0.45	-0.41	1.11E-02	1.33E-02	1.36E-02
124	418382.08	3724901.12	Worker	0.51	0.40	0.40	-0.12	-0.11	7.27E-03	8.69E-03	8.87E-03
125	418396.29	3725123.47	Worker	0.65	0.49	0.50	-0.15	-0.15	9.01E-03	1.08E-02	1.10E-02
126	418400.00	3724200.00	Worker	0.29	0.23	0.24	-0.06	-0.05	4.31E-03	5.14E-03	5.25E-03
127	418400.00	3724300.00	Sensitive	0.93	0.74	0.75	-0.19	-0.17	4.61E-03	5.49E-03	5.60E-03
128	418400.00	3724400.00	Worker	0.34	0.27	0.28	-0.07	-0.07	5.06E-03	6.03E-03	6.15E-03
129	418400.00	3724500.00	Worker	0.37	0.30	0.30	-0.08	-0.07	5.46E-03	6.52E-03	6.65E-03
130	418400.00	3724600.00	Worker	0.41	0.32	0.33	-0.09	-0.08	5.91E-03	7.05E-03	7.20E-03
131	418400.00	3724700.00	Sensitive	1.30	1.02	1.04	-0.28	-0.26	6.37E-03	7.61E-03	7.76E-03
132	418400.00	3724800.00	Sensitive	1.42	1.11	1.13	-0.31	-0.29	6.88E-03	8.22E-03	8.38E-03
133	418400.00	3725200.00	Resident	2.02	1.53	1.56	-0.49	-0.46	9.54E-03	1.14E-02	1.16E-02
134	418400.00	3725300.00	Worker	0.73	0.55	0.56	-0.18	-0.17	1.01E-02	1.21E-02	1.23E-02
135	418400.00	3725400.00	Worker	0.79	0.59	0.60	-0.19	-0.18	1.08E-02	1.29E-02	1.32E-02
136	418400.00	3725500.00	Worker	0.82	0.61	0.63	-0.20	-0.19	1.12E-02	1.34E-02	1.37E-02
137	418400.00	3725600.00	Worker	0.86	0.65	0.66	-0.21	-0.20	1.18E-02	1.41E-02	1.44E-02
138	418400.00	3725700.00	Sensitive	2.58	1.95	1.98	-0.63	-0.59	1.21E-02	1.45E-02	1.48E-02
139	418400.00	3725800.00	Worker	0.89	0.68	0.69	-0.21	-0.20	1.24E-02	1.48E-02	1.51E-02
140	418400.00	3725900.00	Worker	0.89	0.69	0.70	-0.21	-0.19	1.25E-02	1.50E-02	1.53E-02
141	418400.00	3726000.00	Worker	0.89	0.69	0.70	-0.20	-0.19	1.26E-02	1.51E-02	1.54E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
142	418400.00	3726100.00	Worker	0.88	0.69	0.70	-0.19	-0.18	1.26E-02	1.51E-02	1.54E-02
143	418400.00	3726200.00	Sensitive	2.54	2.01	2.04	-0.54	-0.50	1.25E-02	1.50E-02	1.53E-02
144	418400.00	3726300.00	Sensitive	2.47	1.96	2.00	-0.51	-0.47	1.22E-02	1.47E-02	1.50E-02
145	418400.00	3726400.00	Worker	0.81	0.65	0.66	-0.17	-0.15	1.19E-02	1.43E-02	1.46E-02
146	418404.79	3724853.18	Sensitive	1.48	1.15	1.17	-0.33	-0.31	7.16E-03	8.55E-03	8.72E-03
147	418406.74	3725692.79	Sensitive	2.61	1.97	2.01	-0.64	-0.61	1.22E-02	1.46E-02	1.49E-02
148	418450.00	3723950.00	Sensitive	0.72	0.58	0.59	-0.13	-0.12	3.62E-03	4.31E-03	4.40E-03
149	418450.00	3724200.00	Resident	0.87	0.70	0.71	-0.17	-0.16	4.34E-03	5.17E-03	5.27E-03
150	418450.00	3726450.00	Worker	0.87	0.69	0.71	-0.18	-0.16	1.27E-02	1.52E-02	1.56E-02
151	418450.00	3726700.00	Worker	0.78	0.63	0.64	-0.15	-0.13	1.16E-02	1.39E-02	1.42E-02
152	418450.00	3726950.00	Worker	0.68	0.56	0.57	-0.12	-0.11	1.03E-02	1.24E-02	1.26E-02
153	418450.00	3727200.00	Resident	1.79	1.52	1.55	-0.27	-0.24	9.48E-03	1.14E-02	1.16E-02
154	418450.00	3727450.00	Resident	1.55	1.35	1.37	-0.20	-0.18	8.44E-03	1.01E-02	1.03E-02
155	418454.89	3725204.50	Worker	0.75	0.56	0.57	-0.19	-0.18	1.03E-02	1.23E-02	1.25E-02
156	418459.25	3724837.52	Worker	0.52	0.40	0.41	-0.12	-0.11	7.33E-03	8.75E-03	8.93E-03
157	418500.00	3724200.00	Worker	0.29	0.24	0.24	-0.06	-0.05	4.35E-03	5.18E-03	5.29E-03
158	418500.00	3724300.00	Resident	0.95	0.76	0.77	-0.19	-0.18	4.71E-03	5.61E-03	5.73E-03
159	418500.00	3724400.00	Worker	0.35	0.28	0.28	-0.07	-0.07	5.12E-03	6.10E-03	6.23E-03
160	418500.00	3724500.00	Worker	0.38	0.30	0.31	-0.08	-0.08	5.57E-03	6.64E-03	6.78E-03
161	418500.00	3724600.00	Worker	0.42	0.33	0.34	-0.09	-0.09	6.07E-03	7.24E-03	7.39E-03
162	418500.00	3724700.00	Worker	0.46	0.36	0.37	-0.10	-0.10	6.64E-03	7.92E-03	8.08E-03
163	418500.00	3724800.00	Sensitive	1.51	1.17	1.19	-0.34	-0.32	7.30E-03	8.71E-03	8.89E-03
164	418500.00	3725300.00	Worker	0.90	0.65	0.67	-0.25	-0.24	1.19E-02	1.42E-02	1.45E-02
165	418500.00	3725400.00	Worker	0.99	0.71	0.72	-0.28	-0.27	1.29E-02	1.54E-02	1.58E-02
166	418500.00	3725500.00	Worker	1.08	0.77	0.79	-0.31	-0.29	1.41E-02	1.68E-02	1.71E-02
167	418500.00	3725600.00	Worker	1.11	0.80	0.82	-0.31	-0.29	1.46E-02	1.75E-02	1.78E-02
168	418500.00	3725700.00	Worker	1.12	0.82	0.84	-0.30	-0.29	1.50E-02	1.79E-02	1.83E-02
169	418500.00	3725800.00	Worker	1.13	0.84	0.85	-0.29	-0.28	1.53E-02	1.83E-02	1.87E-02
170	418500.00	3725900.00	Worker	1.13	0.85	0.87	-0.28	-0.26	1.55E-02	1.85E-02	1.89E-02
171	418500.00	3726000.00	Worker	1.12	0.85	0.87	-0.27	-0.25	1.55E-02	1.86E-02	1.90E-02
172	418500.00	3726100.00	Worker	1.10	0.84	0.86	-0.25	-0.24	1.54E-02	1.84E-02	1.88E-02
173	418500.00	3726200.00	Worker	1.06	0.82	0.84	-0.24	-0.22	1.50E-02	1.80E-02	1.84E-02
174	418500.00	3726300.00	Worker	1.02	0.80	0.81	-0.22	-0.21	1.46E-02	1.75E-02	1.79E-02
175	418500.00	3726400.00	Worker	0.97	0.77	0.78	-0.20	-0.19	1.41E-02	1.69E-02	1.72E-02
176	418500.00	3726500.00	Worker	0.93	0.74	0.75	-0.19	-0.17	1.36E-02	1.63E-02	1.66E-02
177	418500.00	3726600.00	Worker	0.88	0.71	0.72	-0.17	-0.16	1.30E-02	1.56E-02	1.59E-02
178	418500.00	3726700.00	Worker	0.84	0.68	0.69	-0.16	-0.15	1.25E-02	1.50E-02	1.53E-02
179	418500.00	3726800.00	Worker	0.80	0.65	0.66	-0.15	-0.14	1.20E-02	1.44E-02	1.47E-02
180	418531.66	3727407.45	Sensitive	1.72	1.49	1.52	-0.23	-0.20	9.36E-03	1.12E-02	1.15E-02
181	418535.50	3725255.47	Worker	0.92	0.66	0.67	-0.26	-0.25	1.20E-02	1.44E-02	1.47E-02
182	418536.42	3724773.91	Worker	0.51	0.39	0.40	-0.12	-0.11	7.23E-03	8.63E-03	8.81E-03
183	418589.03	3725210.09	Worker	0.92	0.66	0.68	-0.26	-0.24	1.21E-02	1.44E-02	1.47E-02
184	418600.00	3724200.00	Resident	0.86	0.69	0.70	-0.17	-0.16	4.28E-03	5.10E-03	5.20E-03
185	418600.00	3724300.00	Resident	0.94	0.75	0.76	-0.19	-0.18	4.66E-03	5.55E-03	5.67E-03
186	418600.00	3724400.00	Worker	0.35	0.28	0.28	-0.07	-0.07	5.13E-03	6.11E-03	6.23E-03
187	418600.00	3724500.00	Worker	0.39	0.30	0.31	-0.08	-0.08	5.61E-03	6.69E-03	6.82E-03
188	418600.00	3724600.00	Worker	0.43	0.33	0.34	-0.10	-0.09	6.16E-03	7.34E-03	7.49E-03

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
189	418600.00	3724700.00	Worker	0.48	0.37	0.38	-0.11	-0.10	6.82E-03	8.14E-03	8.31E-03
190	418600.00	3725300.00	Worker	1.16	0.79	0.80	-0.37	-0.36	1.43E-02	1.70E-02	1.74E-02
191	418600.00	3725400.00	Worker	1.79	1.07	1.09	-0.72	-0.70	1.92E-02	2.28E-02	2.33E-02
192	418600.00	3725500.00	Worker	1.64	1.06	1.08	-0.59	-0.57	1.91E-02	2.27E-02	2.32E-02
193	418600.00	3725600.00	Worker	1.56	1.06	1.08	-0.50	-0.48	1.92E-02	2.29E-02	2.34E-02
194	418600.00	3725700.00	Worker	1.54	1.08	1.10	-0.46	-0.44	1.95E-02	2.33E-02	2.38E-02
195	418600.00	3725800.00	Worker	1.52	1.09	1.12	-0.43	-0.41	1.99E-02	2.38E-02	2.42E-02
196	418600.00	3725900.00	Worker	1.51	1.11	1.13	-0.41	-0.39	2.01E-02	2.41E-02	2.46E-02
197	418600.00	3726000.00	Worker	1.47	1.09	1.11	-0.38	-0.36	1.99E-02	2.38E-02	2.43E-02
198	418600.00	3726100.00	Worker	1.41	1.06	1.08	-0.35	-0.33	1.94E-02	2.32E-02	2.37E-02
199	418600.00	3726200.00	Worker	1.34	1.02	1.04	-0.32	-0.30	1.86E-02	2.23E-02	2.28E-02
200	418600.00	3726300.00	Worker	1.26	0.97	0.99	-0.29	-0.27	1.78E-02	2.13E-02	2.18E-02
201	418600.00	3726400.00	Worker	1.19	0.92	0.94	-0.26	-0.24	1.69E-02	2.03E-02	2.07E-02
202	418600.00	3726500.00	Sensitive	3.28	2.60	2.65	-0.68	-0.63	1.62E-02	1.94E-02	1.98E-02
203	418600.00	3726600.00	Worker	1.05	0.84	0.85	-0.21	-0.20	1.54E-02	1.84E-02	1.88E-02
204	418600.00	3726700.00	Worker	0.99	0.80	0.81	-0.20	-0.18	1.47E-02	1.76E-02	1.79E-02
205	418600.00	3726800.00	Worker	0.94	0.76	0.77	-0.18	-0.17	1.40E-02	1.68E-02	1.71E-02
206	418600.00	3726900.00	Worker	0.88	0.72	0.73	-0.16	-0.15	1.33E-02	1.59E-02	1.62E-02
207	418600.00	3727000.00	Sensitive	2.44	2.01	2.05	-0.42	-0.38	1.26E-02	1.51E-02	1.54E-02
208	418606.21	3724774.88	Worker	0.53	0.40	0.41	-0.12	-0.12	7.41E-03	8.84E-03	9.02E-03
209	418634.18	3727035.12	Sensitive	2.50	2.07	2.11	-0.43	-0.39	1.29E-02	1.55E-02	1.58E-02
210	418635.78	3727013.05	Sensitive	2.54	2.10	2.14	-0.44	-0.40	1.31E-02	1.57E-02	1.61E-02
211	418637.00	3726515.00	Sensitive	3.50	2.76	2.82	-0.74	-0.69	1.72E-02	2.06E-02	2.11E-02
212	418652.30	3725435.84	Worker	5.67	2.57	2.62	-3.10	-3.05	4.44E-02	5.21E-02	5.33E-02
213	418657.24	3725363.28	Worker	2.74	1.44	1.47	-1.30	-1.27	2.54E-02	3.01E-02	3.07E-02
214	418665.32	3725145.44	Worker	0.90	0.65	0.67	-0.25	-0.23	1.19E-02	1.43E-02	1.45E-02
215	418667.04	3724854.26	Worker	0.60	0.45	0.46	-0.15	-0.14	8.24E-03	9.84E-03	1.00E-02
216	418700.00	3723950.00	Resident	0.69	0.56	0.57	-0.13	-0.12	3.48E-03	4.13E-03	4.22E-03
217	418700.00	3724200.00	Resident	0.85	0.68	0.70	-0.17	-0.16	4.24E-03	5.04E-03	5.14E-03
218	418700.00	3724300.00	Resident	0.93	0.74	0.76	-0.19	-0.18	4.62E-03	5.50E-03	5.61E-03
219	418700.00	3724400.00	Worker	0.35	0.28	0.28	-0.07	-0.07	5.09E-03	6.06E-03	6.18E-03
220	418700.00	3724500.00	Worker	0.39	0.30	0.31	-0.09	-0.08	5.61E-03	6.69E-03	6.82E-03
221	418700.00	3724600.00	Worker	0.44	0.34	0.34	-0.10	-0.09	6.21E-03	7.41E-03	7.56E-03
222	418700.00	3724700.00	Worker	0.49	0.38	0.38	-0.12	-0.11	6.93E-03	8.26E-03	8.43E-03
223	418700.00	3724800.00	Worker	0.56	0.42	0.43	-0.14	-0.13	7.79E-03	9.29E-03	9.48E-03
224	418700.00	3725200.00	Worker	1.02	0.73	0.74	-0.30	-0.28	1.32E-02	1.58E-02	1.61E-02
225	418700.00	3725300.00	Worker	1.33	0.90	0.92	-0.44	-0.42	1.63E-02	1.94E-02	1.98E-02
226	418700.00	3725600.00	Worker	2.88	1.69	1.72	-1.19	-1.16	3.01E-02	3.57E-02	3.65E-02
227	418700.00	3725700.00	Worker	2.41	1.57	1.60	-0.84	-0.81	2.82E-02	3.37E-02	3.44E-02
228	418700.00	3725800.00	Worker	2.33	1.58	1.61	-0.75	-0.72	2.85E-02	3.40E-02	3.47E-02
229	418700.00	3725900.00	Worker	2.30	1.58	1.61	-0.71	-0.68	2.85E-02	3.41E-02	3.48E-02
230	418700.00	3726000.00	Worker	2.17	1.52	1.55	-0.65	-0.62	2.75E-02	3.28E-02	3.35E-02
231	418700.00	3726100.00	Worker	1.95	1.41	1.44	-0.54	-0.51	2.57E-02	3.07E-02	3.14E-02
232	418700.00	3726200.00	Worker	1.77	1.31	1.34	-0.46	-0.43	2.39E-02	2.87E-02	2.93E-02
233	418700.00	3726300.00	Worker	1.63	1.23	1.25	-0.40	-0.37	2.24E-02	2.69E-02	2.75E-02
234	418700.00	3726400.00	Worker	1.50	1.15	1.17	-0.35	-0.33	2.11E-02	2.53E-02	2.58E-02
235	418700.00	3726500.00	Sensitive	4.07	3.18	3.24	-0.90	-0.84	1.98E-02	2.37E-02	2.42E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
236	418700.00	3726600.00	Sensitive	3.78	2.98	3.04	-0.80	-0.75	1.86E-02	2.23E-02	2.27E-02
237	418700.00	3726700.00	Worker	1.20	0.95	0.97	-0.25	-0.23	1.75E-02	2.10E-02	2.14E-02
238	418700.00	3726800.00	Worker	1.12	0.90	0.91	-0.23	-0.21	1.65E-02	1.98E-02	2.02E-02
239	418700.00	3726900.00	Worker	1.04	0.84	0.86	-0.20	-0.18	1.55E-02	1.86E-02	1.90E-02
240	418700.00	3726950.00	Worker	1.00	0.82	0.83	-0.19	-0.17	1.50E-02	1.81E-02	1.84E-02
241	418700.00	3727000.00	Worker	0.96	0.79	0.80	-0.17	-0.16	1.45E-02	1.75E-02	1.78E-02
242	418700.00	3727100.00	Worker	0.89	0.74	0.75	-0.15	-0.13	1.37E-02	1.64E-02	1.67E-02
243	418700.00	3727200.00	Worker	0.82	0.69	0.71	-0.12	-0.11	1.28E-02	1.54E-02	1.57E-02
244	418700.00	3727450.00	Resident	2.01	1.76	1.79	-0.25	-0.22	1.10E-02	1.32E-02	1.35E-02
245	418700.00	3727700.00	Resident	1.69	1.50	1.53	-0.19	-0.16	9.45E-03	1.13E-02	1.16E-02
246	418713.20	3725515.12	Worker	7.22	3.26	3.32	-3.96	-3.90	5.63E-02	6.60E-02	6.76E-02
247	418727.87	3724933.63	Worker	0.69	0.51	0.52	-0.18	-0.17	9.29E-03	1.11E-02	1.13E-02
248	418732.71	3725297.67	Worker	1.39	0.93	0.95	-0.45	-0.43	1.69E-02	2.02E-02	2.06E-02
249	418741.61	3725080.78	Worker	0.89	0.63	0.65	-0.25	-0.24	1.16E-02	1.38E-02	1.41E-02
250	418748.94	3726007.90	Worker	2.98	1.94	1.98	-1.04	-1.00	3.47E-02	4.15E-02	4.23E-02
251	418760.88	3725603.02	Worker	6.61	3.19	3.26	-3.42	-3.36	5.57E-02	6.56E-02	6.71E-02
252	418777.20	3725946.52	Worker	4.20	2.52	2.57	-1.69	-1.64	4.45E-02	5.30E-02	5.41E-02
253	418788.70	3725013.00	Worker	0.82	0.58	0.60	-0.23	-0.22	1.07E-02	1.27E-02	1.30E-02
254	418800.00	3724200.00	Resident	0.84	0.67	0.69	-0.16	-0.15	4.18E-03	4.97E-03	5.07E-03
255	418800.00	3724300.00	Resident	0.92	0.74	0.75	-0.19	-0.17	4.56E-03	5.43E-03	5.54E-03
256	418800.00	3724400.00	Resident	1.02	0.81	0.82	-0.21	-0.20	5.02E-03	5.97E-03	6.10E-03
257	418800.00	3724500.00	Resident	1.14	0.89	0.91	-0.25	-0.23	5.52E-03	6.58E-03	6.71E-03
258	418800.00	3724600.00	Worker	0.43	0.33	0.34	-0.10	-0.09	6.15E-03	7.33E-03	7.48E-03
259	418800.00	3724700.00	Worker	0.49	0.38	0.38	-0.12	-0.11	6.90E-03	8.22E-03	8.39E-03
260	418800.00	3724800.00	Worker	0.57	0.43	0.44	-0.14	-0.14	7.84E-03	9.34E-03	9.54E-03
261	418800.00	3724900.00	Worker	0.67	0.49	0.50	-0.18	-0.17	9.01E-03	1.07E-02	1.10E-02
262	418800.00	3725000.00	Worker	0.80	0.57	0.59	-0.23	-0.22	1.05E-02	1.25E-02	1.28E-02
263	418800.00	3725100.00	Worker	0.96	0.67	0.68	-0.29	-0.27	1.22E-02	1.45E-02	1.48E-02
264	418800.00	3725200.00	Worker	1.20	0.82	0.83	-0.38	-0.36	1.48E-02	1.77E-02	1.81E-02
265	418800.00	3725700.00	Worker	5.44	3.01	3.07	-2.43	-2.37	5.34E-02	6.33E-02	6.47E-02
266	418800.00	3725900.00	Worker	4.69	2.83	2.89	-1.86	-1.80	4.98E-02	5.92E-02	6.05E-02
267	418800.00	3726100.00	Worker	3.20	2.12	2.16	-1.08	-1.04	3.82E-02	4.56E-02	4.65E-02
268	418800.00	3726200.00	Worker	2.56	1.81	1.85	-0.75	-0.71	3.29E-02	3.94E-02	4.02E-02
269	418800.00	3726300.00	Worker	2.24	1.63	1.66	-0.60	-0.57	2.98E-02	3.56E-02	3.64E-02
270	418800.00	3726400.00	Worker	2.00	1.49	1.52	-0.51	-0.48	2.73E-02	3.27E-02	3.33E-02
271	418800.00	3726500.00	Worker	1.81	1.37	1.39	-0.44	-0.41	2.50E-02	3.00E-02	3.06E-02
272	418800.00	3726600.00	Worker	1.65	1.26	1.29	-0.38	-0.36	2.31E-02	2.78E-02	2.83E-02
273	418800.00	3726700.00	Worker	1.51	1.17	1.19	-0.34	-0.32	2.15E-02	2.58E-02	2.63E-02
274	418800.00	3726800.00	Worker	1.39	1.09	1.11	-0.30	-0.27	2.00E-02	2.40E-02	2.45E-02
275	418800.00	3726900.00	Worker	1.26	1.01	1.03	-0.25	-0.23	1.85E-02	2.22E-02	2.27E-02
276	418800.00	3727000.00	Worker	1.14	0.93	0.95	-0.21	-0.19	1.71E-02	2.05E-02	2.09E-02
277	418800.00	3727100.00	Worker	1.03	0.86	0.87	-0.17	-0.15	1.59E-02	1.90E-02	1.94E-02
278	418800.00	3727200.00	Worker	0.94	0.80	0.81	-0.14	-0.13	1.48E-02	1.77E-02	1.81E-02
279	418800.00	3727300.00	Worker	0.86	0.74	0.76	-0.12	-0.10	1.38E-02	1.66E-02	1.69E-02
280	418800.00	3727400.00	Worker	0.79	0.68	0.70	-0.10	-0.09	1.27E-02	1.52E-02	1.55E-02
281	418800.72	3725826.58	Worker	7.08	3.74	3.82	-3.34	-3.26	6.54E-02	7.74E-02	7.91E-02
282	418808.17	3725232.05	Worker	1.31	0.88	0.90	-0.43	-0.41	1.60E-02	1.91E-02	1.95E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
283	418808.57	3725690.92	Worker	6.72	3.52	3.59	-3.21	-3.14	6.19E-02	7.32E-02	7.48E-02
284	418821.49	3725766.63	Worker	9.62	4.79	4.89	-4.82	-4.73	8.36E-02	9.87E-02	1.01E-01
285	418832.62	3725996.51	Worker	14.67	6.61	6.74	-8.06	-7.93	1.14E-01	1.33E-01	1.37E-01
286	418856.95	3725909.27	Worker	10.65	5.57	5.68	-5.08	-4.97	9.36E-02	1.11E-01	1.13E-01
287	418883.64	3725166.44	Worker	1.25	0.83	0.84	-0.43	-0.41	1.49E-02	1.78E-02	1.82E-02
288	418896.00	3724503.00	Sensitive	1.12	0.88	0.90	-0.24	-0.22	5.47E-03	6.52E-03	6.65E-03
289	418900.00	3724200.00	Resident	0.83	0.67	0.68	-0.16	-0.15	4.13E-03	4.91E-03	5.01E-03
290	418900.00	3724300.00	Resident	0.91	0.72	0.74	-0.18	-0.17	4.49E-03	5.35E-03	5.46E-03
291	418900.00	3724400.00	Resident	1.00	0.80	0.81	-0.21	-0.19	4.94E-03	5.88E-03	6.00E-03
292	418900.00	3724500.00	Resident	1.12	0.88	0.90	-0.24	-0.22	5.45E-03	6.49E-03	6.63E-03
293	418900.00	3724600.00	Resident	1.26	0.98	1.00	-0.28	-0.26	6.06E-03	7.22E-03	7.37E-03
294	418900.00	3724700.00	Worker	0.49	0.37	0.38	-0.12	-0.11	6.82E-03	8.13E-03	8.29E-03
295	418900.00	3724800.00	Worker	0.57	0.42	0.43	-0.14	-0.14	7.77E-03	9.27E-03	9.46E-03
296	418900.00	3724900.00	Worker	0.67	0.49	0.50	-0.18	-0.17	8.97E-03	1.07E-02	1.09E-02
297	418900.00	3725000.00	Worker	0.82	0.58	0.59	-0.24	-0.23	1.06E-02	1.26E-02	1.29E-02
298	418900.00	3725100.00	Worker	1.05	0.71	0.73	-0.34	-0.32	1.29E-02	1.54E-02	1.57E-02
299	418900.00	3726100.00	Worker	6.79	3.91	3.99	-2.87	-2.80	6.95E-02	8.26E-02	8.44E-02
300	418900.00	3726200.00	Worker	4.38	2.85	2.91	-1.53	-1.48	5.14E-02	6.13E-02	6.26E-02
301	418900.00	3726300.00	Worker	3.42	2.37	2.41	-1.06	-1.01	4.29E-02	5.13E-02	5.24E-02
302	418900.00	3726400.00	Worker	2.89	2.06	2.10	-0.82	-0.78	3.76E-02	4.50E-02	4.59E-02
303	418900.00	3726500.00	Worker	2.52	1.84	1.87	-0.68	-0.65	3.35E-02	4.01E-02	4.09E-02
304	418900.00	3726600.00	Worker	2.24	1.66	1.69	-0.58	-0.55	3.02E-02	3.62E-02	3.70E-02
305	418900.00	3726700.00	Worker	2.00	1.51	1.54	-0.49	-0.47	2.75E-02	3.30E-02	3.37E-02
306	418900.00	3726800.00	Worker	1.77	1.36	1.39	-0.41	-0.38	2.50E-02	2.99E-02	3.05E-02
307	418900.00	3726900.00	Worker	1.56	1.23	1.25	-0.33	-0.30	2.26E-02	2.71E-02	2.77E-02
308	418900.00	3727000.00	Worker	1.37	1.11	1.13	-0.26	-0.24	2.05E-02	2.46E-02	2.51E-02
309	418900.00	3727100.00	Worker	1.22	1.01	1.03	-0.20	-0.18	1.87E-02	2.25E-02	2.30E-02
310	418900.00	3727200.00	Worker	1.10	0.93	0.95	-0.16	-0.15	1.73E-02	2.08E-02	2.12E-02
311	418900.00	3727300.00	Worker	1.00	0.86	0.88	-0.14	-0.12	1.60E-02	1.92E-02	1.96E-02
312	418900.00	3727400.00	Worker	0.91	0.80	0.81	-0.11	-0.10	1.48E-02	1.77E-02	1.81E-02
313	418900.00	3727500.00	Worker	0.83	0.73	0.75	-0.10	-0.09	1.36E-02	1.63E-02	1.67E-02
314	418904.23	3726018.78	Worker	14.23	6.93	7.06	-7.30	-7.16	1.20E-01	1.42E-01	1.45E-01
315	418950.00	3723950.00	Resident	0.67	0.55	0.56	-0.12	-0.11	3.40E-03	4.03E-03	4.12E-03
316	418950.00	3724200.00	Resident	0.82	0.66	0.67	-0.16	-0.15	4.10E-03	4.88E-03	4.98E-03
317	418950.00	3727450.00	Worker	0.94	0.82	0.84	-0.11	-0.10	1.53E-02	1.84E-02	1.87E-02
318	418950.00	3727700.00	Worker	0.75	0.66	0.68	-0.08	-0.07	1.24E-02	1.48E-02	1.51E-02
319	418950.00	3727950.00	Worker	0.61	0.54	0.55	-0.06	-0.05	1.01E-02	1.21E-02	1.23E-02
320	418950.28	3726107.55	Worker	12.22	6.35	6.48	-5.86	-5.74	1.12E-01	1.32E-01	1.35E-01
321	418953.75	3725211.11	Worker	1.60	0.98	1.00	-0.61	-0.59	1.77E-02	2.10E-02	2.15E-02
322	418976.47	3724331.05	Sensitive	0.92	0.74	0.75	-0.19	-0.17	4.58E-03	5.44E-03	5.55E-03
323	418996.32	3726196.31	Worker	11.98	6.46	6.59	-5.52	-5.39	1.14E-01	1.35E-01	1.38E-01
324	419000.00	3724400.00	Resident	0.98	0.78	0.80	-0.20	-0.19	4.85E-03	5.77E-03	5.88E-03
325	419000.00	3724500.00	Resident	1.10	0.86	0.88	-0.23	-0.22	5.36E-03	6.38E-03	6.50E-03
326	419000.00	3724600.00	Resident	1.23	0.96	0.98	-0.27	-0.26	5.96E-03	7.10E-03	7.24E-03
327	419000.00	3724700.00	Resident	1.41	1.08	1.10	-0.33	-0.31	6.68E-03	7.96E-03	8.12E-03
328	419000.00	3724800.00	Worker	0.55	0.41	0.42	-0.14	-0.13	7.60E-03	9.06E-03	9.25E-03
329	419000.00	3724900.00	Worker	0.66	0.48	0.49	-0.18	-0.17	8.81E-03	1.05E-02	1.07E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
330	419000.00	3725000.00	Worker	0.81	0.57	0.58	-0.24	-0.22	1.04E-02	1.24E-02	1.27E-02
331	419000.00	3725100.00	Worker	1.05	0.71	0.72	-0.34	-0.33	1.29E-02	1.53E-02	1.57E-02
332	419000.00	3725200.00	Worker	1.54	0.95	0.97	-0.58	-0.57	1.72E-02	2.04E-02	2.08E-02
333	419000.00	3726300.00	Worker	6.50	4.09	4.16	-2.41	-2.33	7.34E-02	8.76E-02	8.94E-02
334	419000.00	3726400.00	Worker	4.79	3.20	3.26	-1.59	-1.53	5.78E-02	6.91E-02	7.05E-02
335	419000.00	3726500.00	Worker	3.99	2.72	2.77	-1.27	-1.22	4.93E-02	5.89E-02	6.01E-02
336	419000.00	3726600.00	Worker	3.43	2.37	2.42	-1.05	-1.01	4.30E-02	5.15E-02	5.25E-02
337	419000.00	3726700.00	Worker	2.88	2.06	2.10	-0.83	-0.79	3.74E-02	4.48E-02	4.58E-02
338	419000.00	3726800.00	Worker	2.39	1.78	1.81	-0.62	-0.58	3.25E-02	3.90E-02	3.98E-02
339	419000.00	3726900.00	Worker	2.00	1.55	1.58	-0.44	-0.41	2.85E-02	3.41E-02	3.48E-02
340	419000.00	3727000.00	Worker	1.70	1.37	1.40	-0.33	-0.30	2.53E-02	3.03E-02	3.09E-02
341	419000.00	3727100.00	Worker	1.48	1.22	1.25	-0.25	-0.23	2.26E-02	2.72E-02	2.77E-02
342	419000.00	3727200.00	Worker	1.31	1.11	1.13	-0.20	-0.18	2.05E-02	2.47E-02	2.52E-02
343	419000.00	3727300.00	Worker	1.17	1.01	1.03	-0.16	-0.14	1.88E-02	2.26E-02	2.31E-02
344	419000.00	3727400.00	Worker	1.06	0.93	0.95	-0.13	-0.11	1.72E-02	2.07E-02	2.11E-02
345	419000.00	3727500.00	Worker	0.96	0.85	0.86	-0.11	-0.10	1.57E-02	1.89E-02	1.93E-02
346	419000.00	3727600.00	Worker	0.87	0.77	0.78	-0.10	-0.08	1.43E-02	1.71E-02	1.75E-02
347	419022.50	3725283.73	Worker	2.95	1.55	1.58	-1.40	-1.37	2.74E-02	3.24E-02	3.31E-02
348	419026.35	3726287.82	Worker	9.11	5.34	5.45	-3.77	-3.66	9.53E-02	1.13E-01	1.16E-01
349	419064.44	3726589.03	Worker	5.42	3.40	3.46	-2.02	-1.96	6.10E-02	7.28E-02	7.43E-02
350	419065.35	3726371.51	Worker	8.90	5.34	5.44	-3.56	-3.45	9.54E-02	1.14E-01	1.16E-01
351	419081.58	3726515.49	Worker	7.36	4.40	4.48	-2.96	-2.88	7.86E-02	9.36E-02	9.56E-02
352	419091.25	3725356.35	Worker	8.12	3.56	3.63	-4.56	-4.49	6.13E-02	7.18E-02	7.35E-02
353	419100.00	3724500.00	Resident	1.07	0.85	0.86	-0.23	-0.21	5.25E-03	6.25E-03	6.38E-03
354	419100.00	3724600.00	Resident	1.21	0.94	0.96	-0.27	-0.25	5.84E-03	6.95E-03	7.09E-03
355	419100.00	3724700.00	Resident	1.37	1.06	1.08	-0.32	-0.30	6.55E-03	7.80E-03	7.96E-03
356	419100.00	3724800.00	Worker	0.54	0.40	0.41	-0.13	-0.12	7.43E-03	8.85E-03	9.03E-03
357	419100.00	3724900.00	Worker	0.64	0.47	0.48	-0.17	-0.16	8.57E-03	1.02E-02	1.04E-02
358	419100.00	3725000.00	Worker	0.78	0.56	0.57	-0.22	-0.21	1.02E-02	1.21E-02	1.24E-02
359	419100.00	3725100.00	Worker	1.01	0.69	0.70	-0.32	-0.31	1.25E-02	1.49E-02	1.52E-02
360	419100.00	3725200.00	Worker	1.46	0.92	0.93	-0.54	-0.52	1.65E-02	1.96E-02	2.00E-02
361	419100.00	3725300.00	Worker	2.88	1.54	1.57	-1.34	-1.31	2.72E-02	3.21E-02	3.28E-02
362	419100.00	3726700.00	Worker	5.05	3.22	3.28	-1.84	-1.77	5.79E-02	6.91E-02	7.06E-02
363	419100.00	3726800.00	Worker	3.55	2.49	2.54	-1.06	-1.01	4.53E-02	5.42E-02	5.53E-02
364	419100.00	3726900.00	Worker	2.71	2.05	2.09	-0.66	-0.62	3.75E-02	4.49E-02	4.59E-02
365	419100.00	3727000.00	Worker	2.19	1.74	1.78	-0.45	-0.42	3.20E-02	3.85E-02	3.92E-02
366	419100.00	3727100.00	Worker	1.85	1.53	1.55	-0.33	-0.30	2.82E-02	3.38E-02	3.45E-02
367	419100.00	3727200.00	Worker	1.60	1.36	1.38	-0.25	-0.22	2.51E-02	3.02E-02	3.08E-02
368	419100.00	3727300.00	Worker	1.41	1.21	1.24	-0.20	-0.17	2.25E-02	2.70E-02	2.76E-02
369	419100.00	3727400.00	Worker	1.26	1.10	1.12	-0.16	-0.14	2.04E-02	2.45E-02	2.50E-02
370	419100.00	3727500.00	Worker	1.12	0.99	1.01	-0.13	-0.11	1.84E-02	2.21E-02	2.26E-02
371	419100.00	3727600.00	Worker	1.00	0.89	0.91	-0.11	-0.10	1.66E-02	1.99E-02	2.03E-02
372	419100.00	3727700.00	Worker	0.91	0.81	0.82	-0.10	-0.08	1.50E-02	1.80E-02	1.84E-02
373	419119.83	3726672.29	Worker	6.98	4.09	4.17	-2.89	-2.81	7.30E-02	8.68E-02	8.87E-02
374	419130.06	3726447.75	Worker	14.99	8.03	8.19	-6.96	-6.80	1.42E-01	1.68E-01	1.72E-01
375	419160.00	3725428.97	Worker	18.00	7.35	7.50	-10.64	-10.50	1.25E-01	1.46E-01	1.50E-01
376	419162.44	3726762.46	Worker	6.30	3.86	3.94	-2.44	-2.36	6.93E-02	8.26E-02	8.43E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
377	419200.00	3724200.00	Resident	0.80	0.64	0.66	-0.15	-0.14	3.98E-03	4.73E-03	4.83E-03
378	419200.00	3724450.00	Resident	1.00	0.79	0.81	-0.21	-0.19	4.91E-03	5.85E-03	5.96E-03
379	419200.00	3724600.00	Resident	1.18	0.92	0.94	-0.26	-0.24	5.71E-03	6.80E-03	6.94E-03
380	419200.00	3724700.00	Worker	0.45	0.35	0.35	-0.10	-0.10	6.39E-03	7.61E-03	7.76E-03
381	419200.00	3724800.00	Worker	0.52	0.39	0.40	-0.13	-0.12	7.25E-03	8.64E-03	8.81E-03
382	419200.00	3724900.00	Worker	0.61	0.45	0.46	-0.16	-0.15	8.32E-03	9.92E-03	1.01E-02
383	419200.00	3725000.00	Worker	0.75	0.54	0.55	-0.21	-0.20	9.81E-03	1.17E-02	1.19E-02
384	419200.00	3725100.00	Worker	0.95	0.65	0.67	-0.29	-0.28	1.19E-02	1.42E-02	1.45E-02
385	419200.00	3725200.00	Worker	1.31	0.85	0.86	-0.46	-0.44	1.53E-02	1.82E-02	1.86E-02
386	419200.00	3725300.00	Worker	2.15	1.25	1.27	-0.90	-0.88	2.22E-02	2.64E-02	2.70E-02
387	419200.00	3725400.00	Worker	5.68	2.70	2.75	-2.98	-2.93	4.70E-02	5.52E-02	5.65E-02
388	419200.00	3726900.00	Worker	4.14	2.94	3.00	-1.20	-1.14	5.35E-02	6.41E-02	6.54E-02
389	419200.00	3727000.00	Worker	3.05	2.35	2.40	-0.70	-0.66	4.32E-02	5.18E-02	5.28E-02
390	419200.00	3727100.00	Worker	2.44	1.98	2.02	-0.47	-0.43	3.65E-02	4.38E-02	4.47E-02
391	419200.00	3727200.00	Worker	2.04	1.70	1.73	-0.33	-0.30	3.15E-02	3.78E-02	3.86E-02
392	419200.00	3727300.00	Worker	1.75	1.50	1.53	-0.25	-0.22	2.78E-02	3.34E-02	3.41E-02
393	419200.00	3727400.00	Worker	1.52	1.33	1.35	-0.20	-0.17	2.46E-02	2.96E-02	3.02E-02
394	419200.00	3727500.00	Worker	1.33	1.17	1.19	-0.16	-0.14	2.18E-02	2.62E-02	2.67E-02
395	419200.00	3727600.00	Worker	1.17	1.04	1.06	-0.14	-0.11	1.93E-02	2.32E-02	2.37E-02
396	419200.00	3727700.00	Worker	1.05	0.93	0.95	-0.12	-0.10	1.73E-02	2.08E-02	2.13E-02
397	419200.00	3727800.00	Worker	0.94	0.83	0.85	-0.10	-0.09	1.55E-02	1.86E-02	1.90E-02
398	419200.00	3727950.00	Worker	0.81	0.72	0.74	-0.09	-0.07	1.34E-02	1.61E-02	1.65E-02
399	419200.00	3728200.00	Worker	0.64	0.57	0.59	-0.07	-0.06	1.07E-02	1.28E-02	1.31E-02
400	419200.00	3728450.00	Worker	0.53	0.47	0.48	-0.06	-0.05	8.84E-03	1.06E-02	1.08E-02
401	419216.11	3726796.28	Worker	8.14	4.77	4.87	-3.37	-3.27	8.52E-02	1.01E-01	1.04E-01
402	419217.39	3726832.06	Worker	6.34	4.00	4.08	-2.34	-2.26	7.21E-02	8.60E-02	8.78E-02
403	419228.75	3725501.58	Worker	21.04	8.64	8.82	-12.39	-12.22	1.47E-01	1.72E-01	1.76E-01
404	419239.67	3727598.11	Sensitive	3.71	3.28	3.34	-0.43	-0.37	2.07E-02	2.49E-02	2.54E-02
405	419247.95	3726906.59	Worker	5.18	3.56	3.63	-1.62	-1.55	6.47E-02	7.74E-02	7.90E-02
406	419261.00	3724850.00	Sensitive	1.63	1.23	1.25	-0.40	-0.37	7.61E-03	9.07E-03	9.25E-03
407	419293.67	3726733.15	Worker	39.19	17.41	17.76	-21.78	-21.43	3.00E-01	3.52E-01	3.60E-01
408	419296.12	3725575.44	Worker	21.09	8.90	9.08	-12.19	-12.01	1.52E-01	1.78E-01	1.82E-01
409	419299.18	3726774.53	Worker	19.50	9.86	10.06	-9.64	-9.44	1.73E-01	2.04E-01	2.09E-01
410	419300.00	3724700.00	Worker	0.44	0.34	0.35	-0.10	-0.09	6.26E-03	7.46E-03	7.61E-03
411	419300.00	3724800.00	Worker	0.50	0.38	0.39	-0.12	-0.11	7.05E-03	8.40E-03	8.57E-03
412	419300.00	3724900.00	Worker	0.59	0.44	0.45	-0.15	-0.14	8.05E-03	9.60E-03	9.79E-03
413	419300.00	3725000.00	Worker	0.71	0.51	0.52	-0.19	-0.18	9.41E-03	1.12E-02	1.15E-02
414	419300.00	3725100.00	Worker	0.88	0.62	0.63	-0.26	-0.25	1.13E-02	1.35E-02	1.38E-02
415	419300.00	3725200.00	Worker	1.17	0.78	0.80	-0.39	-0.37	1.42E-02	1.69E-02	1.72E-02
416	419300.00	3725300.00	Worker	1.73	1.07	1.09	-0.67	-0.64	1.92E-02	2.28E-02	2.33E-02
417	419300.00	3725400.00	Worker	3.25	1.75	1.78	-1.50	-1.46	3.09E-02	3.66E-02	3.74E-02
418	419300.00	3725500.00	Worker	8.09	3.75	3.83	-4.34	-4.26	6.52E-02	7.66E-02	7.83E-02
419	419300.00	3726900.00	Worker	6.98	4.60	4.69	-2.38	-2.29	8.33E-02	9.95E-02	1.02E-01
420	419300.00	3727000.00	Worker	4.55	3.36	3.42	-1.20	-1.13	6.14E-02	7.36E-02	7.51E-02
421	419300.00	3727100.00	Worker	3.38	2.67	2.72	-0.71	-0.66	4.92E-02	5.91E-02	6.03E-02
422	419300.00	3727200.00	Worker	2.70	2.24	2.28	-0.47	-0.42	4.14E-02	4.97E-02	5.07E-02
423	419300.00	3727300.00	Worker	2.24	1.91	1.95	-0.33	-0.29	3.54E-02	4.25E-02	4.34E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
424	419300.00	3727400.00	Worker	1.89	1.64	1.67	-0.25	-0.22	3.04E-02	3.65E-02	3.72E-02
425	419300.00	3727500.00	Worker	1.62	1.42	1.45	-0.20	-0.17	2.64E-02	3.17E-02	3.24E-02
426	419300.00	3727600.00	Worker	1.39	1.23	1.25	-0.16	-0.14	2.28E-02	2.74E-02	2.80E-02
427	419300.00	3727700.00	Worker	1.22	1.09	1.11	-0.14	-0.12	2.02E-02	2.43E-02	2.47E-02
428	419300.00	3727800.00	Worker	1.08	0.96	0.98	-0.12	-0.10	1.79E-02	2.16E-02	2.20E-02
429	419300.00	3727900.00	Worker	0.97	0.86	0.88	-0.11	-0.09	1.61E-02	1.93E-02	1.97E-02
430	419312.04	3727032.20	Worker	4.30	3.26	3.33	-1.04	-0.98	5.98E-02	7.18E-02	7.33E-02
431	419333.28	3726854.46	Worker	10.60	6.50	6.63	-4.10	-3.97	1.17E-01	1.39E-01	1.42E-01
432	419361.35	3725651.24	Worker	22.17	9.67	9.86	-12.50	-12.31	1.66E-01	1.95E-01	1.99E-01
433	419365.86	3727071.98	Worker	4.60	3.58	3.65	-1.03	-0.96	6.58E-02	7.90E-02	8.06E-02
434	419389.97	3726906.05	Worker	9.46	6.54	6.67	-2.92	-2.79	1.19E-01	1.42E-01	1.45E-01
435	419395.81	3726982.36	Worker	6.91	5.10	5.20	-1.81	-1.71	9.34E-02	1.12E-01	1.14E-01
436	419400.00	3724800.00	Worker	0.49	0.37	0.38	-0.11	-0.11	6.83E-03	8.14E-03	8.31E-03
437	419400.00	3724900.00	Worker	0.56	0.42	0.43	-0.14	-0.13	7.79E-03	9.29E-03	9.48E-03
438	419400.00	3725000.00	Worker	0.67	0.49	0.50	-0.18	-0.17	9.03E-03	1.08E-02	1.10E-02
439	419400.00	3725100.00	Worker	0.82	0.59	0.60	-0.23	-0.22	1.07E-02	1.28E-02	1.30E-02
440	419400.00	3725200.00	Worker	1.05	0.72	0.73	-0.33	-0.31	1.31E-02	1.56E-02	1.59E-02
441	419400.00	3725300.00	Worker	1.46	0.94	0.96	-0.52	-0.50	1.70E-02	2.02E-02	2.06E-02
442	419400.00	3725400.00	Worker	2.32	1.36	1.39	-0.96	-0.94	2.43E-02	2.88E-02	2.94E-02
443	419400.00	3725500.00	Worker	4.33	2.27	2.31	-2.06	-2.02	4.00E-02	4.73E-02	4.83E-02
444	419400.00	3725600.00	Worker	8.86	4.28	4.36	-4.58	-4.50	7.46E-02	8.79E-02	8.99E-02
445	419400.00	3727100.00	Worker	4.74	3.78	3.85	-0.97	-0.89	6.96E-02	8.36E-02	8.54E-02
446	419400.00	3727200.00	Worker	3.65	3.03	3.09	-0.62	-0.56	5.61E-02	6.74E-02	6.87E-02
447	419400.00	3727300.00	Worker	2.92	2.49	2.54	-0.43	-0.38	4.62E-02	5.55E-02	5.66E-02
448	419400.00	3727400.00	Worker	2.39	2.07	2.11	-0.31	-0.27	3.85E-02	4.63E-02	4.72E-02
449	419400.00	3727500.00	Worker	1.98	1.73	1.77	-0.25	-0.21	3.22E-02	3.87E-02	3.95E-02
450	419400.00	3727600.00	Worker	1.68	1.48	1.51	-0.20	-0.17	2.76E-02	3.32E-02	3.39E-02
451	419400.00	3727700.00	Worker	1.45	1.28	1.31	-0.17	-0.14	2.38E-02	2.86E-02	2.92E-02
452	419400.00	3727800.00	Worker	1.27	1.13	1.15	-0.14	-0.12	2.10E-02	2.52E-02	2.57E-02
453	419400.00	3727900.00	Worker	1.11	0.99	1.01	-0.12	-0.10	1.85E-02	2.22E-02	2.26E-02
454	419426.59	3725727.03	Worker	23.65	10.62	10.83	-13.04	-12.83	1.83E-01	2.15E-01	2.20E-01
455	419450.00	3724450.00	Worker	0.32	0.25	0.26	-0.07	-0.06	4.69E-03	5.58E-03	5.69E-03
456	419450.00	3724700.00	Worker	0.42	0.33	0.33	-0.09	-0.09	6.00E-03	7.14E-03	7.29E-03
457	419450.00	3724950.00	Worker	0.60	0.45	0.46	-0.15	-0.14	8.20E-03	9.78E-03	9.98E-03
458	419450.00	3727950.00	Worker	1.13	1.01	1.03	-0.12	-0.10	1.88E-02	2.26E-02	2.30E-02
459	419450.00	3728200.00	Worker	0.85	0.75	0.77	-0.09	-0.08	1.41E-02	1.69E-02	1.72E-02
460	419450.00	3728450.00	Worker	0.68	0.61	0.63	-0.07	-0.06	1.14E-02	1.37E-02	1.40E-02
461	419450.00	3728700.00	Resident	1.66	1.49	1.52	-0.17	-0.14	9.41E-03	1.13E-02	1.15E-02
462	419458.60	3727034.56	Worker	7.04	5.69	5.80	-1.35	-1.24	1.05E-01	1.26E-01	1.29E-01
463	419475.20	3728681.66	Sensitive	1.73	1.55	1.58	-0.18	-0.15	9.77E-03	1.17E-02	1.20E-02
464	419491.82	3725802.82	Worker	25.12	11.53	11.76	-13.59	-13.36	2.00E-01	2.35E-01	2.40E-01
465	419500.00	3724900.00	Worker	0.54	0.41	0.42	-0.13	-0.12	7.52E-03	8.96E-03	9.14E-03
466	419500.00	3725000.00	Worker	0.63	0.47	0.48	-0.16	-0.15	8.62E-03	1.03E-02	1.05E-02
467	419500.00	3725100.00	Worker	0.76	0.55	0.56	-0.21	-0.20	1.01E-02	1.20E-02	1.23E-02
468	419500.00	3725200.00	Worker	0.95	0.67	0.68	-0.28	-0.27	1.21E-02	1.45E-02	1.48E-02
469	419500.00	3725300.00	Worker	1.26	0.84	0.86	-0.42	-0.40	1.52E-02	1.81E-02	1.85E-02
470	419500.00	3725400.00	Worker	1.83	1.14	1.16	-0.69	-0.67	2.05E-02	2.43E-02	2.48E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
471	419500.00	3725500.00	Worker	2.95	1.69	1.72	-1.26	-1.23	3.01E-02	3.57E-02	3.64E-02
472	419500.00	3725600.00	Worker	5.06	2.70	2.75	-2.36	-2.31	4.78E-02	5.65E-02	5.78E-02
473	419500.00	3725700.00	Worker	9.18	4.68	4.77	-4.50	-4.41	8.22E-02	9.71E-02	9.93E-02
474	419500.00	3725800.00	Worker	21.39	10.04	10.24	-11.35	-11.15	1.75E-01	2.06E-01	2.10E-01
475	419500.00	3727200.00	Worker	4.95	4.30	4.38	-0.65	-0.57	7.98E-02	9.60E-02	9.79E-02
476	419500.00	3727300.00	Worker	3.85	3.37	3.44	-0.47	-0.41	6.27E-02	7.54E-02	7.70E-02
477	419500.00	3727400.00	Worker	3.04	2.68	2.73	-0.36	-0.31	4.98E-02	5.99E-02	6.11E-02
478	419500.00	3727500.00	Worker	2.47	2.18	2.22	-0.29	-0.24	4.05E-02	4.88E-02	4.97E-02
479	419500.00	3727600.00	Worker	2.03	1.79	1.82	-0.24	-0.21	3.33E-02	4.00E-02	4.08E-02
480	419500.00	3727700.00	Worker	1.72	1.52	1.55	-0.19	-0.16	2.84E-02	3.41E-02	3.48E-02
481	419500.00	3727800.00	Worker	1.50	1.34	1.36	-0.16	-0.14	2.49E-02	2.99E-02	3.05E-02
482	419500.00	3727900.00	Worker	1.31	1.17	1.19	-0.14	-0.12	2.17E-02	2.61E-02	2.66E-02
483	419500.00	3728000.00	Worker	1.15	1.03	1.05	-0.12	-0.10	1.92E-02	2.30E-02	2.35E-02
484	419500.00	3728100.00	Worker	1.03	0.92	0.94	-0.11	-0.09	1.71E-02	2.06E-02	2.10E-02
485	419500.00	3728200.00	Worker	0.91	0.81	0.83	-0.10	-0.08	1.51E-02	1.81E-02	1.85E-02
486	419505.35	3727121.07	Worker	6.32	5.47	5.58	-0.85	-0.74	1.02E-01	1.22E-01	1.25E-01
487	419551.23	3727209.92	Worker	5.80	5.27	5.37	-0.53	-0.43	9.82E-02	1.18E-01	1.21E-01
488	419557.05	3725878.62	Worker	25.50	11.94	12.18	-13.56	-13.32	2.08E-01	2.44E-01	2.50E-01
489	419597.11	3727298.78	Worker	5.26	4.91	5.00	-0.35	-0.26	9.16E-02	1.10E-01	1.13E-01
490	419600.00	3725000.00	Worker	0.60	0.45	0.46	-0.15	-0.14	8.24E-03	9.82E-03	1.00E-02
491	419600.00	3725100.00	Worker	0.71	0.52	0.53	-0.19	-0.18	9.54E-03	1.14E-02	1.16E-02
492	419600.00	3725200.00	Worker	0.86	0.62	0.63	-0.24	-0.23	1.13E-02	1.34E-02	1.37E-02
493	419600.00	3725300.00	Worker	1.11	0.76	0.78	-0.34	-0.33	1.39E-02	1.65E-02	1.68E-02
494	419600.00	3725400.00	Worker	1.52	0.98	1.00	-0.53	-0.51	1.78E-02	2.12E-02	2.16E-02
495	419600.00	3725500.00	Worker	2.24	1.36	1.39	-0.88	-0.85	2.44E-02	2.90E-02	2.96E-02
496	419600.00	3725600.00	Worker	3.47	2.00	2.04	-1.47	-1.43	3.57E-02	4.23E-02	4.32E-02
497	419600.00	3725700.00	Worker	5.53	3.07	3.13	-2.46	-2.40	5.46E-02	6.47E-02	6.61E-02
498	419600.00	3725800.00	Resident	26.68	14.41	14.69	-12.28	-12.00	8.79E-02	1.04E-01	1.06E-01
499	419600.00	3725900.00	Worker	17.82	8.94	9.11	-8.89	-8.71	1.57E-01	1.85E-01	1.89E-01
500	419600.00	3727400.00	Worker	3.94	3.61	3.68	-0.33	-0.26	6.73E-02	8.11E-02	8.27E-02
501	419600.00	3727500.00	Worker	3.10	2.81	2.86	-0.29	-0.24	5.23E-02	6.30E-02	6.42E-02
502	419600.00	3727600.00	Worker	2.51	2.26	2.30	-0.25	-0.20	4.21E-02	5.07E-02	5.17E-02
503	419600.00	3727700.00	Worker	2.08	1.87	1.90	-0.22	-0.18	3.47E-02	4.18E-02	4.26E-02
504	419600.00	3727800.00	Worker	1.79	1.61	1.64	-0.18	-0.15	2.99E-02	3.60E-02	3.67E-02
505	419600.00	3727900.00	Worker	1.54	1.38	1.41	-0.16	-0.13	2.57E-02	3.09E-02	3.16E-02
506	419600.00	3728000.00	Worker	1.34	1.20	1.23	-0.14	-0.11	2.24E-02	2.69E-02	2.75E-02
507	419600.00	3728100.00	Worker	1.18	1.06	1.08	-0.12	-0.10	1.98E-02	2.38E-02	2.43E-02
508	419600.00	3728200.00	Worker	1.05	0.95	0.96	-0.11	-0.09	1.76E-02	2.12E-02	2.16E-02
509	419600.00	3728300.00	Worker	0.94	0.85	0.86	-0.09	-0.08	1.58E-02	1.90E-02	1.93E-02
510	419600.00	3728400.00	Worker	0.84	0.75	0.77	-0.09	-0.07	1.40E-02	1.69E-02	1.72E-02
511	419622.29	3725954.41	Worker	19.36	9.84	10.03	-9.52	-9.33	1.73E-01	2.04E-01	2.09E-01
512	419680.12	3727284.95	Worker	8.49	8.70	8.87	0.21	0.38	1.63E-01	1.98E-01	2.01E-01
513	419688.22	3726029.59	Worker	16.19	8.77	8.94	-7.42	-7.25	1.55E-01	1.84E-01	1.88E-01
514	419700.00	3724700.00	Worker	0.39	0.30	0.31	-0.08	-0.08	5.61E-03	6.68E-03	6.82E-03
515	419700.00	3724950.00	Worker	0.52	0.40	0.41	-0.12	-0.11	7.40E-03	8.81E-03	8.98E-03
516	419700.00	3725100.00	Worker	0.66	0.49	0.50	-0.17	-0.16	9.04E-03	1.08E-02	1.10E-02
517	419700.00	3725200.00	Worker	0.79	0.58	0.59	-0.21	-0.20	1.06E-02	1.26E-02	1.28E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
518	419700.00	3725300.00	Worker	0.99	0.70	0.71	-0.29	-0.28	1.27E-02	1.51E-02	1.54E-02
519	419700.00	3725400.00	Resident	3.79	2.57	2.61	-1.23	-1.18	1.58E-02	1.88E-02	1.92E-02
520	419700.00	3725500.00	Resident	5.24	3.37	3.43	-1.87	-1.81	2.07E-02	2.46E-02	2.51E-02
521	419700.00	3725600.00	Worker	2.61	1.59	1.62	-1.02	-0.99	2.86E-02	3.39E-02	3.47E-02
522	419700.00	3725700.00	Worker	3.86	2.28	2.33	-1.58	-1.53	4.09E-02	4.86E-02	4.96E-02
523	419700.00	3725800.00	Worker	5.78	3.35	3.42	-2.43	-2.37	5.98E-02	7.10E-02	7.26E-02
524	419700.00	3725900.00	Resident	25.44	14.45	14.74	-10.99	-10.71	8.87E-02	1.05E-01	1.08E-01
525	419700.00	3726000.00	Worker	13.14	7.28	7.43	-5.86	-5.71	1.30E-01	1.54E-01	1.57E-01
526	419700.00	3727400.00	Worker	5.47	5.35	5.46	-0.11	-0.01	1.00E-01	1.21E-01	1.23E-01
527	419700.00	3727500.00	Worker	3.99	3.79	3.86	-0.21	-0.13	7.08E-02	8.54E-02	8.71E-02
528	419700.00	3727600.00	Worker	3.11	2.90	2.95	-0.22	-0.16	5.41E-02	6.51E-02	6.64E-02
529	419700.00	3727700.00	Worker	2.54	2.33	2.38	-0.20	-0.16	4.35E-02	5.24E-02	5.34E-02
530	419700.00	3727800.00	Worker	2.13	1.95	1.99	-0.18	-0.15	3.64E-02	4.38E-02	4.46E-02
531	419700.00	3727900.00	Worker	1.81	1.64	1.68	-0.16	-0.13	3.07E-02	3.69E-02	3.76E-02
532	419700.00	3728000.00	Worker	1.56	1.41	1.44	-0.15	-0.12	2.64E-02	3.17E-02	3.24E-02
533	419700.00	3728100.00	Worker	1.37	1.24	1.26	-0.13	-0.11	2.31E-02	2.77E-02	2.83E-02
534	419700.00	3728200.00	Worker	1.20	1.09	1.11	-0.12	-0.09	2.03E-02	2.44E-02	2.49E-02
535	419700.00	3728300.00	Worker	1.07	0.97	0.99	-0.10	-0.08	1.81E-02	2.17E-02	2.22E-02
536	419700.00	3728400.00	Worker	0.96	0.87	0.89	-0.09	-0.08	1.62E-02	1.95E-02	1.99E-02
537	419700.00	3728450.00	Worker	0.91	0.82	0.84	-0.09	-0.07	1.53E-02	1.84E-02	1.88E-02
538	419700.00	3728500.00	Worker	0.87	0.78	0.80	-0.09	-0.07	1.45E-02	1.75E-02	1.78E-02
539	419700.00	3728700.00	Worker	0.73	0.65	0.67	-0.07	-0.06	1.22E-02	1.47E-02	1.50E-02
540	419727.30	3727373.12	Worker	6.76	6.83	6.97	0.07	0.21	1.28E-01	1.55E-01	1.58E-01
541	419763.65	3726091.38	Worker	13.34	7.57	7.72	-5.76	-5.61	1.35E-01	1.60E-01	1.64E-01
542	419774.48	3727461.29	Worker	5.46	5.44	5.54	-0.02	0.08	1.02E-01	1.23E-01	1.26E-01
543	419800.00	3725300.00	Worker	0.89	0.64	0.65	-0.25	-0.24	1.17E-02	1.39E-02	1.42E-02
544	419800.00	3725400.00	Worker	1.13	0.78	0.80	-0.35	-0.33	1.43E-02	1.70E-02	1.73E-02
545	419800.00	3725500.00	Worker	1.50	1.00	1.02	-0.51	-0.49	1.81E-02	2.15E-02	2.20E-02
546	419800.00	3725600.00	Worker	2.07	1.32	1.34	-0.75	-0.72	2.38E-02	2.83E-02	2.89E-02
547	419800.00	3725700.00	Worker	2.90	1.80	1.84	-1.10	-1.06	3.25E-02	3.86E-02	3.95E-02
548	419800.00	3725800.00	Worker	4.11	2.51	2.56	-1.60	-1.55	4.52E-02	5.37E-02	5.48E-02
549	419800.00	3725900.00	Resident	16.73	10.14	10.34	-6.59	-6.39	6.26E-02	7.44E-02	7.60E-02
550	419800.00	3726000.00	Resident	23.00	13.85	14.12	-9.15	-8.88	8.56E-02	1.02E-01	1.04E-01
551	419800.00	3727600.00	Worker	3.85	3.71	3.79	-0.13	-0.06	6.96E-02	8.38E-02	8.55E-02
552	419800.00	3727700.00	Worker	3.08	2.92	2.98	-0.16	-0.11	5.46E-02	6.58E-02	6.71E-02
553	419800.00	3727800.00	Worker	2.52	2.36	2.40	-0.17	-0.12	4.40E-02	5.30E-02	5.41E-02
554	419800.00	3727900.00	Worker	2.12	1.97	2.00	-0.16	-0.12	3.67E-02	4.42E-02	4.51E-02
555	419800.00	3728000.00	Worker	1.82	1.67	1.71	-0.15	-0.11	3.12E-02	3.76E-02	3.83E-02
556	419800.00	3728100.00	Worker	1.57	1.44	1.47	-0.13	-0.11	2.68E-02	3.23E-02	3.29E-02
557	419800.00	3728200.00	Worker	1.38	1.26	1.28	-0.12	-0.10	2.35E-02	2.82E-02	2.88E-02
558	419800.00	3728300.00	Worker	1.22	1.11	1.13	-0.11	-0.09	2.07E-02	2.49E-02	2.53E-02
559	419800.00	3728400.00	Worker	1.09	0.99	1.01	-0.10	-0.08	1.85E-02	2.22E-02	2.26E-02
560	419800.00	3728500.00	Worker	0.98	0.89	0.91	-0.09	-0.07	1.66E-02	1.99E-02	2.03E-02
561	419821.66	3727549.46	Worker	4.59	4.52	4.61	-0.07	0.02	8.48E-02	1.02E-01	1.04E-01
562	419858.29	3726123.37	Worker	9.06	5.57	5.68	-3.49	-3.38	1.00E-01	1.19E-01	1.22E-01
563	419875.32	3727618.28	Worker	4.22	4.15	4.23	-0.07	0.01	7.79E-02	9.39E-02	9.58E-02
564	419900.00	3725400.00	Worker	1.01	0.71	0.73	-0.29	-0.28	1.30E-02	1.55E-02	1.58E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
565	419900.00	3725500.00	Worker	1.29	0.88	0.90	-0.41	-0.39	1.61E-02	1.92E-02	1.96E-02
566	419900.00	3725600.00	Worker	1.71	1.13	1.15	-0.58	-0.55	2.06E-02	2.45E-02	2.50E-02
567	419900.00	3725700.00	Worker	2.31	1.50	1.53	-0.81	-0.79	2.71E-02	3.23E-02	3.30E-02
568	419900.00	3725800.00	Worker	3.14	2.00	2.04	-1.14	-1.10	3.62E-02	4.31E-02	4.40E-02
569	419900.00	3725900.00	Worker	4.23	2.67	2.72	-1.55	-1.50	4.82E-02	5.74E-02	5.86E-02
570	419900.00	3726000.00	Worker	5.57	3.52	3.59	-2.05	-1.98	6.35E-02	7.57E-02	7.73E-02
571	419900.00	3726100.00	Worker	7.21	4.56	4.65	-2.65	-2.56	8.23E-02	9.81E-02	1.00E-01
572	419900.00	3727700.00	Worker	3.64	3.54	3.61	-0.10	-0.03	6.63E-02	7.99E-02	8.15E-02
573	419900.00	3727800.00	Worker	2.95	2.82	2.87	-0.13	-0.08	5.27E-02	6.35E-02	6.47E-02
574	419900.00	3727900.00	Worker	2.45	2.31	2.36	-0.14	-0.09	4.33E-02	5.21E-02	5.31E-02
575	419900.00	3728000.00	Worker	2.09	1.95	1.99	-0.14	-0.10	3.65E-02	4.39E-02	4.48E-02
576	419900.00	3728100.00	Worker	1.80	1.67	1.70	-0.13	-0.10	3.11E-02	3.74E-02	3.82E-02
577	419900.00	3728200.00	Worker	1.57	1.45	1.47	-0.12	-0.09	2.70E-02	3.25E-02	3.31E-02
578	419900.00	3728300.00	Worker	1.38	1.27	1.29	-0.11	-0.09	2.37E-02	2.84E-02	2.90E-02
579	419900.00	3728400.00	Worker	1.23	1.12	1.14	-0.10	-0.08	2.09E-02	2.52E-02	2.57E-02
580	419900.00	3728500.00	Worker	1.10	1.00	1.02	-0.10	-0.08	1.87E-02	2.25E-02	2.29E-02
581	419900.00	3728600.00	Worker	0.99	0.90	0.92	-0.09	-0.07	1.68E-02	2.02E-02	2.06E-02
582	419910.22	3726205.86	Worker	8.92	5.71	5.82	-3.21	-3.09	1.03E-01	1.23E-01	1.26E-01
583	419935.17	3727753.69	Worker	3.40	3.30	3.36	-0.10	-0.04	6.18E-02	7.44E-02	7.59E-02
584	419950.00	3724950.00	Worker	0.46	0.36	0.36	-0.10	-0.09	6.61E-03	7.86E-03	8.02E-03
585	419950.00	3725200.00	Worker	0.65	0.49	0.50	-0.16	-0.15	9.04E-03	1.08E-02	1.10E-02
586	419950.00	3725450.00	Worker	1.06	0.75	0.76	-0.31	-0.30	1.37E-02	1.63E-02	1.66E-02
587	419950.00	3728700.00	Worker	0.94	0.86	0.88	-0.08	-0.07	1.61E-02	1.93E-02	1.97E-02
588	419950.00	3728950.00	Worker	0.75	0.68	0.70	-0.07	-0.06	1.28E-02	1.53E-02	1.56E-02
589	419957.66	3726293.90	Worker	8.42	5.83	5.94	-2.59	-2.48	1.06E-01	1.27E-01	1.30E-01
590	419960.00	3727687.53	Worker	4.03	3.98	4.06	-0.05	0.03	7.48E-02	9.01E-02	9.19E-02
591	419966.10	3727576.34	Worker	5.30	5.37	5.47	0.07	0.17	1.01E-01	1.22E-01	1.24E-01
592	419983.66	3727841.15	Worker	3.03	2.93	2.99	-0.10	-0.05	5.49E-02	6.61E-02	6.74E-02
593	420000.00	3725500.00	Worker	1.13	0.80	0.81	-0.33	-0.32	1.46E-02	1.74E-02	1.77E-02
594	420000.00	3725600.00	Worker	1.45	0.99	1.01	-0.46	-0.44	1.81E-02	2.16E-02	2.20E-02
595	420000.00	3725700.00	Worker	1.91	1.28	1.30	-0.63	-0.60	2.32E-02	2.77E-02	2.82E-02
596	420000.00	3725800.00	Worker	2.51	1.66	1.69	-0.85	-0.82	3.01E-02	3.59E-02	3.66E-02
597	420000.00	3725900.00	Worker	3.27	2.14	2.18	-1.13	-1.08	3.88E-02	4.62E-02	4.72E-02
598	420000.00	3726000.00	Worker	4.19	2.75	2.80	-1.44	-1.39	4.98E-02	5.94E-02	6.06E-02
599	420000.00	3726100.00	Worker	5.27	3.48	3.55	-1.79	-1.72	6.31E-02	7.53E-02	7.68E-02
600	420000.00	3726200.00	Worker	6.45	4.32	4.41	-2.13	-2.05	7.85E-02	9.37E-02	9.57E-02
601	420000.00	3726300.00	Worker	7.44	5.24	5.34	-2.21	-2.10	9.55E-02	1.14E-01	1.17E-01
602	420000.00	3727600.00	Worker	5.17	5.23	5.33	0.06	0.16	9.84E-02	1.18E-01	1.21E-01
603	420000.00	3727900.00	Worker	2.78	2.67	2.72	-0.11	-0.06	5.00E-02	6.02E-02	6.14E-02
604	420000.00	3728000.00	Worker	2.36	2.24	2.28	-0.12	-0.08	4.18E-02	5.03E-02	5.13E-02
605	420000.00	3728100.00	Worker	2.03	1.91	1.94	-0.12	-0.08	3.56E-02	4.29E-02	4.37E-02
606	420000.00	3728200.00	Worker	1.76	1.64	1.67	-0.12	-0.09	3.07E-02	3.69E-02	3.76E-02
607	420000.00	3728300.00	Worker	1.55	1.43	1.46	-0.11	-0.09	2.68E-02	3.22E-02	3.28E-02
608	420000.00	3728400.00	Worker	1.37	1.26	1.29	-0.11	-0.08	2.36E-02	2.83E-02	2.89E-02
609	420000.00	3728500.00	Worker	1.22	1.12	1.14	-0.10	-0.08	2.09E-02	2.52E-02	2.57E-02
610	420000.00	3728600.00	Worker	1.10	1.00	1.02	-0.09	-0.07	1.88E-02	2.25E-02	2.30E-02
611	420005.09	3726381.93	Worker	7.86	5.93	6.04	-1.93	-1.82	1.09E-01	1.30E-01	1.33E-01

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
612	420032.16	3727928.60	Worker	2.74	2.63	2.68	-0.11	-0.06	4.93E-02	5.93E-02	6.05E-02
613	420047.79	3727639.64	Worker	4.89	4.94	5.03	0.05	0.14	9.29E-02	1.12E-01	1.14E-01
614	420052.53	3726469.97	Worker	7.50	6.09	6.21	-1.41	-1.29	1.12E-01	1.35E-01	1.38E-01
615	420056.89	3727534.41	Worker	6.26	6.45	6.58	0.19	0.31	1.22E-01	1.46E-01	1.49E-01
616	420088.78	3727990.80	Worker	2.62	2.51	2.56	-0.10	-0.05	4.71E-02	5.67E-02	5.78E-02
617	420100.00	3725600.00	Worker	1.26	0.89	0.90	-0.37	-0.36	1.62E-02	1.93E-02	1.97E-02
618	420100.00	3725700.00	Worker	1.61	1.11	1.13	-0.50	-0.48	2.03E-02	2.42E-02	2.47E-02
619	420100.00	3725800.00	Worker	2.07	1.41	1.43	-0.66	-0.63	2.56E-02	3.05E-02	3.11E-02
620	420100.00	3725900.00	Worker	2.63	1.78	1.81	-0.85	-0.82	3.23E-02	3.85E-02	3.93E-02
621	420100.00	3726000.00	Worker	3.30	2.23	2.27	-1.07	-1.03	4.05E-02	4.83E-02	4.93E-02
622	420100.00	3726100.00	Worker	4.08	2.78	2.83	-1.31	-1.25	5.05E-02	6.03E-02	6.16E-02
623	420100.00	3726200.00	Worker	4.91	3.40	3.46	-1.52	-1.45	6.18E-02	7.39E-02	7.55E-02
624	420100.00	3726300.00	Worker	5.69	4.08	4.16	-1.61	-1.53	7.46E-02	8.93E-02	9.12E-02
625	420100.00	3726400.00	Worker	6.31	4.82	4.91	-1.50	-1.40	8.85E-02	1.06E-01	1.08E-01
626	420100.00	3726500.00	Worker	6.93	5.71	5.82	-1.22	-1.10	1.06E-01	1.27E-01	1.30E-01
627	420099.96	3726558.00	Worker	7.33	6.32	6.44	-1.02	-0.89	1.17E-01	1.41E-01	1.44E-01
628	420100.00	3727600.00	Worker	5.50	5.61	5.72	0.11	0.22	1.06E-01	1.27E-01	1.30E-01
629	420100.00	3728000.00	Worker	2.61	2.51	2.56	-0.10	-0.05	4.70E-02	5.65E-02	5.77E-02
630	420100.00	3728100.00	Worker	2.24	2.13	2.18	-0.11	-0.07	4.00E-02	4.81E-02	4.90E-02
631	420100.00	3728200.00	Worker	1.95	1.84	1.87	-0.11	-0.08	3.44E-02	4.13E-02	4.22E-02
632	420100.00	3728300.00	Worker	1.71	1.60	1.63	-0.11	-0.08	2.99E-02	3.59E-02	3.67E-02
633	420100.00	3728400.00	Worker	1.51	1.41	1.43	-0.11	-0.08	2.63E-02	3.16E-02	3.23E-02
634	420100.00	3728500.00	Worker	1.35	1.25	1.27	-0.10	-0.08	2.33E-02	2.80E-02	2.86E-02
635	420100.00	3728600.00	Worker	1.21	1.11	1.13	-0.09	-0.07	2.08E-02	2.50E-02	2.55E-02
636	420135.57	3727591.75	Worker	5.63	5.76	5.87	0.13	0.24	1.09E-01	1.31E-01	1.33E-01
637	420147.39	3726646.03	Worker	7.26	6.53	6.66	-0.73	-0.60	1.22E-01	1.47E-01	1.49E-01
638	420147.67	3727492.47	Worker	6.88	7.12	7.26	0.25	0.39	1.34E-01	1.62E-01	1.65E-01
639	420164.77	3727990.59	Worker	2.79	2.70	2.75	-0.08	-0.03	5.07E-02	6.10E-02	6.22E-02
640	420188.76	3727470.35	Worker	7.08	7.35	7.49	0.27	0.41	1.39E-01	1.67E-01	1.70E-01
641	420194.83	3726734.07	Worker	7.03	6.50	6.63	-0.53	-0.40	1.21E-01	1.46E-01	1.49E-01
642	420200.00	3725200.00	Worker	0.55	0.42	0.43	-0.12	-0.11	7.82E-03	9.29E-03	9.47E-03
643	420200.00	3725450.00	Resident	2.42	1.80	1.83	-0.62	-0.59	1.12E-02	1.33E-02	1.36E-02
644	420200.00	3725700.00	Worker	1.39	0.98	1.00	-0.41	-0.39	1.80E-02	2.14E-02	2.19E-02
645	420200.00	3725800.00	Worker	1.74	1.22	1.24	-0.53	-0.50	2.22E-02	2.64E-02	2.70E-02
646	420200.00	3725900.00	Worker	2.18	1.51	1.54	-0.67	-0.64	2.75E-02	3.28E-02	3.35E-02
647	420200.00	3726000.00	Worker	2.70	1.87	1.90	-0.83	-0.80	3.40E-02	4.06E-02	4.15E-02
648	420200.00	3726100.00	Worker	3.29	2.29	2.33	-1.00	-0.95	4.17E-02	4.98E-02	5.08E-02
649	420200.00	3726200.00	Worker	3.92	2.77	2.82	-1.15	-1.09	5.06E-02	6.05E-02	6.17E-02
650	420200.00	3726300.00	Resident	13.17	9.61	9.80	-3.55	-3.37	6.04E-02	7.23E-02	7.38E-02
651	420200.00	3726400.00	Worker	5.08	3.88	3.96	-1.20	-1.12	7.14E-02	8.56E-02	8.74E-02
652	420200.00	3726500.00	Worker	5.61	4.55	4.64	-1.06	-0.97	8.41E-02	1.01E-01	1.03E-01
653	420200.00	3726600.00	Worker	6.18	5.33	5.43	-0.85	-0.75	9.88E-02	1.19E-01	1.21E-01
654	420200.00	3726700.00	Worker	6.87	6.27	6.39	-0.60	-0.48	1.17E-01	1.41E-01	1.44E-01
655	420200.00	3727500.00	Worker	6.68	6.90	7.04	0.23	0.36	1.30E-01	1.56E-01	1.60E-01
656	420200.00	3728100.00	Worker	2.43	2.33	2.38	-0.09	-0.05	4.38E-02	5.26E-02	5.37E-02
657	420200.00	3728200.00	Worker	2.11	2.01	2.05	-0.10	-0.06	3.77E-02	4.53E-02	4.62E-02
658	420200.00	3728300.00	Worker	1.86	1.76	1.79	-0.10	-0.07	3.29E-02	3.96E-02	4.04E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
659	420200.00	3728400.00	Worker	1.65	1.55	1.58	-0.10	-0.07	2.90E-02	3.48E-02	3.55E-02
660	420200.00	3728500.00	Worker	1.47	1.37	1.40	-0.10	-0.07	2.56E-02	3.08E-02	3.14E-02
661	420200.00	3728600.00	Worker	1.32	1.22	1.25	-0.09	-0.07	2.28E-02	2.74E-02	2.80E-02
662	420200.00	3728700.00	Worker	1.19	1.10	1.12	-0.09	-0.07	2.05E-02	2.46E-02	2.51E-02
663	420200.00	3728950.00	Worker	0.94	0.86	0.87	-0.08	-0.06	1.60E-02	1.92E-02	1.96E-02
664	420206.85	3727600.29	Worker	5.52	5.63	5.74	0.11	0.22	1.06E-01	1.28E-01	1.30E-01
665	420210.53	3728079.50	Worker	2.52	2.43	2.47	-0.09	-0.04	4.55E-02	5.47E-02	5.58E-02
666	420242.26	3726822.10	Worker	6.89	6.52	6.64	-0.37	-0.25	1.22E-01	1.47E-01	1.50E-01
667	420254.96	3727687.96	Worker	4.72	4.77	4.86	0.04	0.13	8.98E-02	1.08E-01	1.10E-01
668	420256.25	3727908.53	Worker	3.34	3.29	3.35	-0.05	0.01	6.18E-02	7.43E-02	7.58E-02
669	420262.33	3728054.90	Worker	2.70	2.62	2.67	-0.08	-0.03	4.91E-02	5.90E-02	6.02E-02
670	420276.81	3727422.94	Worker	7.13	7.40	7.54	0.27	0.41	1.40E-01	1.68E-01	1.71E-01
671	420289.70	3726910.14	Worker	6.87	6.64	6.76	-0.23	-0.10	1.24E-01	1.50E-01	1.53E-01
672	420300.00	3725800.00	Worker	1.50	1.07	1.09	-0.43	-0.41	1.96E-02	2.33E-02	2.38E-02
673	420300.00	3725900.00	Worker	1.85	1.31	1.33	-0.54	-0.52	2.39E-02	2.85E-02	2.91E-02
674	420300.00	3726000.00	Worker	2.26	1.59	1.63	-0.66	-0.63	2.91E-02	3.47E-02	3.55E-02
675	420300.00	3726100.00	Worker	2.72	1.93	1.97	-0.79	-0.75	3.53E-02	4.21E-02	4.30E-02
676	420300.00	3726200.00	Worker	3.21	2.31	2.36	-0.90	-0.86	4.22E-02	5.05E-02	5.16E-02
677	420300.00	3726300.00	Resident	10.79	7.97	8.12	-2.82	-2.67	5.01E-02	5.99E-02	6.12E-02
678	420300.00	3726400.00	Worker	4.19	3.21	3.27	-0.98	-0.92	5.90E-02	7.07E-02	7.22E-02
679	420300.00	3726500.00	Worker	4.63	3.72	3.79	-0.91	-0.84	6.85E-02	8.23E-02	8.40E-02
680	420300.00	3726600.00	Worker	5.10	4.32	4.40	-0.78	-0.70	8.00E-02	9.63E-02	9.82E-02
681	420300.00	3726700.00	Worker	5.61	4.98	5.08	-0.62	-0.53	9.26E-02	1.12E-01	1.14E-01
682	420300.00	3726800.00	Worker	6.18	5.74	5.85	-0.44	-0.33	1.07E-01	1.29E-01	1.32E-01
683	420300.00	3726900.00	Worker	6.77	6.52	6.65	-0.25	-0.12	1.22E-01	1.47E-01	1.50E-01
684	420300.00	3727500.00	Worker	6.23	6.41	6.53	0.18	0.30	1.21E-01	1.45E-01	1.48E-01
685	420300.00	3727600.00	Worker	5.37	5.47	5.57	0.09	0.20	1.03E-01	1.24E-01	1.26E-01
686	420300.00	3727700.00	Worker	4.63	4.66	4.75	0.03	0.12	8.78E-02	1.05E-01	1.08E-01
687	420300.00	3727900.00	Worker	3.43	3.39	3.45	-0.04	0.02	6.37E-02	7.65E-02	7.80E-02
688	420300.00	3728100.00	Worker	2.58	2.50	2.55	-0.08	-0.03	4.69E-02	5.64E-02	5.75E-02
689	420300.00	3728200.00	Worker	2.26	2.17	2.21	-0.09	-0.05	4.07E-02	4.89E-02	4.99E-02
690	420300.00	3728300.00	Worker	1.99	1.90	1.93	-0.10	-0.06	3.55E-02	4.27E-02	4.35E-02
691	420300.00	3728400.00	Worker	1.77	1.67	1.71	-0.10	-0.06	3.13E-02	3.76E-02	3.84E-02
692	420300.00	3728500.00	Worker	1.58	1.48	1.51	-0.10	-0.07	2.78E-02	3.33E-02	3.40E-02
693	420300.00	3728600.00	Worker	1.42	1.32	1.35	-0.09	-0.07	2.48E-02	2.97E-02	3.03E-02
694	420303.07	3727775.62	Worker	4.11	4.10	4.18	0.00	0.07	7.72E-02	9.27E-02	9.45E-02
695	420304.21	3727996.28	Worker	2.99	2.92	2.98	-0.06	-0.01	5.50E-02	6.60E-02	6.73E-02
696	420337.13	3726998.17	Worker	6.75	6.63	6.76	-0.12	0.01	1.24E-01	1.50E-01	1.53E-01
697	420337.09	3727859.11	Worker	3.65	3.61	3.68	-0.03	0.04	6.80E-02	8.16E-02	8.32E-02
698	420357.12	3726087.48	Sensitive	7.02	5.03	5.13	-1.99	-1.89	3.15E-02	3.76E-02	3.84E-02
699	420364.86	3727375.54	Worker	6.72	6.92	7.05	0.20	0.33	1.30E-01	1.57E-01	1.60E-01
700	420384.56	3727086.21	Worker	6.61	6.59	6.71	-0.03	0.10	1.24E-01	1.49E-01	1.52E-01
701	420400.00	3725900.00	Worker	1.60	1.15	1.17	-0.45	-0.42	2.10E-02	2.51E-02	2.56E-02
702	420400.00	3726000.00	Worker	1.93	1.38	1.41	-0.54	-0.52	2.53E-02	3.02E-02	3.08E-02
703	420400.00	3726100.00	Worker	2.30	1.66	1.69	-0.64	-0.61	3.03E-02	3.62E-02	3.70E-02
704	420400.00	3726200.00	Resident	7.85	5.73	5.84	-2.11	-2.00	3.59E-02	4.30E-02	4.39E-02
705	420400.00	3726300.00	Resident	9.03	6.73	6.86	-2.30	-2.17	4.23E-02	5.06E-02	5.17E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
706	420400.00	3726400.00	Worker	3.51	2.70	2.75	-0.81	-0.76	4.97E-02	5.95E-02	6.08E-02
707	420400.00	3726500.00	Worker	3.90	3.12	3.18	-0.78	-0.72	5.75E-02	6.91E-02	7.05E-02
708	420400.00	3726600.00	Worker	4.29	3.58	3.65	-0.70	-0.64	6.63E-02	7.97E-02	8.13E-02
709	420400.00	3726700.00	Worker	4.69	4.09	4.17	-0.60	-0.52	7.59E-02	9.13E-02	9.32E-02
710	420400.00	3726800.00	Worker	5.13	4.65	4.74	-0.47	-0.38	8.67E-02	1.04E-01	1.07E-01
711	420400.00	3726900.00	Worker	5.59	5.26	5.36	-0.33	-0.23	9.81E-02	1.18E-01	1.21E-01
712	420400.00	3727000.00	Worker	6.09	5.92	6.03	-0.18	-0.06	1.11E-01	1.34E-01	1.36E-01
713	420400.00	3727100.00	Worker	6.57	6.56	6.68	-0.02	0.11	1.23E-01	1.48E-01	1.51E-01
714	420400.00	3727400.00	Worker	6.26	6.41	6.53	0.15	0.27	1.21E-01	1.45E-01	1.48E-01
715	420400.00	3727500.00	Worker	5.64	5.75	5.86	0.10	0.21	1.08E-01	1.30E-01	1.33E-01
716	420400.00	3727600.00	Worker	5.02	5.08	5.17	0.06	0.15	9.56E-02	1.15E-01	1.17E-01
717	420400.00	3727700.00	Worker	4.45	4.46	4.55	0.01	0.10	8.40E-02	1.01E-01	1.03E-01
718	420400.00	3727800.00	Worker	3.92	3.90	3.97	-0.02	0.05	7.33E-02	8.79E-02	8.97E-02
719	420400.00	3727900.00	Worker	3.44	3.40	3.46	-0.05	0.02	6.39E-02	7.67E-02	7.82E-02
720	420400.00	3728000.00	Worker	3.03	2.97	3.03	-0.06	-0.01	5.58E-02	6.70E-02	6.83E-02
721	420400.00	3728100.00	Worker	2.68	2.61	2.66	-0.07	-0.02	4.90E-02	5.87E-02	5.99E-02
722	420400.00	3728200.00	Worker	2.37	2.29	2.33	-0.08	-0.04	4.30E-02	5.16E-02	5.26E-02
723	420400.00	3728300.00	Worker	2.11	2.02	2.06	-0.09	-0.05	3.78E-02	4.54E-02	4.63E-02
724	420400.00	3728400.00	Worker	1.88	1.78	1.82	-0.09	-0.06	3.34E-02	4.01E-02	4.09E-02
725	420400.00	3728500.00	Worker	1.68	1.59	1.62	-0.09	-0.06	2.97E-02	3.57E-02	3.64E-02
726	420400.00	3728600.00	Worker	1.51	1.42	1.45	-0.09	-0.06	2.66E-02	3.19E-02	3.25E-02
727	420432.00	3727174.24	Worker	6.37	6.40	6.52	0.03	0.15	1.20E-01	1.45E-01	1.48E-01
728	420450.00	3725450.00	Worker	0.66	0.51	0.52	-0.16	-0.15	9.37E-03	1.11E-02	1.14E-02
729	420450.00	3725700.00	Worker	1.02	0.76	0.77	-0.27	-0.25	1.39E-02	1.65E-02	1.69E-02
730	420450.00	3725950.00	Worker	1.63	1.18	1.21	-0.45	-0.43	2.16E-02	2.58E-02	2.64E-02
731	420450.00	3728700.00	Worker	1.40	1.32	1.34	-0.09	-0.06	2.46E-02	2.96E-02	3.01E-02
732	420450.00	3728950.00	Worker	1.11	1.03	1.05	-0.08	-0.06	1.93E-02	2.31E-02	2.36E-02
733	420452.91	3727328.13	Worker	6.02	6.11	6.23	0.09	0.20	1.15E-01	1.38E-01	1.41E-01
734	420479.43	3727262.27	Worker	5.76	5.76	5.87	0.01	0.12	1.08E-01	1.30E-01	1.33E-01
735	420500.00	3726000.00	Worker	1.67	1.22	1.24	-0.45	-0.43	2.23E-02	2.66E-02	2.71E-02
736	420500.00	3726100.00	Resident	5.76	4.22	4.30	-1.53	-1.45	2.64E-02	3.16E-02	3.22E-02
737	420500.00	3726200.00	Resident	6.71	4.96	5.06	-1.74	-1.65	3.11E-02	3.72E-02	3.80E-02
738	420500.00	3726300.00	Worker	2.64	1.99	2.02	-0.66	-0.62	3.65E-02	4.36E-02	4.45E-02
739	420500.00	3726400.00	Worker	2.99	2.31	2.35	-0.68	-0.64	4.25E-02	5.09E-02	5.19E-02
740	420500.00	3726500.00	Worker	3.32	2.65	2.70	-0.67	-0.62	4.89E-02	5.87E-02	5.99E-02
741	420500.00	3726600.00	Resident	10.67	8.83	9.00	-1.83	-1.67	5.60E-02	6.73E-02	6.86E-02
742	420500.00	3726700.00	Worker	3.98	3.42	3.49	-0.56	-0.50	6.34E-02	7.63E-02	7.79E-02
743	420500.00	3726800.00	Worker	4.34	3.87	3.95	-0.47	-0.40	7.20E-02	8.67E-02	8.85E-02
744	420500.00	3726900.00	Worker	4.70	4.33	4.42	-0.37	-0.29	8.08E-02	9.73E-02	9.93E-02
745	420500.00	3727000.00	Worker	5.08	4.82	4.92	-0.26	-0.16	9.02E-02	1.09E-01	1.11E-01
746	420500.00	3727100.00	Worker	5.37	5.23	5.33	-0.15	-0.05	9.79E-02	1.18E-01	1.20E-01
747	420500.00	3727200.00	Worker	5.51	5.44	5.55	-0.07	0.04	1.02E-01	1.23E-01	1.26E-01
748	420500.00	3727300.00	Worker	5.63	5.65	5.76	0.02	0.13	1.06E-01	1.28E-01	1.30E-01
749	420500.00	3727400.00	Worker	5.42	5.47	5.57	0.04	0.15	1.03E-01	1.24E-01	1.26E-01
750	420500.00	3727500.00	Worker	5.06	5.10	5.20	0.04	0.14	9.59E-02	1.15E-01	1.18E-01
751	420500.00	3727600.00	Worker	4.62	4.64	4.72	0.01	0.10	8.72E-02	1.05E-01	1.07E-01
752	420500.00	3727700.00	Worker	4.18	4.17	4.25	-0.01	0.07	7.84E-02	9.42E-02	9.61E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
753	420500.00	3727800.00	Worker	3.78	3.75	3.82	-0.03	0.04	7.05E-02	8.47E-02	8.63E-02
754	420500.00	3727900.00	Worker	3.38	3.33	3.39	-0.05	0.01	6.26E-02	7.51E-02	7.65E-02
755	420500.00	3728000.00	Worker	3.03	2.97	3.02	-0.07	-0.01	5.58E-02	6.68E-02	6.82E-02
756	420500.00	3728100.00	Worker	2.72	2.65	2.70	-0.07	-0.02	4.97E-02	5.96E-02	6.08E-02
757	420500.00	3728200.00	Worker	2.43	2.35	2.40	-0.08	-0.04	4.42E-02	5.29E-02	5.40E-02
758	420500.00	3728300.00	Worker	2.18	2.10	2.14	-0.08	-0.04	3.94E-02	4.72E-02	4.82E-02
759	420500.00	3728400.00	Worker	1.96	1.87	1.90	-0.09	-0.05	3.51E-02	4.21E-02	4.29E-02
760	420500.00	3728500.00	Worker	1.76	1.67	1.70	-0.09	-0.06	3.14E-02	3.76E-02	3.84E-02
761	420500.00	3728600.00	Worker	1.59	1.50	1.53	-0.09	-0.06	2.81E-02	3.37E-02	3.44E-02
762	420600.00	3726100.00	Worker	1.71	1.27	1.29	-0.45	-0.42	2.33E-02	2.78E-02	2.84E-02
763	420600.00	3726200.00	Worker	1.99	1.49	1.52	-0.50	-0.47	2.74E-02	3.27E-02	3.34E-02
764	420600.00	3726300.00	Worker	2.28	1.73	1.76	-0.55	-0.52	3.18E-02	3.81E-02	3.89E-02
765	420600.00	3726400.00	Worker	2.58	1.99	2.03	-0.58	-0.54	3.67E-02	4.40E-02	4.49E-02
766	420600.00	3726500.00	Resident	8.37	6.67	6.80	-1.69	-1.56	4.22E-02	5.06E-02	5.16E-02
767	420600.00	3726600.00	Resident	9.20	7.58	7.72	-1.63	-1.48	4.80E-02	5.76E-02	5.88E-02
768	420600.00	3726700.00	Worker	3.43	2.92	2.97	-0.51	-0.46	5.41E-02	6.50E-02	6.63E-02
769	420600.00	3726800.00	Worker	3.73	3.28	3.34	-0.45	-0.39	6.10E-02	7.34E-02	7.49E-02
770	420600.00	3726900.00	Worker	4.03	3.65	3.72	-0.38	-0.31	6.80E-02	8.19E-02	8.36E-02
771	420600.00	3727000.00	Worker	4.32	4.03	4.10	-0.29	-0.22	7.52E-02	9.05E-02	9.23E-02
772	420600.00	3727100.00	Worker	4.59	4.38	4.46	-0.21	-0.12	8.19E-02	9.87E-02	1.01E-01
773	420600.00	3727200.00	Worker	4.77	4.64	4.73	-0.13	-0.04	8.70E-02	1.05E-01	1.07E-01
774	420600.00	3727300.00	Worker	4.83	4.76	4.85	-0.07	0.03	8.93E-02	1.08E-01	1.10E-01
775	420600.00	3727400.00	Worker	4.66	4.62	4.70	-0.05	0.04	8.66E-02	1.04E-01	1.06E-01
776	420600.00	3727500.00	Worker	4.51	4.48	4.57	-0.02	0.06	8.42E-02	1.01E-01	1.03E-01
777	420600.00	3727600.00	Worker	4.22	4.19	4.27	-0.02	0.06	7.87E-02	9.47E-02	9.66E-02
778	420600.00	3727700.00	Worker	3.89	3.85	3.93	-0.04	0.04	7.24E-02	8.71E-02	8.88E-02
779	420600.00	3727800.00	Worker	3.58	3.54	3.60	-0.05	0.02	6.64E-02	7.98E-02	8.14E-02
780	420600.00	3727900.00	Worker	3.26	3.20	3.26	-0.06	0.00	6.01E-02	7.22E-02	7.36E-02
781	420600.00	3728000.00	Worker	2.97	2.90	2.95	-0.07	-0.01	5.45E-02	6.53E-02	6.66E-02
782	420600.00	3728100.00	Worker	2.70	2.62	2.67	-0.08	-0.03	4.92E-02	5.89E-02	6.01E-02
783	420600.00	3728200.00	Worker	2.44	2.36	2.40	-0.08	-0.04	4.43E-02	5.31E-02	5.41E-02
784	420600.00	3728300.00	Worker	2.21	2.13	2.17	-0.09	-0.04	4.00E-02	4.79E-02	4.88E-02
785	420600.00	3728400.00	Worker	2.01	1.92	1.96	-0.09	-0.05	3.61E-02	4.32E-02	4.41E-02
786	420600.00	3728500.00	Worker	1.82	1.73	1.77	-0.09	-0.05	3.25E-02	3.90E-02	3.98E-02
787	420600.00	3728600.00	Worker	1.65	1.57	1.60	-0.09	-0.06	2.94E-02	3.52E-02	3.59E-02
788	420684.43	3726176.60	Sensitive	5.04	3.79	3.86	-1.25	-1.17	2.38E-02	2.84E-02	2.90E-02
789	420700.00	3725700.00	Worker	0.80	0.61	0.62	-0.19	-0.18	1.13E-02	1.34E-02	1.37E-02
790	420700.00	3725950.00	Worker	1.20	0.90	0.92	-0.30	-0.28	1.65E-02	1.97E-02	2.01E-02
791	420700.00	3726200.00	Worker	1.74	1.32	1.34	-0.43	-0.40	2.42E-02	2.89E-02	2.95E-02
792	420700.00	3726300.00	Worker	1.99	1.52	1.55	-0.47	-0.44	2.80E-02	3.36E-02	3.42E-02
793	420700.00	3726400.00	Worker	2.25	1.75	1.78	-0.50	-0.46	3.22E-02	3.86E-02	3.94E-02
794	420700.00	3726450.00	Worker	2.37	1.87	1.90	-0.50	-0.47	3.44E-02	4.13E-02	4.21E-02
795	420700.00	3726500.00	Worker	2.50	1.99	2.03	-0.51	-0.47	3.68E-02	4.41E-02	4.50E-02
796	420700.00	3726600.00	Worker	2.75	2.25	2.29	-0.50	-0.45	4.16E-02	4.99E-02	5.09E-02
797	420700.00	3726700.00	Worker	2.99	2.53	2.58	-0.47	-0.42	4.68E-02	5.63E-02	5.74E-02
798	420700.00	3726800.00	Worker	3.25	2.82	2.88	-0.42	-0.37	5.24E-02	6.31E-02	6.43E-02
799	420700.00	3726900.00	Worker	3.50	3.13	3.19	-0.37	-0.31	5.82E-02	7.01E-02	7.15E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
800	420700.00	3727000.00	Worker	3.74	3.44	3.50	-0.31	-0.24	6.41E-02	7.72E-02	7.87E-02
801	420700.00	3727100.00	Worker	3.95	3.71	3.78	-0.24	-0.17	6.93E-02	8.34E-02	8.51E-02
802	420700.00	3727200.00	Worker	4.11	3.93	4.01	-0.18	-0.10	7.36E-02	8.87E-02	9.04E-02
803	420700.00	3727300.00	Worker	4.17	4.04	4.12	-0.13	-0.05	7.57E-02	9.12E-02	9.30E-02
804	420700.00	3727400.00	Worker	4.17	4.08	4.16	-0.09	-0.01	7.65E-02	9.22E-02	9.40E-02
805	420700.00	3727500.00	Worker	4.04	3.98	4.05	-0.07	0.01	7.46E-02	8.98E-02	9.16E-02
806	420700.00	3727600.00	Worker	3.85	3.79	3.86	-0.06	0.02	7.12E-02	8.56E-02	8.73E-02
807	420700.00	3727700.00	Worker	3.61	3.55	3.62	-0.06	0.01	6.67E-02	8.02E-02	8.18E-02
808	420700.00	3727800.00	Worker	3.36	3.30	3.36	-0.06	0.00	6.19E-02	7.44E-02	7.59E-02
809	420700.00	3727900.00	Worker	3.10	3.03	3.09	-0.07	-0.01	5.70E-02	6.84E-02	6.98E-02
810	420700.00	3728000.00	Worker	2.85	2.78	2.83	-0.08	-0.02	5.22E-02	6.26E-02	6.38E-02
811	420700.00	3728100.00	Worker	2.62	2.54	2.59	-0.08	-0.03	4.78E-02	5.72E-02	5.84E-02
812	420700.00	3728200.00	Worker	2.41	2.32	2.37	-0.09	-0.04	4.37E-02	5.23E-02	5.33E-02
813	420700.00	3728300.00	Worker	2.21	2.12	2.16	-0.09	-0.05	3.98E-02	4.77E-02	4.86E-02
814	420700.00	3728400.00	Worker	2.02	1.93	1.97	-0.09	-0.05	3.63E-02	4.35E-02	4.44E-02
815	420700.00	3728450.00	Worker	1.94	1.85	1.88	-0.09	-0.05	3.47E-02	4.15E-02	4.23E-02
816	420700.00	3728500.00	Worker	1.85	1.76	1.80	-0.09	-0.05	3.31E-02	3.97E-02	4.05E-02
817	420700.00	3728700.00	Worker	1.55	1.47	1.50	-0.09	-0.06	2.75E-02	3.30E-02	3.37E-02
818	420700.00	3728950.00	Worker	1.25	1.17	1.19	-0.08	-0.06	2.19E-02	2.63E-02	2.68E-02
819	420800.00	3726600.00	Worker	2.41	1.97	2.01	-0.44	-0.40	3.64E-02	4.37E-02	4.46E-02
820	420800.00	3726700.00	Worker	2.63	2.21	2.25	-0.42	-0.38	4.10E-02	4.92E-02	5.02E-02
821	420800.00	3726800.00	Worker	2.85	2.45	2.50	-0.39	-0.35	4.55E-02	5.47E-02	5.58E-02
822	420800.00	3726900.00	Worker	3.07	2.71	2.77	-0.35	-0.30	5.05E-02	6.07E-02	6.19E-02
823	420800.00	3727000.00	Worker	3.28	2.97	3.03	-0.31	-0.25	5.54E-02	6.66E-02	6.80E-02
824	420800.00	3727100.00	Worker	3.46	3.20	3.27	-0.26	-0.19	5.98E-02	7.20E-02	7.34E-02
825	420800.00	3727200.00	Worker	3.60	3.40	3.46	-0.21	-0.14	6.35E-02	7.65E-02	7.80E-02
826	420800.00	3727300.00	Worker	3.63	3.46	3.53	-0.17	-0.10	6.48E-02	7.80E-02	7.96E-02
827	420800.00	3727400.00	Worker	3.69	3.56	3.63	-0.13	-0.06	6.68E-02	8.04E-02	8.20E-02
828	420800.00	3727500.00	Worker	3.62	3.52	3.59	-0.10	-0.03	6.60E-02	7.94E-02	8.10E-02
829	420800.00	3727600.00	Worker	3.49	3.40	3.46	-0.09	-0.02	6.37E-02	7.67E-02	7.82E-02
830	420800.00	3727700.00	Worker	3.30	3.22	3.28	-0.08	-0.02	6.04E-02	7.26E-02	7.41E-02
831	420800.00	3727800.00	Worker	3.13	3.05	3.11	-0.08	-0.02	5.73E-02	6.88E-02	7.02E-02
832	420800.00	3727900.00	Worker	2.94	2.86	2.91	-0.08	-0.02	5.37E-02	6.44E-02	6.57E-02
833	420800.00	3728000.00	Worker	2.73	2.64	2.70	-0.08	-0.03	4.97E-02	5.96E-02	6.08E-02
834	420800.00	3728100.00	Worker	2.54	2.45	2.50	-0.09	-0.04	4.60E-02	5.51E-02	5.62E-02
835	420800.00	3728200.00	Worker	2.35	2.26	2.30	-0.09	-0.05	4.24E-02	5.08E-02	5.19E-02
836	420800.00	3728300.00	Worker	2.17	2.08	2.12	-0.09	-0.05	3.91E-02	4.68E-02	4.77E-02
837	420862.31	3726041.93	Sensitive	3.39	2.58	2.63	-0.81	-0.76	1.61E-02	1.92E-02	1.96E-02
838	420900.00	3726700.00	Worker	2.33	1.95	1.98	-0.38	-0.35	3.61E-02	4.33E-02	4.42E-02
839	420900.00	3726800.00	Worker	2.53	2.16	2.20	-0.36	-0.32	4.01E-02	4.82E-02	4.92E-02
840	420900.00	3726900.00	Worker	2.71	2.38	2.42	-0.33	-0.29	4.42E-02	5.32E-02	5.42E-02
841	420900.00	3727000.00	Worker	2.89	2.59	2.64	-0.30	-0.25	4.83E-02	5.81E-02	5.93E-02
842	420900.00	3727100.00	Worker	3.05	2.79	2.85	-0.26	-0.21	5.21E-02	6.27E-02	6.40E-02
843	420900.00	3727200.00	Worker	3.13	2.90	2.96	-0.23	-0.17	5.42E-02	6.53E-02	6.66E-02
844	420900.00	3727300.00	Worker	3.26	3.08	3.14	-0.18	-0.12	5.76E-02	6.93E-02	7.07E-02
845	420900.00	3727400.00	Worker	3.29	3.14	3.20	-0.15	-0.09	5.87E-02	7.07E-02	7.21E-02
846	420900.00	3727500.00	Worker	3.26	3.13	3.19	-0.13	-0.07	5.87E-02	7.06E-02	7.20E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Cancer Risk (in a million)			Incremental Cancer Risk (in a million)		Chronic Hazard Index		
				Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1
847	420900.00	3727600.00	Worker	3.17	3.06	3.12	-0.11	-0.05	5.74E-02	6.91E-02	7.05E-02
848	420900.00	3727700.00	Worker	3.06	2.96	3.02	-0.10	-0.04	5.55E-02	6.67E-02	6.81E-02
849	420900.00	3727800.00	Worker	2.91	2.82	2.87	-0.09	-0.04	5.29E-02	6.36E-02	6.48E-02
850	420900.00	3727900.00	Worker	2.74	2.64	2.70	-0.09	-0.04	4.96E-02	5.96E-02	6.08E-02
851	420900.00	3728000.00	Worker	2.60	2.51	2.55	-0.09	-0.04	4.70E-02	5.65E-02	5.76E-02
852	420900.00	3728100.00	Worker	2.43	2.34	2.38	-0.09	-0.05	4.39E-02	5.27E-02	5.37E-02
853	420900.00	3728200.00	Worker	2.27	2.18	2.22	-0.09	-0.05	4.09E-02	4.91E-02	5.00E-02
854	420950.00	3726200.00	Worker	1.31	1.01	1.03	-0.30	-0.28	1.85E-02	2.21E-02	2.26E-02
855	420950.00	3726450.00	Worker	1.75	1.39	1.41	-0.36	-0.34	2.56E-02	3.06E-02	3.13E-02
856	420950.00	3726700.00	Worker	2.20	1.83	1.87	-0.37	-0.33	3.39E-02	4.07E-02	4.15E-02
857	420950.00	3726950.00	Worker	2.64	2.34	2.38	-0.31	-0.26	4.35E-02	5.22E-02	5.33E-02
858	420950.00	3727700.00	Resident	8.66	8.30	8.46	-0.36	-0.20	5.30E-02	6.37E-02	6.50E-02
859	420950.00	3727950.00	Worker	2.60	2.51	2.56	-0.09	-0.05	4.70E-02	5.65E-02	5.76E-02
860	420950.00	3728200.00	Worker	2.23	2.13	2.17	-0.09	-0.05	4.00E-02	4.80E-02	4.89E-02
861	420950.00	3728450.00	Worker	1.88	1.79	1.83	-0.09	-0.06	3.36E-02	4.03E-02	4.11E-02
862	420950.00	3728700.00	Worker	1.59	1.50	1.53	-0.09	-0.06	2.81E-02	3.36E-02	3.43E-02
863	421000.00	3726900.00	Worker	2.42	2.10	2.14	-0.31	-0.27	3.91E-02	4.70E-02	4.79E-02
864	421000.00	3727000.00	Worker	2.57	2.29	2.33	-0.29	-0.24	4.26E-02	5.12E-02	5.22E-02
865	421000.00	3727100.00	Worker	2.72	2.46	2.51	-0.26	-0.21	4.59E-02	5.51E-02	5.62E-02
866	421000.00	3727200.00	Worker	2.83	2.61	2.66	-0.23	-0.17	4.87E-02	5.85E-02	5.97E-02
867	421000.00	3727300.00	Worker	2.91	2.72	2.77	-0.19	-0.14	5.08E-02	6.12E-02	6.24E-02
868	421000.00	3727400.00	Worker	2.94	2.77	2.83	-0.17	-0.11	5.19E-02	6.24E-02	6.37E-02
869	421000.00	3727500.00	Sensitive	8.70	8.24	8.40	-0.46	-0.30	5.26E-02	6.33E-02	6.45E-02
870	421000.00	3727600.00	Resident	8.54	8.13	8.29	-0.41	-0.26	5.19E-02	6.24E-02	6.37E-02
871	421000.00	3727700.00	Resident	8.31	7.93	8.08	-0.37	-0.22	5.06E-02	6.09E-02	6.21E-02
872	421070.59	3727529.32	Sensitive	8.08	7.61	7.76	-0.47	-0.32	4.86E-02	5.84E-02	5.96E-02
873	421100.00	3727300.00	Worker	2.62	2.42	2.47	-0.20	-0.15	4.52E-02	5.43E-02	5.54E-02
874	421100.00	3727400.00	Worker	2.66	2.49	2.53	-0.18	-0.13	4.65E-02	5.59E-02	5.70E-02
875	421200.00	3726700.00	Worker	1.69	1.40	1.43	-0.29	-0.26	2.60E-02	3.11E-02	3.18E-02
876	421200.00	3726950.00	Worker	2.02	1.75	1.79	-0.27	-0.23	3.26E-02	3.91E-02	3.99E-02
877	421200.00	3727200.00	Worker	2.29	2.07	2.11	-0.22	-0.18	3.87E-02	4.65E-02	4.74E-02
878	421200.00	3727450.00	Worker	2.44	2.27	2.31	-0.17	-0.13	4.24E-02	5.09E-02	5.19E-02
879	421200.00	3727700.00	Worker	2.40	2.26	2.31	-0.13	-0.09	4.24E-02	5.10E-02	5.20E-02
880	421200.00	3727950.00	Worker	2.23	2.12	2.16	-0.11	-0.07	3.97E-02	4.76E-02	4.86E-02
881	421200.00	3728200.00	Worker	2.00	1.90	1.93	-0.10	-0.06	3.56E-02	4.27E-02	4.35E-02
882	421200.00	3728450.00	Worker	1.76	1.66	1.69	-0.09	-0.06	3.12E-02	3.73E-02	3.81E-02
883	421450.00	3727200.00	Worker	1.81	1.61	1.64	-0.20	-0.17	3.00E-02	3.60E-02	3.67E-02
884	421450.00	3727450.00	Worker	1.95	1.78	1.81	-0.17	-0.14	3.32E-02	3.98E-02	4.06E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
1	417450.00	3724450.00	Resident	6.22E-04	6.99E-04	1.55E-01	1.89E-01	1.93E-01	3.35E-02	3.72E-02
2	417450.00	3724700.00	Resident	6.57E-04	7.38E-04	1.57E-01	1.92E-01	1.95E-01	3.41E-02	3.79E-02
3	417450.00	3724950.00	Resident	6.89E-04	7.74E-04	1.44E-01	1.76E-01	1.79E-01	3.14E-02	3.48E-02
4	417450.00	3725200.00	Sensitive	7.18E-04	8.06E-04	1.62E-01	1.97E-01	2.01E-01	3.50E-02	3.88E-02
5	417450.00	3725450.00	Sensitive	7.37E-04	8.28E-04	1.58E-01	1.92E-01	1.96E-01	3.42E-02	3.80E-02
6	417513.72	3724591.85	Sensitive	6.68E-04	7.51E-04	1.63E-01	1.98E-01	2.02E-01	3.51E-02	3.90E-02
7	417617.42	3724864.54	Sensitive	7.64E-04	8.59E-04	1.76E-01	2.14E-01	2.18E-01	3.82E-02	4.23E-02
8	417668.01	3724420.76	Sensitive	7.03E-04	7.90E-04	1.70E-01	2.06E-01	2.10E-01	3.67E-02	4.08E-02
9	417700.00	3724200.00	Sensitive	6.69E-04	7.53E-04	1.68E-01	2.05E-01	2.09E-01	3.64E-02	4.04E-02
10	417700.00	3724450.00	Resident	7.24E-04	8.14E-04	1.73E-01	2.10E-01	2.15E-01	3.75E-02	4.16E-02
11	417700.00	3724700.00	Resident	7.78E-04	8.75E-04	1.88E-01	2.29E-01	2.33E-01	4.07E-02	4.51E-02
12	417700.00	3724900.00	Resident	8.20E-04	9.21E-04	1.88E-01	2.29E-01	2.34E-01	4.10E-02	4.54E-02
13	417700.00	3724950.00	Sensitive	8.31E-04	9.34E-04	1.84E-01	2.24E-01	2.29E-01	4.01E-02	4.45E-02
14	417700.00	3725000.00	Worker	8.40E-04	9.44E-04	1.81E-01	2.20E-01	2.25E-01	3.93E-02	4.36E-02
15	417700.00	3725200.00	Sensitive	8.82E-04	9.91E-04	1.75E-01	2.13E-01	2.17E-01	3.79E-02	4.20E-02
16	417700.00	3725450.00	Sensitive	9.17E-04	1.03E-03	1.85E-01	2.25E-01	2.30E-01	4.01E-02	4.45E-02
17	417700.00	3725700.00	Sensitive	9.39E-04	1.05E-03	1.68E-01	2.04E-01	2.08E-01	3.64E-02	4.03E-02
18	417727.85	3724357.62	Sensitive	7.14E-04	8.03E-04	1.80E-01	2.20E-01	2.24E-01	3.91E-02	4.34E-02
19	417746.00	3724391.00	Sensitive	7.30E-04	8.21E-04	1.82E-01	2.22E-01	2.26E-01	3.95E-02	4.39E-02
20	417753.07	3724308.09	Sensitive	7.13E-04	8.02E-04	1.83E-01	2.23E-01	2.27E-01	3.97E-02	4.40E-02
21	417800.00	3724600.00	Resident	8.10E-04	9.11E-04	1.90E-01	2.32E-01	2.36E-01	4.12E-02	4.57E-02
22	417800.00	3724700.00	Resident	8.36E-04	9.40E-04	1.99E-01	2.42E-01	2.47E-01	4.31E-02	4.78E-02
23	417800.00	3724800.00	Resident	8.64E-04	9.71E-04	2.02E-01	2.46E-01	2.51E-01	4.39E-02	4.87E-02
24	417800.00	3724900.00	Resident	8.88E-04	9.98E-04	2.03E-01	2.47E-01	2.52E-01	4.42E-02	4.90E-02
25	417800.00	3725000.00	Resident	9.19E-04	1.03E-03	1.94E-01	2.36E-01	2.41E-01	4.22E-02	4.68E-02
26	417800.00	3725100.00	Worker	9.46E-04	1.06E-03	1.83E-01	2.23E-01	2.27E-01	3.98E-02	4.42E-02
27	417800.00	3725200.00	Worker	9.67E-04	1.09E-03	1.78E-01	2.17E-01	2.21E-01	3.87E-02	4.30E-02
28	417900.00	3724600.00	Resident	8.77E-04	9.86E-04	1.87E-01	2.28E-01	2.32E-01	4.06E-02	4.50E-02
29	417900.00	3724700.00	Resident	9.02E-04	1.01E-03	2.02E-01	2.46E-01	2.51E-01	4.37E-02	4.85E-02
30	417900.00	3724800.00	Resident	9.38E-04	1.05E-03	2.08E-01	2.53E-01	2.58E-01	4.51E-02	5.00E-02
31	417900.00	3724900.00	Resident	9.69E-04	1.09E-03	2.17E-01	2.64E-01	2.69E-01	4.71E-02	5.23E-02
32	417900.00	3725000.00	Resident	1.01E-03	1.13E-03	2.08E-01	2.54E-01	2.59E-01	4.54E-02	5.04E-02
33	417900.00	3725100.00	Resident	1.04E-03	1.17E-03	2.02E-01	2.46E-01	2.50E-01	4.39E-02	4.87E-02
34	417900.00	3725200.00	Sensitive	1.06E-03	1.20E-03	1.92E-01	2.34E-01	2.38E-01	4.18E-02	4.63E-02
35	417900.00	3725300.00	Worker	1.08E-03	1.21E-03	1.93E-01	2.35E-01	2.39E-01	4.18E-02	4.64E-02
36	417900.00	3725400.00	Worker	1.11E-03	1.25E-03	2.06E-01	2.51E-01	2.56E-01	4.48E-02	4.97E-02
37	417902.00	3724079.00	Sensitive	6.94E-04	7.81E-04	1.56E-01	1.90E-01	1.94E-01	3.39E-02	3.76E-02
38	417950.00	3724200.00	Worker	7.53E-04	8.47E-04	1.72E-01	2.09E-01	2.13E-01	3.73E-02	4.13E-02
39	417950.00	3724450.00	Resident	8.46E-04	9.51E-04	1.86E-01	2.27E-01	2.31E-01	4.04E-02	4.49E-02
40	417950.00	3725450.00	Sensitive	1.18E-03	1.33E-03	2.15E-01	2.62E-01	2.67E-01	4.67E-02	5.18E-02
41	417950.00	3725700.00	Worker	1.18E-03	1.33E-03	2.02E-01	2.46E-01	2.51E-01	4.38E-02	4.86E-02
42	417950.00	3725950.00	Worker	1.26E-03	1.41E-03	1.72E-01	2.09E-01	2.13E-01	3.72E-02	4.12E-02
43	417950.00	3726200.00	Worker	1.27E-03	1.43E-03	1.69E-01	2.05E-01	2.09E-01	3.64E-02	4.03E-02
44	417950.00	3726450.00	Worker	1.28E-03	1.44E-03	1.59E-01	1.93E-01	1.97E-01	3.41E-02	3.78E-02
45	418000.00	3724500.00	Resident	8.83E-04	9.92E-04	1.93E-01	2.35E-01	2.39E-01	4.19E-02	4.65E-02
46	418000.00	3724600.00	Resident	9.11E-04	1.02E-03	1.97E-01	2.40E-01	2.45E-01	4.29E-02	4.75E-02
47	418000.00	3724700.00	Resident	9.79E-04	1.10E-03	2.00E-01	2.44E-01	2.49E-01	4.35E-02	4.83E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
48	418000.00	3724800.00	Resident	1.02E-03	1.15E-03	2.07E-01	2.52E-01	2.57E-01	4.49E-02	4.99E-02
49	418000.00	3724900.00	Resident	1.06E-03	1.19E-03	2.23E-01	2.71E-01	2.77E-01	4.84E-02	5.37E-02
50	418000.00	3725000.00	Resident	1.10E-03	1.24E-03	2.28E-01	2.77E-01	2.83E-01	4.97E-02	5.51E-02
51	418000.00	3725100.00	Resident	1.14E-03	1.28E-03	2.22E-01	2.70E-01	2.76E-01	4.84E-02	5.37E-02
52	418000.00	3725200.00	Resident	1.18E-03	1.32E-03	2.13E-01	2.59E-01	2.64E-01	4.63E-02	5.14E-02
53	418000.00	3725300.00	Sensitive	1.20E-03	1.34E-03	2.00E-01	2.43E-01	2.48E-01	4.35E-02	4.82E-02
54	418000.00	3725400.00	Sensitive	1.24E-03	1.39E-03	2.17E-01	2.64E-01	2.69E-01	4.71E-02	5.23E-02
55	418000.00	3725500.00	Worker	1.26E-03	1.41E-03	2.23E-01	2.72E-01	2.77E-01	4.85E-02	5.38E-02
56	418100.00	3724400.00	Worker	8.70E-04	9.79E-04	1.86E-01	2.27E-01	2.31E-01	4.05E-02	4.49E-02
57	418100.00	3724500.00	Sensitive	9.27E-04	1.04E-03	1.96E-01	2.38E-01	2.43E-01	4.25E-02	4.72E-02
58	418100.00	3724600.00	Sensitive	9.83E-04	1.11E-03	2.09E-01	2.55E-01	2.60E-01	4.55E-02	5.05E-02
59	418100.00	3724700.00	Sensitive	1.03E-03	1.16E-03	2.15E-01	2.62E-01	2.67E-01	4.68E-02	5.19E-02
60	418100.00	3724800.00	Resident	1.11E-03	1.24E-03	2.24E-01	2.73E-01	2.78E-01	4.87E-02	5.40E-02
61	418100.00	3724900.00	Resident	1.16E-03	1.30E-03	2.27E-01	2.76E-01	2.81E-01	4.92E-02	5.45E-02
62	418100.00	3725000.00	Resident	1.21E-03	1.36E-03	2.42E-01	2.95E-01	3.01E-01	5.28E-02	5.85E-02
63	418100.00	3725100.00	Resident	1.26E-03	1.42E-03	2.48E-01	3.02E-01	3.08E-01	5.41E-02	6.00E-02
64	418100.00	3725200.00	Resident	1.31E-03	1.47E-03	2.36E-01	2.88E-01	2.93E-01	5.15E-02	5.71E-02
65	418100.00	3725300.00	Resident	1.34E-03	1.50E-03	2.22E-01	2.71E-01	2.76E-01	4.85E-02	5.37E-02
66	418100.00	3725400.00	Worker	1.38E-03	1.55E-03	2.26E-01	2.76E-01	2.81E-01	4.93E-02	5.47E-02
67	418100.00	3725500.00	Worker	1.42E-03	1.60E-03	2.39E-01	2.91E-01	2.96E-01	5.19E-02	5.75E-02
68	418100.00	3725600.00	Worker	1.45E-03	1.63E-03	2.38E-01	2.90E-01	2.95E-01	5.16E-02	5.72E-02
69	418100.00	3725700.00	Worker	1.47E-03	1.65E-03	2.34E-01	2.84E-01	2.90E-01	5.06E-02	5.61E-02
70	418103.18	3725420.16	Sensitive	1.39E-03	1.56E-03	2.30E-01	2.80E-01	2.85E-01	5.01E-02	5.55E-02
71	418200.00	3723950.00	Sensitive	6.84E-04	7.71E-04	1.56E-01	1.90E-01	1.93E-01	3.38E-02	3.75E-02
72	418200.00	3724200.00	Resident	8.07E-04	9.08E-04	1.82E-01	2.22E-01	2.26E-01	3.96E-02	4.39E-02
73	418200.00	3724300.00	Resident	8.57E-04	9.64E-04	1.91E-01	2.33E-01	2.38E-01	4.16E-02	4.62E-02
74	418200.00	3724400.00	Worker	9.05E-04	1.02E-03	2.00E-01	2.44E-01	2.48E-01	4.36E-02	4.83E-02
75	418200.00	3724500.00	Sensitive	9.84E-04	1.11E-03	2.06E-01	2.51E-01	2.56E-01	4.49E-02	4.98E-02
76	418200.00	3724600.00	Sensitive	1.05E-03	1.18E-03	2.13E-01	2.60E-01	2.65E-01	4.64E-02	5.15E-02
77	418200.00	3724700.00	Sensitive	1.10E-03	1.24E-03	2.27E-01	2.77E-01	2.82E-01	4.95E-02	5.49E-02
78	418200.00	3724800.00	Worker	1.18E-03	1.32E-03	2.38E-01	2.90E-01	2.95E-01	5.18E-02	5.74E-02
79	418200.00	3724900.00	Resident	1.26E-03	1.42E-03	2.51E-01	3.05E-01	3.11E-01	5.45E-02	6.04E-02
80	418200.00	3725000.00	Resident	1.33E-03	1.50E-03	2.51E-01	3.06E-01	3.12E-01	5.47E-02	6.07E-02
81	418200.00	3725100.00	Resident	1.40E-03	1.58E-03	2.70E-01	3.29E-01	3.36E-01	5.91E-02	6.55E-02
82	418200.00	3725200.00	Resident	1.47E-03	1.65E-03	2.66E-01	3.24E-01	3.30E-01	5.81E-02	6.45E-02
83	418200.00	3725300.00	Resident	1.51E-03	1.70E-03	2.51E-01	3.06E-01	3.12E-01	5.48E-02	6.08E-02
84	418200.00	3725400.00	Worker	1.57E-03	1.77E-03	2.41E-01	2.93E-01	2.99E-01	5.25E-02	5.83E-02
85	418200.00	3725500.00	Worker	1.62E-03	1.82E-03	2.55E-01	3.11E-01	3.17E-01	5.56E-02	6.16E-02
86	418200.00	3725600.00	Worker	1.66E-03	1.87E-03	2.58E-01	3.14E-01	3.20E-01	5.59E-02	6.20E-02
87	418200.00	3725700.00	Worker	1.69E-03	1.90E-03	2.53E-01	3.08E-01	3.14E-01	5.49E-02	6.09E-02
88	418200.00	3725800.00	Worker	1.72E-03	1.94E-03	2.42E-01	2.94E-01	3.00E-01	5.24E-02	5.81E-02
89	418200.00	3725900.00	Worker	1.76E-03	1.97E-03	2.29E-01	2.79E-01	2.84E-01	4.96E-02	5.50E-02
90	418200.00	3725950.00	Worker	1.76E-03	1.98E-03	2.20E-01	2.68E-01	2.73E-01	4.77E-02	5.29E-02
91	418200.00	3726000.00	Worker	1.77E-03	1.99E-03	2.11E-01	2.57E-01	2.62E-01	4.57E-02	5.07E-02
92	418200.00	3726100.00	Worker	1.78E-03	2.00E-03	1.93E-01	2.35E-01	2.40E-01	4.18E-02	4.64E-02
93	418200.00	3726200.00	Worker	1.79E-03	2.01E-03	1.92E-01	2.34E-01	2.38E-01	4.14E-02	4.60E-02
94	418200.00	3726300.00	Worker	1.78E-03	2.00E-03	1.91E-01	2.33E-01	2.37E-01	4.12E-02	4.57E-02

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John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
95	418200.00	3726450.00	Worker	1.75E-03	1.96E-03	1.84E-01	2.23E-01	2.28E-01	3.94E-02	4.38E-02
96	418200.00	3726700.00	Worker	1.66E-03	1.86E-03	1.63E-01	1.98E-01	2.02E-01	3.49E-02	3.87E-02
97	418200.00	3726950.00	Resident	1.56E-03	1.75E-03	1.45E-01	1.76E-01	1.80E-01	3.12E-02	3.46E-02
98	418274.62	3725141.19	Sensitive	1.56E-03	1.75E-03	2.88E-01	3.51E-01	3.57E-01	6.29E-02	6.98E-02
99	418300.00	3724300.00	Resident	8.74E-04	9.83E-04	1.93E-01	2.35E-01	2.40E-01	4.20E-02	4.66E-02
100	418300.00	3724400.00	Sensitive	9.38E-04	1.06E-03	2.05E-01	2.50E-01	2.55E-01	4.47E-02	4.96E-02
101	418300.00	3724500.00	Worker	1.03E-03	1.15E-03	2.33E-01	2.84E-01	2.90E-01	5.08E-02	5.63E-02
102	418300.00	3724600.00	Sensitive	1.10E-03	1.23E-03	2.28E-01	2.77E-01	2.83E-01	4.96E-02	5.50E-02
103	418300.00	3724700.00	Sensitive	1.17E-03	1.32E-03	2.35E-01	2.86E-01	2.91E-01	5.12E-02	5.68E-02
104	418300.00	3724800.00	Sensitive	1.26E-03	1.42E-03	2.49E-01	3.03E-01	3.09E-01	5.44E-02	6.03E-02
105	418300.00	3724900.00	Worker	1.36E-03	1.53E-03	2.63E-01	3.21E-01	3.27E-01	5.74E-02	6.37E-02
106	418300.00	3725000.00	Worker	1.47E-03	1.65E-03	2.75E-01	3.34E-01	3.41E-01	5.97E-02	6.62E-02
107	418300.00	3725100.00	Resident	1.56E-03	1.76E-03	2.82E-01	3.43E-01	3.50E-01	6.16E-02	6.83E-02
108	418300.00	3725200.00	Resident	1.66E-03	1.86E-03	2.98E-01	3.63E-01	3.70E-01	6.53E-02	7.24E-02
109	418300.00	3725300.00	Resident	1.67E-03	1.88E-03	2.86E-01	3.48E-01	3.55E-01	6.25E-02	6.93E-02
110	418300.00	3725400.00	Worker	1.82E-03	2.04E-03	2.75E-01	3.34E-01	3.41E-01	5.99E-02	6.64E-02
111	418300.00	3725500.00	Worker	1.88E-03	2.12E-03	2.72E-01	3.31E-01	3.38E-01	5.93E-02	6.58E-02
112	418300.00	3725600.00	Worker	1.93E-03	2.17E-03	2.75E-01	3.35E-01	3.41E-01	5.98E-02	6.63E-02
113	418300.00	3725700.00	Worker	1.97E-03	2.21E-03	2.71E-01	3.30E-01	3.36E-01	5.89E-02	6.53E-02
114	418300.00	3725800.00	Worker	2.03E-03	2.28E-03	2.67E-01	3.25E-01	3.31E-01	5.79E-02	6.42E-02
115	418300.00	3725900.00	Worker	2.06E-03	2.32E-03	2.54E-01	3.09E-01	3.15E-01	5.51E-02	6.11E-02
116	418300.00	3726000.00	Worker	2.08E-03	2.34E-03	2.36E-01	2.87E-01	2.92E-01	5.11E-02	5.66E-02
117	418300.00	3726100.00	Worker	2.09E-03	2.35E-03	2.14E-01	2.60E-01	2.65E-01	4.63E-02	5.14E-02
118	418300.00	3726200.00	Sensitive	2.09E-03	2.35E-03	2.05E-01	2.49E-01	2.54E-01	4.42E-02	4.91E-02
119	418300.00	3726300.00	Worker	2.07E-03	2.32E-03	2.04E-01	2.48E-01	2.53E-01	4.39E-02	4.88E-02
120	418300.00	3726400.00	Worker	2.03E-03	2.28E-03	2.00E-01	2.43E-01	2.48E-01	4.30E-02	4.77E-02
121	418304.91	3724964.72	Worker	1.43E-03	1.61E-03	2.69E-01	3.27E-01	3.34E-01	5.85E-02	6.49E-02
122	418337.69	3725042.43	Worker	1.56E-03	1.76E-03	2.86E-01	3.48E-01	3.55E-01	6.22E-02	6.89E-02
123	418346.37	3726332.45	Sensitive	2.21E-03	2.48E-03	2.09E-01	2.54E-01	2.59E-01	4.51E-02	5.00E-02
124	418382.08	3724901.12	Worker	1.42E-03	1.59E-03	2.72E-01	3.31E-01	3.37E-01	5.94E-02	6.58E-02
125	418396.29	3725123.47	Worker	1.76E-03	1.98E-03	3.11E-01	3.79E-01	3.86E-01	6.79E-02	7.53E-02
126	418400.00	3724200.00	Worker	8.27E-04	9.31E-04	1.84E-01	2.24E-01	2.28E-01	4.00E-02	4.44E-02
127	418400.00	3724300.00	Sensitive	8.86E-04	9.97E-04	1.93E-01	2.36E-01	2.40E-01	4.22E-02	4.68E-02
128	418400.00	3724400.00	Worker	9.74E-04	1.10E-03	2.14E-01	2.61E-01	2.66E-01	4.67E-02	5.18E-02
129	418400.00	3724500.00	Worker	1.06E-03	1.19E-03	2.36E-01	2.87E-01	2.93E-01	5.13E-02	5.69E-02
130	418400.00	3724600.00	Worker	1.14E-03	1.29E-03	2.57E-01	3.13E-01	3.19E-01	5.60E-02	6.21E-02
131	418400.00	3724700.00	Sensitive	1.24E-03	1.39E-03	2.53E-01	3.08E-01	3.14E-01	5.51E-02	6.11E-02
132	418400.00	3724800.00	Sensitive	1.34E-03	1.51E-03	2.65E-01	3.23E-01	3.29E-01	5.79E-02	6.41E-02
133	418400.00	3725200.00	Resident	1.86E-03	2.10E-03	3.18E-01	3.88E-01	3.95E-01	6.98E-02	7.74E-02
134	418400.00	3725300.00	Worker	1.98E-03	2.23E-03	3.31E-01	4.04E-01	4.12E-01	7.27E-02	8.05E-02
135	418400.00	3725400.00	Worker	2.12E-03	2.39E-03	3.21E-01	3.91E-01	3.98E-01	7.01E-02	7.77E-02
136	418400.00	3725500.00	Worker	2.21E-03	2.48E-03	3.00E-01	3.66E-01	3.73E-01	6.56E-02	7.28E-02
137	418400.00	3725600.00	Worker	2.32E-03	2.61E-03	3.01E-01	3.67E-01	3.74E-01	6.55E-02	7.27E-02
138	418400.00	3725700.00	Sensitive	2.38E-03	2.67E-03	3.00E-01	3.66E-01	3.73E-01	6.53E-02	7.24E-02
139	418400.00	3725800.00	Worker	2.44E-03	2.74E-03	2.93E-01	3.56E-01	3.63E-01	6.35E-02	7.04E-02
140	418400.00	3725900.00	Worker	2.48E-03	2.78E-03	2.82E-01	3.43E-01	3.50E-01	6.12E-02	6.79E-02
141	418400.00	3726000.00	Worker	2.50E-03	2.81E-03	2.67E-01	3.24E-01	3.31E-01	5.78E-02	6.41E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
142	418400.00	3726100.00	Worker	2.50E-03	2.81E-03	2.43E-01	2.96E-01	3.02E-01	5.27E-02	5.84E-02
143	418400.00	3726200.00	Sensitive	2.48E-03	2.78E-03	2.20E-01	2.67E-01	2.72E-01	4.75E-02	5.27E-02
144	418400.00	3726300.00	Sensitive	2.43E-03	2.73E-03	2.19E-01	2.66E-01	2.71E-01	4.72E-02	5.24E-02
145	418400.00	3726400.00	Worker	2.37E-03	2.66E-03	2.15E-01	2.61E-01	2.66E-01	4.63E-02	5.14E-02
146	418404.79	3724853.18	Sensitive	1.39E-03	1.57E-03	2.69E-01	3.28E-01	3.35E-01	5.89E-02	6.53E-02
147	418406.74	3725692.79	Sensitive	2.40E-03	2.70E-03	3.03E-01	3.68E-01	3.75E-01	6.57E-02	7.29E-02
148	418450.00	3723950.00	Sensitive	6.87E-04	7.74E-04	1.65E-01	2.00E-01	2.04E-01	3.58E-02	3.97E-02
149	418450.00	3724200.00	Resident	8.30E-04	9.34E-04	1.84E-01	2.25E-01	2.29E-01	4.01E-02	4.45E-02
150	418450.00	3726450.00	Worker	2.53E-03	2.84E-03	2.19E-01	2.66E-01	2.71E-01	4.71E-02	5.23E-02
151	418450.00	3726700.00	Worker	2.32E-03	2.60E-03	1.92E-01	2.34E-01	2.38E-01	4.12E-02	4.58E-02
152	418450.00	3726950.00	Worker	2.06E-03	2.31E-03	1.67E-01	2.03E-01	2.07E-01	3.58E-02	3.98E-02
153	418450.00	3727200.00	Resident	1.89E-03	2.12E-03	1.50E-01	1.83E-01	1.86E-01	3.24E-02	3.60E-02
154	418450.00	3727450.00	Resident	1.68E-03	1.89E-03	1.47E-01	1.79E-01	1.82E-01	3.19E-02	3.54E-02
155	418454.89	3725204.50	Worker	2.00E-03	2.25E-03	3.41E-01	4.16E-01	4.24E-01	7.47E-02	8.28E-02
156	418459.25	3724837.52	Worker	1.43E-03	1.60E-03	2.82E-01	3.43E-01	3.50E-01	6.16E-02	6.83E-02
157	418500.00	3724200.00	Worker	8.31E-04	9.36E-04	1.89E-01	2.30E-01	2.35E-01	4.12E-02	4.57E-02
158	418500.00	3724300.00	Resident	9.03E-04	1.02E-03	2.00E-01	2.44E-01	2.49E-01	4.36E-02	4.83E-02
159	418500.00	3724400.00	Worker	9.84E-04	1.11E-03	2.16E-01	2.63E-01	2.69E-01	4.72E-02	5.23E-02
160	418500.00	3724500.00	Worker	1.07E-03	1.21E-03	2.38E-01	2.89E-01	2.95E-01	5.18E-02	5.74E-02
161	418500.00	3724600.00	Worker	1.17E-03	1.32E-03	2.57E-01	3.13E-01	3.19E-01	5.60E-02	6.21E-02
162	418500.00	3724700.00	Worker	1.29E-03	1.45E-03	2.85E-01	3.47E-01	3.53E-01	6.21E-02	6.89E-02
163	418500.00	3724800.00	Sensitive	1.42E-03	1.59E-03	2.85E-01	3.47E-01	3.54E-01	6.23E-02	6.91E-02
164	418500.00	3725300.00	Worker	2.32E-03	2.61E-03	3.72E-01	4.54E-01	4.63E-01	8.20E-02	9.09E-02
165	418500.00	3725400.00	Worker	2.52E-03	2.84E-03	3.72E-01	4.54E-01	4.63E-01	8.17E-02	9.05E-02
166	418500.00	3725500.00	Worker	2.74E-03	3.09E-03	3.68E-01	4.48E-01	4.57E-01	8.04E-02	8.91E-02
167	418500.00	3725600.00	Worker	2.86E-03	3.22E-03	3.36E-01	4.09E-01	4.17E-01	7.31E-02	8.10E-02
168	418500.00	3725700.00	Worker	2.94E-03	3.31E-03	3.31E-01	4.03E-01	4.11E-01	7.20E-02	7.98E-02
169	418500.00	3725800.00	Worker	3.01E-03	3.38E-03	3.26E-01	3.96E-01	4.04E-01	7.08E-02	7.85E-02
170	418500.00	3725900.00	Worker	3.06E-03	3.44E-03	3.17E-01	3.86E-01	3.93E-01	6.89E-02	7.64E-02
171	418500.00	3726000.00	Worker	3.07E-03	3.46E-03	3.01E-01	3.66E-01	3.73E-01	6.53E-02	7.24E-02
172	418500.00	3726100.00	Worker	3.05E-03	3.43E-03	2.75E-01	3.35E-01	3.41E-01	5.96E-02	6.61E-02
173	418500.00	3726200.00	Worker	2.99E-03	3.36E-03	2.46E-01	3.00E-01	3.06E-01	5.33E-02	5.91E-02
174	418500.00	3726300.00	Worker	2.90E-03	3.26E-03	2.36E-01	2.87E-01	2.93E-01	5.11E-02	5.66E-02
175	418500.00	3726400.00	Worker	2.80E-03	3.14E-03	2.32E-01	2.82E-01	2.87E-01	5.00E-02	5.54E-02
176	418500.00	3726500.00	Worker	2.70E-03	3.03E-03	2.23E-01	2.71E-01	2.76E-01	4.80E-02	5.32E-02
177	418500.00	3726600.00	Worker	2.59E-03	2.91E-03	2.12E-01	2.57E-01	2.62E-01	4.54E-02	5.03E-02
178	418500.00	3726700.00	Worker	2.49E-03	2.80E-03	2.00E-01	2.43E-01	2.48E-01	4.29E-02	4.76E-02
179	418500.00	3726800.00	Worker	2.40E-03	2.69E-03	1.86E-01	2.26E-01	2.30E-01	3.98E-02	4.42E-02
180	418531.66	3727407.45	Sensitive	1.87E-03	2.10E-03	1.57E-01	1.91E-01	1.94E-01	3.40E-02	3.78E-02
181	418535.50	3725255.47	Worker	2.34E-03	2.63E-03	3.79E-01	4.62E-01	4.71E-01	8.31E-02	9.21E-02
182	418536.42	3724773.91	Worker	1.40E-03	1.58E-03	2.91E-01	3.54E-01	3.61E-01	6.36E-02	7.06E-02
183	418589.03	3725210.09	Worker	2.35E-03	2.65E-03	3.83E-01	4.67E-01	4.76E-01	8.39E-02	9.30E-02
184	418600.00	3724200.00	Resident	8.16E-04	9.19E-04	2.01E-01	2.45E-01	2.50E-01	4.39E-02	4.86E-02
185	418600.00	3724300.00	Resident	8.91E-04	1.00E-03	2.10E-01	2.56E-01	2.61E-01	4.58E-02	5.08E-02
186	418600.00	3724400.00	Worker	9.82E-04	1.11E-03	2.19E-01	2.67E-01	2.72E-01	4.78E-02	5.30E-02
187	418600.00	3724500.00	Worker	1.08E-03	1.21E-03	2.41E-01	2.93E-01	2.99E-01	5.25E-02	5.82E-02
188	418600.00	3724600.00	Worker	1.19E-03	1.34E-03	2.66E-01	3.24E-01	3.30E-01	5.81E-02	6.44E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
189	418600.00	3724700.00	Worker	1.32E-03	1.48E-03	2.78E-01	3.39E-01	3.45E-01	6.08E-02	6.74E-02
190	418600.00	3725300.00	Worker	2.76E-03	3.11E-03	4.31E-01	5.26E-01	5.36E-01	9.52E-02	1.05E-01
191	418600.00	3725400.00	Worker	3.61E-03	4.10E-03	4.82E-01	5.90E-01	6.01E-01	1.07E-01	1.19E-01
192	418600.00	3725500.00	Worker	3.65E-03	4.13E-03	4.40E-01	5.37E-01	5.47E-01	9.65E-02	1.07E-01
193	418600.00	3725600.00	Worker	3.72E-03	4.19E-03	4.18E-01	5.10E-01	5.20E-01	9.14E-02	1.01E-01
194	418600.00	3725700.00	Worker	3.81E-03	4.30E-03	3.82E-01	4.65E-01	4.74E-01	8.34E-02	9.24E-02
195	418600.00	3725800.00	Worker	3.90E-03	4.39E-03	3.67E-01	4.47E-01	4.56E-01	8.00E-02	8.87E-02
196	418600.00	3725900.00	Worker	3.96E-03	4.46E-03	3.56E-01	4.33E-01	4.42E-01	7.76E-02	8.60E-02
197	418600.00	3726000.00	Worker	3.93E-03	4.42E-03	3.44E-01	4.19E-01	4.27E-01	7.50E-02	8.31E-02
198	418600.00	3726100.00	Worker	3.84E-03	4.32E-03	3.14E-01	3.82E-01	3.90E-01	6.81E-02	7.55E-02
199	418600.00	3726200.00	Worker	3.70E-03	4.15E-03	2.84E-01	3.45E-01	3.52E-01	6.14E-02	6.81E-02
200	418600.00	3726300.00	Worker	3.54E-03	3.97E-03	2.56E-01	3.12E-01	3.18E-01	5.54E-02	6.14E-02
201	418600.00	3726400.00	Worker	3.37E-03	3.79E-03	2.52E-01	3.06E-01	3.12E-01	5.43E-02	6.02E-02
202	418600.00	3726500.00	Sensitive	3.23E-03	3.62E-03	2.46E-01	2.99E-01	3.05E-01	5.31E-02	5.89E-02
203	418600.00	3726600.00	Worker	3.07E-03	3.44E-03	2.31E-01	2.81E-01	2.86E-01	4.97E-02	5.52E-02
204	418600.00	3726700.00	Worker	2.93E-03	3.28E-03	2.18E-01	2.65E-01	2.70E-01	4.68E-02	5.19E-02
205	418600.00	3726800.00	Worker	2.79E-03	3.13E-03	2.02E-01	2.45E-01	2.50E-01	4.33E-02	4.81E-02
206	418600.00	3726900.00	Worker	2.65E-03	2.97E-03	1.90E-01	2.31E-01	2.35E-01	4.09E-02	4.54E-02
207	418600.00	3727000.00	Sensitive	2.51E-03	2.82E-03	1.81E-01	2.20E-01	2.24E-01	3.90E-02	4.33E-02
208	418606.21	3724774.88	Worker	1.43E-03	1.61E-03	2.91E-01	3.54E-01	3.61E-01	6.36E-02	7.05E-02
209	418634.18	3727035.12	Sensitive	2.59E-03	2.90E-03	1.81E-01	2.20E-01	2.24E-01	3.91E-02	4.34E-02
210	418635.78	3727013.05	Sensitive	2.62E-03	2.94E-03	1.83E-01	2.23E-01	2.27E-01	3.95E-02	4.38E-02
211	418637.00	3726515.00	Sensitive	3.43E-03	3.85E-03	2.53E-01	3.08E-01	3.14E-01	5.47E-02	6.07E-02
212	418652.30	3725435.84	Worker	7.69E-03	8.90E-03	5.48E-01	6.70E-01	6.84E-01	1.23E-01	1.36E-01
213	418657.24	3725363.28	Worker	4.62E-03	5.29E-03	5.47E-01	6.70E-01	6.83E-01	1.23E-01	1.36E-01
214	418665.32	3725145.44	Worker	2.32E-03	2.61E-03	4.00E-01	4.88E-01	4.98E-01	8.81E-02	9.76E-02
215	418667.04	3724854.26	Worker	1.59E-03	1.80E-03	3.15E-01	3.84E-01	3.91E-01	6.91E-02	7.66E-02
216	418700.00	3723950.00	Resident	6.56E-04	7.39E-04	1.74E-01	2.12E-01	2.16E-01	3.80E-02	4.22E-02
217	418700.00	3724200.00	Resident	8.05E-04	9.07E-04	1.93E-01	2.35E-01	2.39E-01	4.21E-02	4.66E-02
218	418700.00	3724300.00	Resident	8.81E-04	9.92E-04	2.07E-01	2.52E-01	2.57E-01	4.52E-02	5.01E-02
219	418700.00	3724400.00	Worker	9.72E-04	1.09E-03	2.17E-01	2.65E-01	2.70E-01	4.75E-02	5.27E-02
220	418700.00	3724500.00	Worker	1.08E-03	1.21E-03	2.32E-01	2.82E-01	2.88E-01	5.07E-02	5.62E-02
221	418700.00	3724600.00	Worker	1.19E-03	1.34E-03	2.50E-01	3.05E-01	3.11E-01	5.47E-02	6.06E-02
222	418700.00	3724700.00	Worker	1.33E-03	1.50E-03	2.78E-01	3.39E-01	3.46E-01	6.10E-02	6.77E-02
223	418700.00	3724800.00	Worker	1.50E-03	1.69E-03	3.03E-01	3.70E-01	3.77E-01	6.66E-02	7.38E-02
224	418700.00	3725200.00	Worker	2.57E-03	2.89E-03	4.24E-01	5.17E-01	5.28E-01	9.34E-02	1.03E-01
225	418700.00	3725300.00	Worker	3.13E-03	3.54E-03	4.54E-01	5.53E-01	5.64E-01	9.99E-02	1.11E-01
226	418700.00	3725600.00	Worker	5.65E-03	6.43E-03	5.22E-01	6.37E-01	6.49E-01	1.15E-01	1.27E-01
227	418700.00	3725700.00	Worker	5.45E-03	6.16E-03	5.02E-01	6.12E-01	6.24E-01	1.10E-01	1.22E-01
228	418700.00	3725800.00	Worker	5.54E-03	6.26E-03	4.40E-01	5.37E-01	5.48E-01	9.68E-02	1.07E-01
229	418700.00	3725900.00	Worker	5.57E-03	6.28E-03	4.16E-01	5.08E-01	5.18E-01	9.14E-02	1.01E-01
230	418700.00	3726000.00	Worker	5.39E-03	6.07E-03	4.07E-01	4.96E-01	5.06E-01	8.93E-02	9.89E-02
231	418700.00	3726100.00	Worker	5.06E-03	5.70E-03	3.65E-01	4.45E-01	4.53E-01	7.93E-02	8.80E-02
232	418700.00	3726200.00	Worker	4.74E-03	5.33E-03	3.29E-01	4.01E-01	4.09E-01	7.14E-02	7.92E-02
233	418700.00	3726300.00	Worker	4.46E-03	5.01E-03	2.97E-01	3.61E-01	3.68E-01	6.43E-02	7.13E-02
234	418700.00	3726400.00	Worker	4.19E-03	4.71E-03	2.78E-01	3.39E-01	3.45E-01	6.03E-02	6.68E-02
235	418700.00	3726500.00	Sensitive	3.94E-03	4.42E-03	2.73E-01	3.33E-01	3.39E-01	5.93E-02	6.58E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
236	418700.00	3726600.00	Sensitive	3.70E-03	4.16E-03	2.56E-01	3.12E-01	3.18E-01	5.53E-02	6.14E-02
237	418700.00	3726700.00	Worker	3.50E-03	3.92E-03	2.38E-01	2.89E-01	2.95E-01	5.12E-02	5.68E-02
238	418700.00	3726800.00	Worker	3.29E-03	3.70E-03	2.22E-01	2.70E-01	2.75E-01	4.78E-02	5.31E-02
239	418700.00	3726900.00	Worker	3.10E-03	3.48E-03	2.07E-01	2.52E-01	2.56E-01	4.46E-02	4.95E-02
240	418700.00	3726950.00	Worker	3.01E-03	3.37E-03	2.00E-01	2.43E-01	2.48E-01	4.31E-02	4.78E-02
241	418700.00	3727000.00	Worker	2.91E-03	3.26E-03	1.94E-01	2.36E-01	2.40E-01	4.19E-02	4.65E-02
242	418700.00	3727100.00	Worker	2.74E-03	3.07E-03	1.85E-01	2.25E-01	2.29E-01	4.01E-02	4.45E-02
243	418700.00	3727200.00	Worker	2.57E-03	2.88E-03	1.84E-01	2.24E-01	2.28E-01	4.00E-02	4.44E-02
244	418700.00	3727450.00	Resident	2.21E-03	2.48E-03	1.72E-01	2.10E-01	2.14E-01	3.75E-02	4.16E-02
245	418700.00	3727700.00	Resident	1.89E-03	2.12E-03	1.62E-01	1.98E-01	2.02E-01	3.53E-02	3.92E-02
246	418713.20	3725515.12	Worker	9.75E-03	1.13E-02	5.82E-01	7.12E-01	7.26E-01	1.29E-01	1.43E-01
247	418727.87	3724933.63	Worker	1.79E-03	2.02E-03	3.46E-01	4.22E-01	4.30E-01	7.62E-02	8.45E-02
248	418732.71	3725297.67	Worker	3.27E-03	3.69E-03	4.88E-01	5.96E-01	6.08E-01	1.08E-01	1.19E-01
249	418741.61	3725080.78	Worker	2.24E-03	2.53E-03	4.00E-01	4.89E-01	4.98E-01	8.84E-02	9.80E-02
250	418748.94	3726007.90	Worker	6.72E-03	7.59E-03	4.47E-01	5.45E-01	5.56E-01	9.86E-02	1.09E-01
251	418760.88	3725603.02	Worker	9.91E-03	1.14E-02	6.27E-01	7.66E-01	7.81E-01	1.39E-01	1.54E-01
252	418777.20	3725946.52	Worker	8.45E-03	9.59E-03	5.20E-01	6.36E-01	6.49E-01	1.16E-01	1.29E-01
253	418788.70	3725013.00	Worker	2.06E-03	2.32E-03	3.79E-01	4.63E-01	4.72E-01	8.39E-02	9.29E-02
254	418800.00	3724200.00	Resident	7.92E-04	8.93E-04	1.97E-01	2.40E-01	2.44E-01	4.30E-02	4.76E-02
255	418800.00	3724300.00	Resident	8.68E-04	9.78E-04	2.05E-01	2.50E-01	2.55E-01	4.48E-02	4.97E-02
256	418800.00	3724400.00	Resident	9.57E-04	1.08E-03	2.13E-01	2.59E-01	2.64E-01	4.66E-02	5.16E-02
257	418800.00	3724500.00	Resident	1.06E-03	1.19E-03	2.29E-01	2.79E-01	2.84E-01	5.00E-02	5.55E-02
258	418800.00	3724600.00	Worker	1.18E-03	1.33E-03	2.48E-01	3.03E-01	3.09E-01	5.44E-02	6.03E-02
259	418800.00	3724700.00	Worker	1.32E-03	1.49E-03	2.72E-01	3.31E-01	3.38E-01	5.96E-02	6.61E-02
260	418800.00	3724800.00	Worker	1.51E-03	1.70E-03	2.94E-01	3.59E-01	3.66E-01	6.47E-02	7.17E-02
261	418800.00	3724900.00	Worker	1.73E-03	1.95E-03	3.32E-01	4.05E-01	4.13E-01	7.32E-02	8.11E-02
262	418800.00	3725000.00	Worker	2.02E-03	2.28E-03	3.70E-01	4.51E-01	4.60E-01	8.17E-02	9.06E-02
263	418800.00	3725100.00	Worker	2.35E-03	2.65E-03	4.10E-01	5.02E-01	5.11E-01	9.14E-02	1.01E-01
264	418800.00	3725200.00	Worker	2.86E-03	3.23E-03	4.71E-01	5.76E-01	5.88E-01	1.05E-01	1.16E-01
265	418800.00	3725700.00	Worker	9.92E-03	1.13E-02	6.86E-01	8.38E-01	8.54E-01	1.52E-01	1.68E-01
266	418800.00	3725900.00	Worker	9.47E-03	1.07E-02	5.49E-01	6.72E-01	6.85E-01	1.23E-01	1.36E-01
267	418800.00	3726100.00	Worker	7.41E-03	8.37E-03	4.32E-01	5.26E-01	5.36E-01	9.42E-02	1.04E-01
268	418800.00	3726200.00	Worker	6.49E-03	7.31E-03	3.82E-01	4.65E-01	4.74E-01	8.28E-02	9.19E-02
269	418800.00	3726300.00	Worker	5.89E-03	6.62E-03	3.49E-01	4.25E-01	4.34E-01	7.59E-02	8.41E-02
270	418800.00	3726400.00	Worker	5.41E-03	6.08E-03	3.20E-01	3.89E-01	3.97E-01	6.96E-02	7.72E-02
271	418800.00	3726500.00	Worker	4.98E-03	5.59E-03	3.08E-01	3.76E-01	3.83E-01	6.73E-02	7.46E-02
272	418800.00	3726600.00	Worker	4.61E-03	5.18E-03	2.89E-01	3.51E-01	3.58E-01	6.26E-02	6.94E-02
273	418800.00	3726700.00	Worker	4.29E-03	4.81E-03	2.64E-01	3.20E-01	3.27E-01	5.69E-02	6.31E-02
274	418800.00	3726800.00	Worker	3.99E-03	4.48E-03	2.49E-01	3.03E-01	3.09E-01	5.40E-02	5.99E-02
275	418800.00	3726900.00	Worker	3.70E-03	4.16E-03	2.28E-01	2.77E-01	2.82E-01	4.92E-02	5.46E-02
276	418800.00	3727000.00	Worker	3.42E-03	3.84E-03	2.13E-01	2.59E-01	2.64E-01	4.62E-02	5.12E-02
277	418800.00	3727100.00	Worker	3.18E-03	3.57E-03	2.07E-01	2.52E-01	2.57E-01	4.51E-02	5.00E-02
278	418800.00	3727200.00	Worker	2.96E-03	3.32E-03	2.03E-01	2.47E-01	2.52E-01	4.42E-02	4.91E-02
279	418800.00	3727300.00	Worker	2.77E-03	3.10E-03	1.93E-01	2.35E-01	2.40E-01	4.21E-02	4.67E-02
280	418800.00	3727400.00	Worker	2.54E-03	2.85E-03	1.86E-01	2.26E-01	2.30E-01	4.04E-02	4.48E-02
281	418800.72	3725826.58	Worker	1.20E-02	1.37E-02	6.25E-01	7.65E-01	7.80E-01	1.40E-01	1.55E-01
282	418808.17	3725232.05	Worker	3.08E-03	3.48E-03	4.99E-01	6.09E-01	6.21E-01	1.11E-01	1.23E-01

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
283	418808.57	3725690.92	Worker	1.13E-02	1.29E-02	6.94E-01	8.47E-01	8.64E-01	1.53E-01	1.70E-01
284	418821.49	3725766.63	Worker	1.51E-02	1.73E-02	9.04E-01	1.11E+00	1.13E+00	2.07E-01	2.29E-01
285	418832.62	3725996.51	Worker	1.97E-02	2.29E-02	5.52E-01	6.76E-01	6.89E-01	1.23E-01	1.37E-01
286	418856.95	3725909.27	Worker	1.71E-02	1.96E-02	6.91E-01	8.47E-01	8.63E-01	1.56E-01	1.73E-01
287	418883.64	3725166.44	Worker	2.85E-03	3.22E-03	4.81E-01	5.89E-01	6.01E-01	1.08E-01	1.20E-01
288	418896.00	3724503.00	Sensitive	1.04E-03	1.18E-03	2.30E-01	2.81E-01	2.86E-01	5.05E-02	5.59E-02
289	418900.00	3724200.00	Resident	7.82E-04	8.81E-04	1.93E-01	2.35E-01	2.40E-01	4.22E-02	4.68E-02
290	418900.00	3724300.00	Resident	8.54E-04	9.61E-04	2.05E-01	2.50E-01	2.55E-01	4.49E-02	4.98E-02
291	418900.00	3724400.00	Resident	9.40E-04	1.06E-03	2.16E-01	2.64E-01	2.69E-01	4.74E-02	5.25E-02
292	418900.00	3724500.00	Resident	1.04E-03	1.17E-03	2.30E-01	2.80E-01	2.86E-01	5.04E-02	5.58E-02
293	418900.00	3724600.00	Resident	1.16E-03	1.31E-03	2.46E-01	3.00E-01	3.06E-01	5.40E-02	5.98E-02
294	418900.00	3724700.00	Worker	1.31E-03	1.47E-03	2.63E-01	3.20E-01	3.27E-01	5.77E-02	6.40E-02
295	418900.00	3724800.00	Worker	1.49E-03	1.68E-03	2.82E-01	3.45E-01	3.51E-01	6.22E-02	6.89E-02
296	418900.00	3724900.00	Worker	1.72E-03	1.94E-03	3.19E-01	3.89E-01	3.96E-01	7.03E-02	7.79E-02
297	418900.00	3725000.00	Worker	2.04E-03	2.30E-03	3.51E-01	4.29E-01	4.38E-01	7.80E-02	8.64E-02
298	418900.00	3725100.00	Worker	2.48E-03	2.80E-03	4.20E-01	5.14E-01	5.24E-01	9.38E-02	1.04E-01
299	418900.00	3726100.00	Worker	1.31E-02	1.49E-02	5.41E-01	6.60E-01	6.73E-01	1.19E-01	1.32E-01
300	418900.00	3726200.00	Worker	9.96E-03	1.13E-02	4.69E-01	5.71E-01	5.82E-01	1.03E-01	1.14E-01
301	418900.00	3726300.00	Worker	8.43E-03	9.50E-03	4.20E-01	5.11E-01	5.21E-01	9.14E-02	1.01E-01
302	418900.00	3726400.00	Worker	7.42E-03	8.35E-03	3.85E-01	4.70E-01	4.79E-01	8.45E-02	9.36E-02
303	418900.00	3726500.00	Worker	6.63E-03	7.45E-03	3.54E-01	4.31E-01	4.40E-01	7.75E-02	8.59E-02
304	418900.00	3726600.00	Worker	6.00E-03	6.74E-03	3.32E-01	4.04E-01	4.12E-01	7.25E-02	8.04E-02
305	418900.00	3726700.00	Worker	5.48E-03	6.15E-03	3.00E-01	3.65E-01	3.72E-01	6.52E-02	7.23E-02
306	418900.00	3726800.00	Worker	4.97E-03	5.59E-03	2.82E-01	3.44E-01	3.50E-01	6.14E-02	6.81E-02
307	418900.00	3726900.00	Worker	4.52E-03	5.08E-03	2.60E-01	3.17E-01	3.23E-01	5.66E-02	6.28E-02
308	418900.00	3727000.00	Worker	4.10E-03	4.60E-03	2.41E-01	2.93E-01	2.99E-01	5.26E-02	5.83E-02
309	418900.00	3727100.00	Worker	3.77E-03	4.22E-03	2.30E-01	2.80E-01	2.85E-01	5.03E-02	5.57E-02
310	418900.00	3727200.00	Worker	3.48E-03	3.90E-03	2.18E-01	2.66E-01	2.71E-01	4.77E-02	5.29E-02
311	418900.00	3727300.00	Worker	3.22E-03	3.60E-03	2.11E-01	2.57E-01	2.62E-01	4.62E-02	5.12E-02
312	418900.00	3727400.00	Worker	2.97E-03	3.33E-03	2.07E-01	2.52E-01	2.57E-01	4.52E-02	5.02E-02
313	418900.00	3727500.00	Worker	2.73E-03	3.06E-03	2.01E-01	2.44E-01	2.49E-01	4.37E-02	4.85E-02
314	418904.23	3726018.78	Worker	2.15E-02	2.48E-02	6.46E-01	7.91E-01	8.06E-01	1.45E-01	1.60E-01
315	418950.00	3723950.00	Resident	6.38E-04	7.19E-04	1.69E-01	2.06E-01	2.11E-01	3.70E-02	4.10E-02
316	418950.00	3724200.00	Resident	7.76E-04	8.74E-04	1.93E-01	2.35E-01	2.39E-01	4.22E-02	4.67E-02
317	418950.00	3727450.00	Worker	3.08E-03	3.45E-03	2.12E-01	2.58E-01	2.64E-01	4.62E-02	5.13E-02
318	418950.00	3727700.00	Worker	2.48E-03	2.78E-03	1.93E-01	2.35E-01	2.39E-01	4.18E-02	4.64E-02
319	418950.00	3727950.00	Worker	2.02E-03	2.26E-03	1.78E-01	2.16E-01	2.20E-01	3.83E-02	4.25E-02
320	418950.28	3726107.55	Worker	2.05E-02	2.34E-02	6.73E-01	8.23E-01	8.39E-01	1.50E-01	1.66E-01
321	418953.75	3725211.11	Worker	3.33E-03	3.78E-03	5.15E-01	6.31E-01	6.44E-01	1.16E-01	1.29E-01
322	418976.47	3724331.05	Sensitive	8.68E-04	9.78E-04	2.05E-01	2.50E-01	2.55E-01	4.50E-02	4.99E-02
323	418996.32	3726196.31	Worker	2.12E-02	2.42E-02	6.40E-01	7.83E-01	7.98E-01	1.43E-01	1.58E-01
324	419000.00	3724400.00	Resident	9.21E-04	1.04E-03	2.14E-01	2.60E-01	2.65E-01	4.68E-02	5.19E-02
325	419000.00	3724500.00	Resident	1.02E-03	1.15E-03	2.26E-01	2.75E-01	2.81E-01	4.96E-02	5.50E-02
326	419000.00	3724600.00	Resident	1.14E-03	1.28E-03	2.40E-01	2.93E-01	2.99E-01	5.29E-02	5.86E-02
327	419000.00	3724700.00	Resident	1.28E-03	1.44E-03	2.60E-01	3.18E-01	3.24E-01	5.73E-02	6.35E-02
328	419000.00	3724800.00	Worker	1.46E-03	1.64E-03	2.83E-01	3.45E-01	3.52E-01	6.23E-02	6.90E-02
329	419000.00	3724900.00	Worker	1.69E-03	1.91E-03	3.09E-01	3.77E-01	3.84E-01	6.82E-02	7.55E-02

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John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
330	419000.00	3725000.00	Worker	2.00E-03	2.25E-03	3.33E-01	4.06E-01	4.14E-01	7.37E-02	8.17E-02
331	419000.00	3725100.00	Worker	2.46E-03	2.78E-03	3.88E-01	4.74E-01	4.83E-01	8.63E-02	9.55E-02
332	419000.00	3725200.00	Worker	3.23E-03	3.67E-03	4.70E-01	5.75E-01	5.86E-01	1.06E-01	1.17E-01
333	419000.00	3726300.00	Worker	1.42E-02	1.60E-02	5.39E-01	6.57E-01	6.70E-01	1.19E-01	1.31E-01
334	419000.00	3726400.00	Worker	1.13E-02	1.27E-02	4.79E-01	5.84E-01	5.96E-01	1.05E-01	1.17E-01
335	419000.00	3726500.00	Worker	9.65E-03	1.09E-02	4.47E-01	5.46E-01	5.57E-01	9.94E-02	1.10E-01
336	419000.00	3726600.00	Worker	8.44E-03	9.52E-03	3.99E-01	4.88E-01	4.97E-01	8.84E-02	9.79E-02
337	419000.00	3726700.00	Worker	7.38E-03	8.32E-03	3.57E-01	4.35E-01	4.43E-01	7.83E-02	8.68E-02
338	419000.00	3726800.00	Worker	6.45E-03	7.25E-03	3.33E-01	4.06E-01	4.14E-01	7.32E-02	8.11E-02
339	419000.00	3726900.00	Worker	5.68E-03	6.38E-03	3.06E-01	3.73E-01	3.81E-01	6.73E-02	7.46E-02
340	419000.00	3727000.00	Worker	5.07E-03	5.69E-03	2.70E-01	3.29E-01	3.36E-01	5.92E-02	6.57E-02
341	419000.00	3727100.00	Worker	4.55E-03	5.10E-03	2.56E-01	3.13E-01	3.19E-01	5.63E-02	6.24E-02
342	419000.00	3727200.00	Worker	4.14E-03	4.63E-03	2.44E-01	2.98E-01	3.03E-01	5.35E-02	5.93E-02
343	419000.00	3727300.00	Worker	3.79E-03	4.25E-03	2.34E-01	2.85E-01	2.91E-01	5.12E-02	5.67E-02
344	419000.00	3727400.00	Worker	3.47E-03	3.88E-03	2.24E-01	2.72E-01	2.78E-01	4.87E-02	5.40E-02
345	419000.00	3727500.00	Worker	3.16E-03	3.54E-03	2.15E-01	2.61E-01	2.66E-01	4.66E-02	5.17E-02
346	419000.00	3727600.00	Worker	2.86E-03	3.21E-03	2.05E-01	2.50E-01	2.55E-01	4.45E-02	4.93E-02
347	419022.50	3725283.73	Worker	4.97E-03	5.69E-03	5.78E-01	7.10E-01	7.24E-01	1.32E-01	1.46E-01
348	419026.35	3726287.82	Worker	1.81E-02	2.05E-02	5.98E-01	7.30E-01	7.45E-01	1.32E-01	1.47E-01
349	419064.44	3726589.03	Worker	1.17E-02	1.33E-02	4.85E-01	5.94E-01	6.05E-01	1.09E-01	1.20E-01
350	419065.35	3726371.51	Worker	1.82E-02	2.06E-02	6.09E-01	7.45E-01	7.59E-01	1.35E-01	1.50E-01
351	419081.58	3726515.49	Worker	1.50E-02	1.70E-02	6.09E-01	7.48E-01	7.63E-01	1.39E-01	1.53E-01
352	419091.25	3725356.35	Worker	1.05E-02	1.22E-02	6.16E-01	7.57E-01	7.72E-01	1.41E-01	1.56E-01
353	419100.00	3724500.00	Resident	9.99E-04	1.13E-03	2.19E-01	2.68E-01	2.73E-01	4.83E-02	5.35E-02
354	419100.00	3724600.00	Resident	1.11E-03	1.25E-03	2.34E-01	2.86E-01	2.91E-01	5.16E-02	5.72E-02
355	419100.00	3724700.00	Resident	1.25E-03	1.41E-03	2.52E-01	3.07E-01	3.13E-01	5.55E-02	6.15E-02
356	419100.00	3724800.00	Worker	1.42E-03	1.60E-03	2.73E-01	3.33E-01	3.40E-01	6.04E-02	6.69E-02
357	419100.00	3724900.00	Worker	1.65E-03	1.86E-03	2.90E-01	3.54E-01	3.61E-01	6.42E-02	7.11E-02
358	419100.00	3725000.00	Worker	1.95E-03	2.20E-03	3.25E-01	3.97E-01	4.04E-01	7.20E-02	7.98E-02
359	419100.00	3725100.00	Worker	2.39E-03	2.70E-03	3.62E-01	4.43E-01	4.51E-01	8.05E-02	8.92E-02
360	419100.00	3725200.00	Worker	3.12E-03	3.53E-03	4.12E-01	5.03E-01	5.13E-01	9.18E-02	1.02E-01
361	419100.00	3725300.00	Worker	4.95E-03	5.65E-03	4.97E-01	6.09E-01	6.21E-01	1.12E-01	1.24E-01
362	419100.00	3726700.00	Worker	1.12E-02	1.26E-02	4.62E-01	5.65E-01	5.76E-01	1.03E-01	1.15E-01
363	419100.00	3726800.00	Worker	8.90E-03	1.00E-02	4.09E-01	5.00E-01	5.09E-01	9.10E-02	1.01E-01
364	419100.00	3726900.00	Worker	7.47E-03	8.39E-03	3.57E-01	4.37E-01	4.45E-01	7.91E-02	8.77E-02
365	419100.00	3727000.00	Worker	6.42E-03	7.21E-03	3.09E-01	3.77E-01	3.84E-01	6.79E-02	7.52E-02
366	419100.00	3727100.00	Worker	5.67E-03	6.36E-03	2.82E-01	3.43E-01	3.50E-01	6.16E-02	6.83E-02
367	419100.00	3727200.00	Worker	5.06E-03	5.68E-03	2.68E-01	3.27E-01	3.33E-01	5.86E-02	6.49E-02
368	419100.00	3727300.00	Worker	4.54E-03	5.08E-03	2.57E-01	3.14E-01	3.20E-01	5.61E-02	6.22E-02
369	419100.00	3727400.00	Worker	4.11E-03	4.61E-03	2.46E-01	2.99E-01	3.05E-01	5.34E-02	5.92E-02
370	419100.00	3727500.00	Worker	3.71E-03	4.16E-03	2.34E-01	2.84E-01	2.90E-01	5.07E-02	5.62E-02
371	419100.00	3727600.00	Worker	3.33E-03	3.73E-03	2.23E-01	2.71E-01	2.77E-01	4.83E-02	5.36E-02
372	419100.00	3727700.00	Worker	3.02E-03	3.38E-03	2.15E-01	2.62E-01	2.67E-01	4.66E-02	5.17E-02
373	419119.83	3726672.29	Worker	1.38E-02	1.57E-02	5.17E-01	6.34E-01	6.46E-01	1.17E-01	1.29E-01
374	419130.06	3726447.75	Worker	2.62E-02	2.99E-02	7.25E-01	8.89E-01	9.06E-01	1.64E-01	1.81E-01
375	419160.00	3725428.97	Worker	2.08E-02	2.43E-02	6.82E-01	8.39E-01	8.56E-01	1.57E-01	1.74E-01
376	419162.44	3726762.46	Worker	1.33E-02	1.50E-02	5.08E-01	6.22E-01	6.35E-01	1.15E-01	1.27E-01

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
377	419200.00	3724200.00	Resident	7.51E-04	8.46E-04	1.85E-01	2.25E-01	2.29E-01	4.04E-02	4.48E-02
378	419200.00	3724450.00	Resident	9.33E-04	1.05E-03	2.10E-01	2.57E-01	2.62E-01	4.62E-02	5.12E-02
379	419200.00	3724600.00	Resident	1.09E-03	1.23E-03	2.29E-01	2.79E-01	2.85E-01	5.03E-02	5.58E-02
380	419200.00	3724700.00	Worker	1.22E-03	1.38E-03	2.43E-01	2.97E-01	3.03E-01	5.36E-02	5.94E-02
381	419200.00	3724800.00	Worker	1.39E-03	1.57E-03	2.58E-01	3.15E-01	3.21E-01	5.70E-02	6.31E-02
382	419200.00	3724900.00	Worker	1.60E-03	1.80E-03	2.80E-01	3.42E-01	3.48E-01	6.19E-02	6.85E-02
383	419200.00	3725000.00	Worker	1.88E-03	2.12E-03	3.03E-01	3.71E-01	3.78E-01	6.72E-02	7.44E-02
384	419200.00	3725100.00	Worker	2.28E-03	2.57E-03	3.32E-01	4.06E-01	4.14E-01	7.38E-02	8.17E-02
385	419200.00	3725200.00	Worker	2.91E-03	3.29E-03	3.70E-01	4.52E-01	4.61E-01	8.24E-02	9.12E-02
386	419200.00	3725300.00	Worker	4.13E-03	4.70E-03	4.21E-01	5.15E-01	5.25E-01	9.42E-02	1.04E-01
387	419200.00	3725400.00	Worker	8.27E-03	9.53E-03	5.04E-01	6.18E-01	6.30E-01	1.14E-01	1.26E-01
388	419200.00	3726900.00	Worker	1.06E-02	1.19E-02	4.03E-01	4.92E-01	5.01E-01	8.92E-02	9.88E-02
389	419200.00	3727000.00	Worker	8.62E-03	9.68E-03	3.47E-01	4.23E-01	4.31E-01	7.62E-02	8.44E-02
390	419200.00	3727100.00	Worker	7.33E-03	8.22E-03	3.24E-01	3.95E-01	4.02E-01	7.08E-02	7.85E-02
391	419200.00	3727200.00	Worker	6.34E-03	7.11E-03	3.04E-01	3.71E-01	3.78E-01	6.63E-02	7.36E-02
392	419200.00	3727300.00	Worker	5.61E-03	6.28E-03	2.84E-01	3.46E-01	3.53E-01	6.18E-02	6.86E-02
393	419200.00	3727400.00	Worker	4.97E-03	5.56E-03	2.65E-01	3.23E-01	3.29E-01	5.75E-02	6.38E-02
394	419200.00	3727500.00	Worker	4.39E-03	4.91E-03	2.51E-01	3.06E-01	3.12E-01	5.44E-02	6.04E-02
395	419200.00	3727600.00	Worker	3.90E-03	4.36E-03	2.40E-01	2.92E-01	2.97E-01	5.18E-02	5.75E-02
396	419200.00	3727700.00	Worker	3.49E-03	3.91E-03	2.31E-01	2.81E-01	2.87E-01	4.99E-02	5.54E-02
397	419200.00	3727800.00	Worker	3.12E-03	3.50E-03	2.22E-01	2.69E-01	2.75E-01	4.78E-02	5.31E-02
398	419200.00	3727950.00	Worker	2.70E-03	3.02E-03	2.10E-01	2.56E-01	2.61E-01	4.53E-02	5.03E-02
399	419200.00	3728200.00	Worker	2.14E-03	2.40E-03	1.89E-01	2.30E-01	2.34E-01	4.06E-02	4.51E-02
400	419200.00	3728450.00	Worker	1.76E-03	1.98E-03	1.66E-01	2.02E-01	2.06E-01	3.57E-02	3.96E-02
401	419216.11	3726796.28	Worker	1.61E-02	1.83E-02	5.28E-01	6.47E-01	6.60E-01	1.19E-01	1.32E-01
402	419217.39	3726832.06	Worker	1.39E-02	1.57E-02	4.85E-01	5.93E-01	6.05E-01	1.09E-01	1.20E-01
403	419228.75	3725501.58	Worker	2.46E-02	2.87E-02	6.33E-01	7.79E-01	7.94E-01	1.45E-01	1.61E-01
404	419239.67	3727598.11	Sensitive	4.18E-03	4.68E-03	2.49E-01	3.03E-01	3.09E-01	5.39E-02	5.98E-02
405	419247.95	3726906.59	Worker	1.27E-02	1.43E-02	4.28E-01	5.23E-01	5.34E-01	9.50E-02	1.05E-01
406	419261.00	3724850.00	Sensitive	1.46E-03	1.64E-03	2.62E-01	3.20E-01	3.26E-01	5.77E-02	6.39E-02
407	419293.67	3726733.15	Worker	5.19E-02	6.01E-02	8.12E-01	1.00E+00	1.02E+00	1.88E-01	2.08E-01
408	419296.12	3725575.44	Worker	2.57E-02	2.99E-02	5.94E-01	7.30E-01	7.45E-01	1.36E-01	1.50E-01
409	419299.18	3726774.53	Worker	3.14E-02	3.60E-02	6.65E-01	8.16E-01	8.32E-01	1.51E-01	1.67E-01
410	419300.00	3724700.00	Worker	1.20E-03	1.35E-03	2.33E-01	2.84E-01	2.90E-01	5.13E-02	5.68E-02
411	419300.00	3724800.00	Worker	1.35E-03	1.52E-03	2.49E-01	3.04E-01	3.10E-01	5.49E-02	6.08E-02
412	419300.00	3724900.00	Worker	1.55E-03	1.74E-03	2.66E-01	3.24E-01	3.31E-01	5.86E-02	6.49E-02
413	419300.00	3725000.00	Worker	1.81E-03	2.04E-03	2.84E-01	3.46E-01	3.53E-01	6.26E-02	6.94E-02
414	419300.00	3725100.00	Worker	2.17E-03	2.45E-03	3.05E-01	3.72E-01	3.80E-01	6.74E-02	7.47E-02
415	419300.00	3725200.00	Worker	2.70E-03	3.05E-03	3.30E-01	4.03E-01	4.11E-01	7.31E-02	8.10E-02
416	419300.00	3725300.00	Worker	3.61E-03	4.10E-03	3.62E-01	4.42E-01	4.51E-01	8.04E-02	8.91E-02
417	419300.00	3725400.00	Worker	5.66E-03	6.46E-03	4.04E-01	4.95E-01	5.04E-01	9.04E-02	1.00E-01
418	419300.00	3725500.00	Worker	1.14E-02	1.32E-02	4.71E-01	5.77E-01	5.88E-01	1.06E-01	1.17E-01
419	419300.00	3726900.00	Worker	1.62E-02	1.83E-02	4.63E-01	5.65E-01	5.76E-01	1.03E-01	1.14E-01
420	419300.00	3727000.00	Worker	1.22E-02	1.37E-02	3.99E-01	4.87E-01	4.96E-01	8.73E-02	9.69E-02
421	419300.00	3727100.00	Worker	9.87E-03	1.11E-02	3.72E-01	4.53E-01	4.62E-01	8.09E-02	8.98E-02
422	419300.00	3727200.00	Worker	8.34E-03	9.35E-03	3.43E-01	4.18E-01	4.26E-01	7.46E-02	8.28E-02
423	419300.00	3727300.00	Worker	7.14E-03	8.00E-03	3.20E-01	3.89E-01	3.97E-01	6.93E-02	7.69E-02

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John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
424	419300.00	3727400.00	Worker	6.13E-03	6.87E-03	2.97E-01	3.62E-01	3.69E-01	6.44E-02	7.14E-02
425	419300.00	3727500.00	Worker	5.33E-03	5.97E-03	2.80E-01	3.40E-01	3.47E-01	6.04E-02	6.71E-02
426	419300.00	3727600.00	Worker	4.61E-03	5.16E-03	2.65E-01	3.22E-01	3.29E-01	5.72E-02	6.35E-02
427	419300.00	3727700.00	Worker	4.07E-03	4.56E-03	2.54E-01	3.09E-01	3.15E-01	5.48E-02	6.08E-02
428	419300.00	3727800.00	Worker	3.61E-03	4.05E-03	2.44E-01	2.96E-01	3.02E-01	5.25E-02	5.83E-02
429	419300.00	3727900.00	Worker	3.23E-03	3.62E-03	2.33E-01	2.83E-01	2.88E-01	5.01E-02	5.56E-02
430	419312.04	3727032.20	Worker	1.19E-02	1.34E-02	4.02E-01	4.89E-01	4.99E-01	8.76E-02	9.71E-02
431	419333.28	3726854.46	Worker	2.24E-02	2.54E-02	5.26E-01	6.42E-01	6.55E-01	1.17E-01	1.29E-01
432	419361.35	3725651.24	Worker	2.85E-02	3.31E-02	5.96E-01	7.32E-01	7.46E-01	1.36E-01	1.51E-01
433	419365.86	3727071.98	Worker	1.32E-02	1.48E-02	4.22E-01	5.14E-01	5.24E-01	9.15E-02	1.02E-01
434	419389.97	3726906.05	Worker	2.34E-02	2.64E-02	5.14E-01	6.27E-01	6.39E-01	1.13E-01	1.25E-01
435	419395.81	3726982.36	Worker	1.86E-02	2.09E-02	4.84E-01	5.89E-01	6.01E-01	1.05E-01	1.16E-01
436	419400.00	3724800.00	Worker	1.31E-03	1.48E-03	2.38E-01	2.90E-01	2.96E-01	5.23E-02	5.80E-02
437	419400.00	3724900.00	Worker	1.50E-03	1.69E-03	2.51E-01	3.07E-01	3.13E-01	5.54E-02	6.13E-02
438	419400.00	3725000.00	Worker	1.73E-03	1.95E-03	2.67E-01	3.26E-01	3.32E-01	5.89E-02	6.53E-02
439	419400.00	3725100.00	Worker	2.05E-03	2.31E-03	2.85E-01	3.48E-01	3.55E-01	6.30E-02	6.98E-02
440	419400.00	3725200.00	Worker	2.50E-03	2.82E-03	3.06E-01	3.74E-01	3.81E-01	6.78E-02	7.51E-02
441	419400.00	3725300.00	Worker	3.22E-03	3.64E-03	3.30E-01	4.03E-01	4.11E-01	7.32E-02	8.10E-02
442	419400.00	3725400.00	Worker	4.52E-03	5.15E-03	3.59E-01	4.39E-01	4.48E-01	7.99E-02	8.84E-02
443	419400.00	3725500.00	Worker	7.27E-03	8.32E-03	3.98E-01	4.86E-01	4.96E-01	8.88E-02	9.83E-02
444	419400.00	3725600.00	Worker	1.33E-02	1.53E-02	4.57E-01	5.60E-01	5.71E-01	1.03E-01	1.14E-01
445	419400.00	3727100.00	Worker	1.40E-02	1.57E-02	4.32E-01	5.25E-01	5.35E-01	9.31E-02	1.03E-01
446	419400.00	3727200.00	Worker	1.13E-02	1.27E-02	3.90E-01	4.74E-01	4.83E-01	8.41E-02	9.34E-02
447	419400.00	3727300.00	Worker	9.33E-03	1.05E-02	3.50E-01	4.25E-01	4.33E-01	7.53E-02	8.36E-02
448	419400.00	3727400.00	Worker	7.78E-03	8.72E-03	3.21E-01	3.89E-01	3.97E-01	6.88E-02	7.64E-02
449	419400.00	3727500.00	Worker	6.51E-03	7.29E-03	3.00E-01	3.65E-01	3.72E-01	6.43E-02	7.14E-02
450	419400.00	3727600.00	Worker	5.58E-03	6.25E-03	2.89E-01	3.51E-01	3.58E-01	6.19E-02	6.88E-02
451	419400.00	3727700.00	Worker	4.81E-03	5.39E-03	2.76E-01	3.35E-01	3.41E-01	5.91E-02	6.56E-02
452	419400.00	3727800.00	Worker	4.24E-03	4.74E-03	2.61E-01	3.17E-01	3.23E-01	5.60E-02	6.22E-02
453	419400.00	3727900.00	Worker	3.72E-03	4.17E-03	2.44E-01	2.96E-01	3.02E-01	5.23E-02	5.81E-02
454	419426.59	3725727.03	Worker	3.18E-02	3.68E-02	6.05E-01	7.44E-01	7.58E-01	1.38E-01	1.53E-01
455	419450.00	3724450.00	Worker	8.89E-04	1.00E-03	1.96E-01	2.39E-01	2.43E-01	4.28E-02	4.75E-02
456	419450.00	3724700.00	Worker	1.15E-03	1.29E-03	2.21E-01	2.70E-01	2.75E-01	4.86E-02	5.38E-02
457	419450.00	3724950.00	Worker	1.57E-03	1.77E-03	2.52E-01	3.07E-01	3.13E-01	5.54E-02	6.14E-02
458	419450.00	3727950.00	Worker	3.79E-03	4.24E-03	2.34E-01	2.84E-01	2.90E-01	5.01E-02	5.56E-02
459	419450.00	3728200.00	Worker	2.82E-03	3.16E-03	2.01E-01	2.43E-01	2.48E-01	4.29E-02	4.76E-02
460	419450.00	3728450.00	Worker	2.29E-03	2.57E-03	1.75E-01	2.12E-01	2.16E-01	3.75E-02	4.16E-02
461	419450.00	3728700.00	Resident	1.88E-03	2.10E-03	1.55E-01	1.89E-01	1.92E-01	3.34E-02	3.70E-02
462	419458.60	3727034.56	Worker	2.12E-02	2.38E-02	5.15E-01	6.26E-01	6.38E-01	1.11E-01	1.23E-01
463	419475.20	3728681.66	Sensitive	1.95E-03	2.19E-03	1.57E-01	1.91E-01	1.95E-01	3.37E-02	3.74E-02
464	419491.82	3725802.82	Worker	3.50E-02	4.04E-02	6.23E-01	7.65E-01	7.80E-01	1.42E-01	1.57E-01
465	419500.00	3724900.00	Worker	1.44E-03	1.62E-03	2.36E-01	2.88E-01	2.94E-01	5.19E-02	5.76E-02
466	419500.00	3725000.00	Worker	1.65E-03	1.86E-03	2.52E-01	3.08E-01	3.14E-01	5.55E-02	6.14E-02
467	419500.00	3725100.00	Worker	1.93E-03	2.18E-03	2.68E-01	3.27E-01	3.33E-01	5.90E-02	6.54E-02
468	419500.00	3725200.00	Worker	2.32E-03	2.62E-03	2.86E-01	3.49E-01	3.56E-01	6.30E-02	6.98E-02
469	419500.00	3725300.00	Worker	2.89E-03	3.27E-03	3.07E-01	3.75E-01	3.82E-01	6.79E-02	7.52E-02
470	419500.00	3725400.00	Worker	3.85E-03	4.36E-03	3.32E-01	4.05E-01	4.13E-01	7.34E-02	8.13E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
471	419500.00	3725500.00	Worker	5.57E-03	6.35E-03	3.62E-01	4.43E-01	4.51E-01	8.03E-02	8.89E-02
472	419500.00	3725600.00	Worker	8.73E-03	9.98E-03	4.04E-01	4.94E-01	5.04E-01	8.99E-02	9.95E-02
473	419500.00	3725700.00	Worker	1.49E-02	1.71E-02	4.65E-01	5.69E-01	5.80E-01	1.04E-01	1.15E-01
474	419500.00	3725800.00	Worker	3.08E-02	3.56E-02	5.89E-01	7.23E-01	7.38E-01	1.34E-01	1.48E-01
475	419500.00	3727200.00	Worker	1.62E-02	1.82E-02	4.29E-01	5.20E-01	5.30E-01	9.17E-02	1.02E-01
476	419500.00	3727300.00	Worker	1.27E-02	1.43E-02	3.85E-01	4.68E-01	4.77E-01	8.21E-02	9.12E-02
477	419500.00	3727400.00	Worker	1.01E-02	1.13E-02	3.66E-01	4.44E-01	4.53E-01	7.82E-02	8.68E-02
478	419500.00	3727500.00	Worker	8.22E-03	9.20E-03	3.48E-01	4.22E-01	4.30E-01	7.44E-02	8.26E-02
479	419500.00	3727600.00	Worker	6.74E-03	7.54E-03	3.25E-01	3.94E-01	4.02E-01	6.94E-02	7.71E-02
480	419500.00	3727700.00	Worker	5.74E-03	6.42E-03	2.94E-01	3.57E-01	3.64E-01	6.29E-02	6.99E-02
481	419500.00	3727800.00	Worker	5.04E-03	5.64E-03	2.69E-01	3.26E-01	3.32E-01	5.74E-02	6.37E-02
482	419500.00	3727900.00	Worker	4.38E-03	4.91E-03	2.42E-01	2.94E-01	3.00E-01	5.17E-02	5.74E-02
483	419500.00	3728000.00	Worker	3.87E-03	4.33E-03	2.24E-01	2.72E-01	2.77E-01	4.78E-02	5.31E-02
484	419500.00	3728100.00	Worker	3.45E-03	3.86E-03	2.12E-01	2.58E-01	2.63E-01	4.54E-02	5.04E-02
485	419500.00	3728200.00	Worker	3.03E-03	3.39E-03	2.05E-01	2.49E-01	2.54E-01	4.38E-02	4.86E-02
486	419505.35	3727121.07	Worker	2.07E-02	2.32E-02	4.92E-01	5.97E-01	6.08E-01	1.05E-01	1.17E-01
487	419551.23	3727209.92	Worker	2.01E-02	2.25E-02	4.75E-01	5.77E-01	5.88E-01	1.01E-01	1.12E-01
488	419557.05	3725878.62	Worker	3.66E-02	4.23E-02	6.51E-01	8.00E-01	8.16E-01	1.49E-01	1.64E-01
489	419597.11	3727298.78	Worker	1.88E-02	2.10E-02	4.89E-01	5.93E-01	6.04E-01	1.04E-01	1.15E-01
490	419600.00	3725000.00	Worker	1.57E-03	1.78E-03	2.30E-01	2.80E-01	2.86E-01	5.04E-02	5.59E-02
491	419600.00	3725100.00	Worker	1.82E-03	2.05E-03	2.45E-01	2.99E-01	3.05E-01	5.38E-02	5.96E-02
492	419600.00	3725200.00	Worker	2.15E-03	2.43E-03	2.63E-01	3.21E-01	3.27E-01	5.78E-02	6.40E-02
493	419600.00	3725300.00	Worker	2.63E-03	2.98E-03	2.81E-01	3.43E-01	3.50E-01	6.18E-02	6.85E-02
494	419600.00	3725400.00	Worker	3.36E-03	3.81E-03	3.06E-01	3.73E-01	3.81E-01	6.74E-02	7.46E-02
495	419600.00	3725500.00	Worker	4.57E-03	5.19E-03	3.34E-01	4.07E-01	4.15E-01	7.36E-02	8.15E-02
496	419600.00	3725600.00	Worker	6.63E-03	7.55E-03	3.66E-01	4.47E-01	4.56E-01	8.08E-02	8.96E-02
497	419600.00	3725700.00	Worker	1.01E-02	1.15E-02	4.10E-01	5.01E-01	5.11E-01	9.09E-02	1.01E-01
498	419600.00	3725800.00	Resident	1.62E-02	1.85E-02	4.64E-01	5.67E-01	5.78E-01	1.03E-01	1.14E-01
499	419600.00	3725900.00	Worker	2.83E-02	3.25E-02	5.87E-01	7.20E-01	7.34E-01	1.32E-01	1.47E-01
500	419600.00	3727400.00	Worker	1.38E-02	1.54E-02	4.44E-01	5.38E-01	5.49E-01	9.41E-02	1.05E-01
501	419600.00	3727500.00	Worker	1.07E-02	1.19E-02	3.86E-01	4.68E-01	4.77E-01	8.18E-02	9.09E-02
502	419600.00	3727600.00	Worker	8.57E-03	9.58E-03	3.37E-01	4.09E-01	4.17E-01	7.17E-02	7.97E-02
503	419600.00	3727700.00	Worker	7.05E-03	7.89E-03	3.05E-01	3.70E-01	3.77E-01	6.50E-02	7.22E-02
504	419600.00	3727800.00	Worker	6.06E-03	6.79E-03	2.81E-01	3.41E-01	3.48E-01	6.01E-02	6.67E-02
505	419600.00	3727900.00	Worker	5.21E-03	5.83E-03	2.59E-01	3.15E-01	3.21E-01	5.54E-02	6.16E-02
506	419600.00	3728000.00	Worker	4.53E-03	5.06E-03	2.40E-01	2.91E-01	2.97E-01	5.13E-02	5.70E-02
507	419600.00	3728100.00	Worker	4.00E-03	4.47E-03	2.24E-01	2.72E-01	2.77E-01	4.78E-02	5.31E-02
508	419600.00	3728200.00	Worker	3.55E-03	3.98E-03	2.09E-01	2.54E-01	2.58E-01	4.46E-02	4.95E-02
509	419600.00	3728300.00	Worker	3.18E-03	3.56E-03	1.95E-01	2.37E-01	2.42E-01	4.17E-02	4.63E-02
510	419600.00	3728400.00	Worker	2.82E-03	3.16E-03	1.90E-01	2.30E-01	2.35E-01	4.04E-02	4.49E-02
511	419622.29	3725954.41	Worker	3.14E-02	3.60E-02	6.07E-01	7.44E-01	7.59E-01	1.37E-01	1.51E-01
512	419680.12	3727284.95	Worker	3.41E-02	3.80E-02	7.03E-01	8.52E-01	8.68E-01	1.48E-01	1.65E-01
513	419688.22	3726029.59	Worker	2.88E-02	3.28E-02	5.70E-01	6.98E-01	7.11E-01	1.27E-01	1.41E-01
514	419700.00	3724700.00	Worker	1.07E-03	1.21E-03	1.84E-01	2.24E-01	2.29E-01	4.02E-02	4.46E-02
515	419700.00	3724950.00	Worker	1.41E-03	1.59E-03	2.08E-01	2.53E-01	2.58E-01	4.55E-02	5.05E-02
516	419700.00	3725100.00	Worker	1.72E-03	1.94E-03	2.25E-01	2.74E-01	2.80E-01	4.93E-02	5.47E-02
517	419700.00	3725200.00	Worker	2.01E-03	2.27E-03	2.39E-01	2.92E-01	2.97E-01	5.24E-02	5.81E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
518	419700.00	3725300.00	Worker	2.41E-03	2.73E-03	2.53E-01	3.09E-01	3.15E-01	5.56E-02	6.16E-02
519	419700.00	3725400.00	Resident	2.99E-03	3.39E-03	2.73E-01	3.32E-01	3.39E-01	5.98E-02	6.63E-02
520	419700.00	3725500.00	Resident	3.90E-03	4.42E-03	2.94E-01	3.59E-01	3.66E-01	6.45E-02	7.15E-02
521	419700.00	3725600.00	Worker	5.36E-03	6.09E-03	3.17E-01	3.87E-01	3.95E-01	6.96E-02	7.72E-02
522	419700.00	3725700.00	Worker	7.66E-03	8.71E-03	3.47E-01	4.23E-01	4.31E-01	7.60E-02	8.42E-02
523	419700.00	3725800.00	Worker	1.12E-02	1.27E-02	3.91E-01	4.77E-01	4.86E-01	8.60E-02	9.53E-02
524	419700.00	3725900.00	Resident	1.66E-02	1.89E-02	4.52E-01	5.52E-01	5.63E-01	1.00E-01	1.11E-01
525	419700.00	3726000.00	Worker	2.41E-02	2.75E-02	5.20E-01	6.36E-01	6.48E-01	1.15E-01	1.28E-01
526	419700.00	3727400.00	Worker	2.07E-02	2.32E-02	5.32E-01	6.45E-01	6.57E-01	1.13E-01	1.25E-01
527	419700.00	3727500.00	Worker	1.45E-02	1.63E-02	4.34E-01	5.26E-01	5.36E-01	9.21E-02	1.02E-01
528	419700.00	3727600.00	Worker	1.11E-02	1.24E-02	3.79E-01	4.59E-01	4.68E-01	8.04E-02	8.94E-02
529	419700.00	3727700.00	Worker	8.87E-03	9.92E-03	3.38E-01	4.10E-01	4.18E-01	7.18E-02	7.98E-02
530	419700.00	3727800.00	Worker	7.39E-03	8.27E-03	3.10E-01	3.76E-01	3.83E-01	6.59E-02	7.32E-02
531	419700.00	3727900.00	Worker	6.22E-03	6.96E-03	2.84E-01	3.45E-01	3.52E-01	6.06E-02	6.73E-02
532	419700.00	3728000.00	Worker	5.34E-03	5.98E-03	2.63E-01	3.19E-01	3.25E-01	5.61E-02	6.23E-02
533	419700.00	3728100.00	Worker	4.66E-03	5.22E-03	2.44E-01	2.96E-01	3.02E-01	5.21E-02	5.79E-02
534	419700.00	3728200.00	Worker	4.09E-03	4.58E-03	2.27E-01	2.76E-01	2.81E-01	4.86E-02	5.39E-02
535	419700.00	3728300.00	Worker	3.64E-03	4.08E-03	2.12E-01	2.58E-01	2.63E-01	4.54E-02	5.04E-02
536	419700.00	3728400.00	Worker	3.27E-03	3.66E-03	1.99E-01	2.42E-01	2.46E-01	4.25E-02	4.72E-02
537	419700.00	3728450.00	Worker	3.08E-03	3.45E-03	1.96E-01	2.38E-01	2.42E-01	4.18E-02	4.64E-02
538	419700.00	3728500.00	Worker	2.92E-03	3.27E-03	1.90E-01	2.31E-01	2.35E-01	4.06E-02	4.51E-02
539	419700.00	3728700.00	Worker	2.45E-03	2.74E-03	1.66E-01	2.01E-01	2.05E-01	3.53E-02	3.92E-02
540	419727.30	3727373.12	Worker	2.67E-02	2.98E-02	5.96E-01	7.22E-01	7.36E-01	1.26E-01	1.40E-01
541	419763.65	3726091.38	Worker	2.53E-02	2.88E-02	5.17E-01	6.32E-01	6.44E-01	1.14E-01	1.27E-01
542	419774.48	3727461.29	Worker	2.11E-02	2.36E-02	5.11E-01	6.19E-01	6.31E-01	1.08E-01	1.20E-01
543	419800.00	3725300.00	Worker	2.22E-03	2.51E-03	2.40E-01	2.92E-01	2.98E-01	5.24E-02	5.81E-02
544	419800.00	3725400.00	Worker	2.70E-03	3.05E-03	2.55E-01	3.11E-01	3.17E-01	5.57E-02	6.17E-02
545	419800.00	3725500.00	Worker	3.42E-03	3.87E-03	2.73E-01	3.33E-01	3.39E-01	5.97E-02	6.62E-02
546	419800.00	3725600.00	Worker	4.50E-03	5.10E-03	2.93E-01	3.57E-01	3.64E-01	6.41E-02	7.10E-02
547	419800.00	3725700.00	Worker	6.14E-03	6.96E-03	3.18E-01	3.87E-01	3.95E-01	6.94E-02	7.69E-02
548	419800.00	3725800.00	Worker	8.53E-03	9.68E-03	3.50E-01	4.26E-01	4.34E-01	7.64E-02	8.47E-02
549	419800.00	3725900.00	Resident	1.18E-02	1.34E-02	3.88E-01	4.74E-01	4.83E-01	8.51E-02	9.44E-02
550	419800.00	3726000.00	Resident	1.62E-02	1.84E-02	4.30E-01	5.24E-01	5.35E-01	9.44E-02	1.05E-01
551	419800.00	3727600.00	Worker	1.43E-02	1.60E-02	4.19E-01	5.08E-01	5.17E-01	8.86E-02	9.85E-02
552	419800.00	3727700.00	Worker	1.12E-02	1.25E-02	3.67E-01	4.45E-01	4.53E-01	7.77E-02	8.64E-02
553	419800.00	3727800.00	Worker	8.98E-03	1.00E-02	3.22E-01	3.91E-01	3.98E-01	6.83E-02	7.59E-02
554	419800.00	3727900.00	Worker	7.47E-03	8.35E-03	2.90E-01	3.52E-01	3.59E-01	6.15E-02	6.83E-02
555	419800.00	3728000.00	Worker	6.34E-03	7.09E-03	2.69E-01	3.26E-01	3.32E-01	5.71E-02	6.34E-02
556	419800.00	3728100.00	Worker	5.44E-03	6.08E-03	2.50E-01	3.03E-01	3.09E-01	5.31E-02	5.90E-02
557	419800.00	3728200.00	Worker	4.74E-03	5.31E-03	2.33E-01	2.83E-01	2.89E-01	4.97E-02	5.52E-02
558	419800.00	3728300.00	Worker	4.17E-03	4.67E-03	2.19E-01	2.65E-01	2.71E-01	4.66E-02	5.18E-02
559	419800.00	3728400.00	Worker	3.72E-03	4.16E-03	2.06E-01	2.50E-01	2.54E-01	4.39E-02	4.87E-02
560	419800.00	3728500.00	Worker	3.34E-03	3.74E-03	1.94E-01	2.35E-01	2.40E-01	4.14E-02	4.59E-02
561	419821.66	3727549.46	Worker	1.75E-02	1.95E-02	4.54E-01	5.50E-01	5.61E-01	9.59E-02	1.07E-01
562	419858.29	3726123.37	Worker	1.91E-02	2.17E-02	4.30E-01	5.25E-01	5.35E-01	9.43E-02	1.05E-01
563	419875.32	3727618.28	Worker	1.60E-02	1.79E-02	4.20E-01	5.09E-01	5.19E-01	8.87E-02	9.86E-02
564	419900.00	3725400.00	Worker	2.47E-03	2.79E-03	2.45E-01	2.98E-01	3.04E-01	5.34E-02	5.92E-02

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John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
565	419900.00	3725500.00	Worker	3.05E-03	3.45E-03	2.59E-01	3.16E-01	3.22E-01	5.64E-02	6.26E-02
566	419900.00	3725600.00	Worker	3.90E-03	4.41E-03	2.76E-01	3.36E-01	3.43E-01	6.00E-02	6.66E-02
567	419900.00	3725700.00	Worker	5.15E-03	5.83E-03	2.95E-01	3.59E-01	3.66E-01	6.42E-02	7.12E-02
568	419900.00	3725800.00	Worker	6.89E-03	7.80E-03	3.15E-01	3.84E-01	3.91E-01	6.86E-02	7.61E-02
569	419900.00	3725900.00	Worker	9.20E-03	1.04E-02	3.39E-01	4.14E-01	4.22E-01	7.40E-02	8.21E-02
570	419900.00	3726000.00	Worker	1.22E-02	1.38E-02	3.63E-01	4.43E-01	4.51E-01	7.93E-02	8.79E-02
571	419900.00	3726100.00	Worker	1.58E-02	1.79E-02	3.90E-01	4.75E-01	4.84E-01	8.50E-02	9.43E-02
572	419900.00	3727700.00	Worker	1.36E-02	1.52E-02	3.86E-01	4.67E-01	4.76E-01	8.14E-02	9.05E-02
573	419900.00	3727800.00	Worker	1.08E-02	1.20E-02	3.47E-01	4.20E-01	4.28E-01	7.34E-02	8.16E-02
574	419900.00	3727900.00	Worker	8.82E-03	9.86E-03	3.12E-01	3.79E-01	3.86E-01	6.63E-02	7.36E-02
575	419900.00	3728000.00	Worker	7.42E-03	8.30E-03	2.82E-01	3.42E-01	3.49E-01	5.99E-02	6.65E-02
576	419900.00	3728100.00	Worker	6.31E-03	7.06E-03	2.57E-01	3.12E-01	3.18E-01	5.45E-02	6.06E-02
577	419900.00	3728200.00	Worker	5.47E-03	6.12E-03	2.36E-01	2.86E-01	2.91E-01	5.01E-02	5.56E-02
578	419900.00	3728300.00	Worker	4.78E-03	5.35E-03	2.17E-01	2.64E-01	2.69E-01	4.62E-02	5.13E-02
579	419900.00	3728400.00	Worker	4.22E-03	4.73E-03	2.01E-01	2.44E-01	2.48E-01	4.28E-02	4.75E-02
580	419900.00	3728500.00	Worker	3.77E-03	4.21E-03	1.89E-01	2.29E-01	2.34E-01	4.03E-02	4.47E-02
581	419900.00	3728600.00	Worker	3.38E-03	3.78E-03	1.79E-01	2.18E-01	2.22E-01	3.82E-02	4.25E-02
582	419910.22	3726205.86	Worker	1.99E-02	2.25E-02	4.28E-01	5.21E-01	5.31E-01	9.36E-02	1.04E-01
583	419935.17	3727753.69	Worker	1.26E-02	1.41E-02	3.65E-01	4.42E-01	4.50E-01	7.69E-02	8.55E-02
584	419950.00	3724950.00	Worker	1.25E-03	1.41E-03	1.93E-01	2.35E-01	2.39E-01	4.20E-02	4.65E-02
585	419950.00	3725200.00	Worker	1.71E-03	1.93E-03	2.13E-01	2.60E-01	2.65E-01	4.64E-02	5.15E-02
586	419950.00	3725450.00	Worker	2.60E-03	2.94E-03	2.44E-01	2.98E-01	3.03E-01	5.31E-02	5.89E-02
587	419950.00	3728700.00	Worker	3.23E-03	3.61E-03	1.68E-01	2.04E-01	2.08E-01	3.58E-02	3.98E-02
588	419950.00	3728950.00	Worker	2.56E-03	2.86E-03	1.49E-01	1.80E-01	1.84E-01	3.17E-02	3.52E-02
589	419957.66	3726293.90	Worker	2.08E-02	2.35E-02	4.18E-01	5.10E-01	5.20E-01	9.14E-02	1.01E-01
590	419960.00	3727687.53	Worker	1.53E-02	1.71E-02	3.85E-01	4.66E-01	4.75E-01	8.10E-02	9.01E-02
591	419966.10	3727576.34	Worker	2.07E-02	2.31E-02	4.35E-01	5.26E-01	5.36E-01	9.11E-02	1.01E-01
592	419983.66	3727841.15	Worker	1.12E-02	1.25E-02	3.33E-01	4.03E-01	4.11E-01	7.03E-02	7.82E-02
593	420000.00	3725500.00	Worker	2.77E-03	3.13E-03	2.36E-01	2.88E-01	2.93E-01	5.12E-02	5.68E-02
594	420000.00	3725600.00	Worker	3.45E-03	3.90E-03	2.51E-01	3.05E-01	3.11E-01	5.43E-02	6.02E-02
595	420000.00	3725700.00	Worker	4.43E-03	5.01E-03	2.65E-01	3.22E-01	3.28E-01	5.74E-02	6.37E-02
596	420000.00	3725800.00	Worker	5.76E-03	6.51E-03	2.79E-01	3.40E-01	3.46E-01	6.05E-02	6.71E-02
597	420000.00	3725900.00	Worker	7.44E-03	8.42E-03	2.97E-01	3.62E-01	3.69E-01	6.45E-02	7.15E-02
598	420000.00	3726000.00	Worker	9.58E-03	1.08E-02	3.14E-01	3.82E-01	3.90E-01	6.81E-02	7.56E-02
599	420000.00	3726100.00	Worker	1.22E-02	1.38E-02	3.35E-01	4.07E-01	4.15E-01	7.27E-02	8.06E-02
600	420000.00	3726200.00	Worker	1.52E-02	1.72E-02	3.58E-01	4.36E-01	4.45E-01	7.78E-02	8.63E-02
601	420000.00	3726300.00	Worker	1.88E-02	2.12E-02	3.89E-01	4.74E-01	4.83E-01	8.47E-02	9.39E-02
602	420000.00	3727600.00	Worker	2.01E-02	2.25E-02	4.26E-01	5.15E-01	5.25E-01	8.93E-02	9.93E-02
603	420000.00	3727900.00	Worker	1.02E-02	1.14E-02	3.15E-01	3.82E-01	3.90E-01	6.67E-02	7.42E-02
604	420000.00	3728000.00	Worker	8.50E-03	9.51E-03	2.91E-01	3.52E-01	3.59E-01	6.17E-02	6.85E-02
605	420000.00	3728100.00	Worker	7.23E-03	8.08E-03	2.68E-01	3.25E-01	3.32E-01	5.69E-02	6.33E-02
606	420000.00	3728200.00	Worker	6.21E-03	6.95E-03	2.47E-01	3.00E-01	3.06E-01	5.25E-02	5.83E-02
607	420000.00	3728300.00	Worker	5.41E-03	6.06E-03	2.29E-01	2.78E-01	2.83E-01	4.87E-02	5.41E-02
608	420000.00	3728400.00	Worker	4.76E-03	5.32E-03	2.13E-01	2.58E-01	2.63E-01	4.52E-02	5.02E-02
609	420000.00	3728500.00	Worker	4.22E-03	4.72E-03	1.99E-01	2.41E-01	2.45E-01	4.23E-02	4.70E-02
610	420000.00	3728600.00	Worker	3.77E-03	4.22E-03	1.86E-01	2.25E-01	2.30E-01	3.95E-02	4.39E-02
611	420005.09	3726381.93	Worker	2.17E-02	2.44E-02	4.05E-01	4.93E-01	5.03E-01	8.78E-02	9.74E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
612	420032.16	3727928.60	Worker	1.00E-02	1.12E-02	3.04E-01	3.69E-01	3.76E-01	6.44E-02	7.15E-02
613	420047.79	3727639.64	Worker	1.90E-02	2.12E-02	4.10E-01	4.95E-01	5.05E-01	8.58E-02	9.55E-02
614	420052.53	3726469.97	Worker	2.27E-02	2.55E-02	4.11E-01	5.00E-01	5.09E-01	8.84E-02	9.81E-02
615	420056.89	3727534.41	Worker	2.48E-02	2.77E-02	4.56E-01	5.51E-01	5.62E-01	9.53E-02	1.06E-01
616	420088.78	3727990.80	Worker	9.56E-03	1.07E-02	2.82E-01	3.41E-01	3.48E-01	5.96E-02	6.62E-02
617	420100.00	3725600.00	Worker	3.08E-03	3.48E-03	2.34E-01	2.85E-01	2.90E-01	5.06E-02	5.61E-02
618	420100.00	3725700.00	Worker	3.88E-03	4.38E-03	2.45E-01	2.98E-01	3.04E-01	5.31E-02	5.89E-02
619	420100.00	3725800.00	Worker	4.90E-03	5.54E-03	2.55E-01	3.11E-01	3.17E-01	5.52E-02	6.12E-02
620	420100.00	3725900.00	Worker	6.22E-03	7.03E-03	2.69E-01	3.27E-01	3.33E-01	5.81E-02	6.44E-02
621	420100.00	3726000.00	Worker	7.82E-03	8.83E-03	2.82E-01	3.43E-01	3.50E-01	6.11E-02	6.77E-02
622	420100.00	3726100.00	Worker	9.80E-03	1.11E-02	2.96E-01	3.60E-01	3.68E-01	6.41E-02	7.11E-02
623	420100.00	3726200.00	Worker	1.21E-02	1.36E-02	3.15E-01	3.84E-01	3.91E-01	6.82E-02	7.57E-02
624	420100.00	3726300.00	Worker	1.47E-02	1.66E-02	3.37E-01	4.10E-01	4.18E-01	7.28E-02	8.08E-02
625	420100.00	3726400.00	Worker	1.77E-02	1.99E-02	3.65E-01	4.44E-01	4.52E-01	7.86E-02	8.73E-02
626	420100.00	3726500.00	Worker	2.14E-02	2.40E-02	3.89E-01	4.73E-01	4.82E-01	8.34E-02	9.26E-02
627	420099.96	3726558.00	Worker	2.39E-02	2.68E-02	4.11E-01	4.99E-01	5.09E-01	8.79E-02	9.76E-02
628	420100.00	3727600.00	Worker	2.15E-02	2.40E-02	4.24E-01	5.12E-01	5.22E-01	8.86E-02	9.85E-02
629	420100.00	3728000.00	Worker	9.54E-03	1.07E-02	2.78E-01	3.37E-01	3.43E-01	5.87E-02	6.52E-02
630	420100.00	3728100.00	Worker	8.10E-03	9.06E-03	2.62E-01	3.17E-01	3.23E-01	5.54E-02	6.16E-02
631	420100.00	3728200.00	Worker	6.96E-03	7.78E-03	2.46E-01	2.98E-01	3.04E-01	5.21E-02	5.79E-02
632	420100.00	3728300.00	Worker	6.04E-03	6.76E-03	2.31E-01	2.79E-01	2.85E-01	4.89E-02	5.43E-02
633	420100.00	3728400.00	Worker	5.31E-03	5.94E-03	2.16E-01	2.62E-01	2.67E-01	4.58E-02	5.09E-02
634	420100.00	3728500.00	Worker	4.70E-03	5.26E-03	2.03E-01	2.47E-01	2.51E-01	4.32E-02	4.80E-02
635	420100.00	3728600.00	Worker	4.18E-03	4.68E-03	1.91E-01	2.32E-01	2.36E-01	4.06E-02	4.51E-02
636	420135.57	3727591.75	Worker	2.20E-02	2.46E-02	4.19E-01	5.06E-01	5.16E-01	8.74E-02	9.72E-02
637	420147.39	3726646.03	Worker	2.50E-02	2.79E-02	4.07E-01	4.93E-01	5.02E-01	8.63E-02	9.59E-02
638	420147.67	3727492.47	Worker	2.72E-02	3.03E-02	4.56E-01	5.51E-01	5.62E-01	9.49E-02	1.06E-01
639	420164.77	3727990.59	Worker	1.03E-02	1.15E-02	2.89E-01	3.50E-01	3.57E-01	6.10E-02	6.77E-02
640	420188.76	3727470.35	Worker	2.80E-02	3.12E-02	4.65E-01	5.62E-01	5.72E-01	9.68E-02	1.08E-01
641	420194.83	3726734.07	Worker	2.50E-02	2.79E-02	4.02E-01	4.87E-01	4.96E-01	8.49E-02	9.44E-02
642	420200.00	3725200.00	Worker	1.47E-03	1.66E-03	1.86E-01	2.26E-01	2.30E-01	4.01E-02	4.45E-02
643	420200.00	3725450.00	Resident	2.12E-03	2.39E-03	2.05E-01	2.49E-01	2.54E-01	4.43E-02	4.91E-02
644	420200.00	3725700.00	Worker	3.44E-03	3.89E-03	2.27E-01	2.76E-01	2.82E-01	4.91E-02	5.45E-02
645	420200.00	3725800.00	Worker	4.26E-03	4.81E-03	2.35E-01	2.85E-01	2.91E-01	5.06E-02	5.61E-02
646	420200.00	3725900.00	Worker	5.30E-03	5.99E-03	2.45E-01	2.97E-01	3.03E-01	5.28E-02	5.86E-02
647	420200.00	3726000.00	Worker	6.59E-03	7.44E-03	2.56E-01	3.11E-01	3.17E-01	5.53E-02	6.13E-02
648	420200.00	3726100.00	Worker	8.11E-03	9.15E-03	2.67E-01	3.25E-01	3.31E-01	5.76E-02	6.40E-02
649	420200.00	3726200.00	Worker	9.90E-03	1.12E-02	2.87E-01	3.49E-01	3.56E-01	6.20E-02	6.88E-02
650	420200.00	3726300.00	Resident	1.19E-02	1.34E-02	3.04E-01	3.70E-01	3.77E-01	6.56E-02	7.28E-02
651	420200.00	3726400.00	Worker	1.42E-02	1.60E-02	3.22E-01	3.91E-01	3.99E-01	6.92E-02	7.68E-02
652	420200.00	3726500.00	Worker	1.70E-02	1.90E-02	3.47E-01	4.22E-01	4.30E-01	7.44E-02	8.26E-02
653	420200.00	3726600.00	Worker	2.01E-02	2.25E-02	3.64E-01	4.42E-01	4.51E-01	7.76E-02	8.62E-02
654	420200.00	3726700.00	Worker	2.40E-02	2.68E-02	3.95E-01	4.78E-01	4.88E-01	8.35E-02	9.28E-02
655	420200.00	3727500.00	Worker	2.63E-02	2.93E-02	4.48E-01	5.41E-01	5.51E-01	9.32E-02	1.04E-01
656	420200.00	3728100.00	Worker	8.84E-03	9.89E-03	2.64E-01	3.19E-01	3.25E-01	5.56E-02	6.18E-02
657	420200.00	3728200.00	Worker	7.61E-03	8.51E-03	2.38E-01	2.88E-01	2.94E-01	5.03E-02	5.59E-02
658	420200.00	3728300.00	Worker	6.64E-03	7.43E-03	2.20E-01	2.66E-01	2.71E-01	4.64E-02	5.16E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
659	420200.00	3728400.00	Worker	5.84E-03	6.53E-03	2.10E-01	2.54E-01	2.59E-01	4.43E-02	4.93E-02
660	420200.00	3728500.00	Worker	5.16E-03	5.77E-03	1.99E-01	2.41E-01	2.46E-01	4.21E-02	4.68E-02
661	420200.00	3728600.00	Worker	4.59E-03	5.14E-03	1.89E-01	2.29E-01	2.34E-01	4.01E-02	4.45E-02
662	420200.00	3728700.00	Worker	4.12E-03	4.61E-03	1.80E-01	2.18E-01	2.23E-01	3.82E-02	4.24E-02
663	420200.00	3728950.00	Worker	3.21E-03	3.59E-03	1.58E-01	1.92E-01	1.96E-01	3.36E-02	3.73E-02
664	420206.85	3727600.29	Worker	2.14E-02	2.39E-02	3.97E-01	4.80E-01	4.89E-01	8.29E-02	9.22E-02
665	420210.53	3728079.50	Worker	9.19E-03	1.03E-02	2.70E-01	3.27E-01	3.33E-01	5.69E-02	6.32E-02
666	420242.26	3726822.10	Worker	2.51E-02	2.81E-02	3.96E-01	4.80E-01	4.89E-01	8.35E-02	9.28E-02
667	420254.96	3727687.96	Worker	1.80E-02	2.02E-02	3.60E-01	4.35E-01	4.43E-01	7.53E-02	8.38E-02
668	420256.25	3727908.53	Worker	1.24E-02	1.39E-02	3.10E-01	3.75E-01	3.82E-01	6.52E-02	7.25E-02
669	420262.33	3728054.90	Worker	9.89E-03	1.11E-02	2.78E-01	3.37E-01	3.44E-01	5.87E-02	6.52E-02
670	420276.81	3727422.94	Worker	2.84E-02	3.17E-02	4.47E-01	5.40E-01	5.50E-01	9.34E-02	1.04E-01
671	420289.70	3726910.14	Worker	2.57E-02	2.86E-02	3.90E-01	4.72E-01	4.82E-01	8.21E-02	9.13E-02
672	420300.00	3725800.00	Worker	3.76E-03	4.25E-03	2.18E-01	2.65E-01	2.71E-01	4.71E-02	5.22E-02
673	420300.00	3725900.00	Worker	4.62E-03	5.21E-03	2.26E-01	2.75E-01	2.80E-01	4.88E-02	5.41E-02
674	420300.00	3726000.00	Worker	5.65E-03	6.37E-03	2.35E-01	2.85E-01	2.91E-01	5.06E-02	5.62E-02
675	420300.00	3726100.00	Worker	6.87E-03	7.75E-03	2.48E-01	3.01E-01	3.07E-01	5.34E-02	5.93E-02
676	420300.00	3726200.00	Worker	8.28E-03	9.33E-03	2.64E-01	3.21E-01	3.28E-01	5.70E-02	6.32E-02
677	420300.00	3726300.00	Resident	9.88E-03	1.11E-02	2.78E-01	3.37E-01	3.44E-01	5.96E-02	6.62E-02
678	420300.00	3726400.00	Worker	1.18E-02	1.32E-02	2.91E-01	3.53E-01	3.60E-01	6.23E-02	6.91E-02
679	420300.00	3726500.00	Worker	1.38E-02	1.55E-02	3.11E-01	3.78E-01	3.85E-01	6.65E-02	7.39E-02
680	420300.00	3726600.00	Worker	1.62E-02	1.82E-02	3.19E-01	3.87E-01	3.94E-01	6.78E-02	7.53E-02
681	420300.00	3726700.00	Worker	1.90E-02	2.12E-02	3.46E-01	4.19E-01	4.27E-01	7.33E-02	8.14E-02
682	420300.00	3726800.00	Worker	2.20E-02	2.46E-02	3.65E-01	4.41E-01	4.50E-01	7.69E-02	8.55E-02
683	420300.00	3726900.00	Worker	2.52E-02	2.81E-02	3.86E-01	4.67E-01	4.76E-01	8.12E-02	9.03E-02
684	420300.00	3727500.00	Worker	2.45E-02	2.73E-02	4.11E-01	4.96E-01	5.06E-01	8.58E-02	9.54E-02
685	420300.00	3727600.00	Worker	2.07E-02	2.32E-02	3.84E-01	4.64E-01	4.73E-01	8.03E-02	8.93E-02
686	420300.00	3727700.00	Worker	1.76E-02	1.97E-02	3.52E-01	4.25E-01	4.34E-01	7.37E-02	8.19E-02
687	420300.00	3727900.00	Worker	1.28E-02	1.43E-02	3.03E-01	3.67E-01	3.74E-01	6.37E-02	7.08E-02
688	420300.00	3728100.00	Worker	9.43E-03	1.06E-02	2.68E-01	3.25E-01	3.31E-01	5.66E-02	6.29E-02
689	420300.00	3728200.00	Worker	8.19E-03	9.16E-03	2.49E-01	3.02E-01	3.08E-01	5.26E-02	5.84E-02
690	420300.00	3728300.00	Worker	7.15E-03	8.00E-03	2.29E-01	2.77E-01	2.83E-01	4.83E-02	5.37E-02
691	420300.00	3728400.00	Worker	6.30E-03	7.05E-03	2.10E-01	2.54E-01	2.59E-01	4.43E-02	4.92E-02
692	420300.00	3728500.00	Worker	5.58E-03	6.24E-03	1.93E-01	2.34E-01	2.38E-01	4.08E-02	4.53E-02
693	420300.00	3728600.00	Worker	4.97E-03	5.56E-03	1.81E-01	2.19E-01	2.23E-01	3.82E-02	4.25E-02
694	420303.07	3727775.62	Worker	1.55E-02	1.73E-02	3.29E-01	3.98E-01	4.06E-01	6.91E-02	7.68E-02
695	420304.21	3727996.28	Worker	1.10E-02	1.23E-02	2.87E-01	3.47E-01	3.54E-01	6.04E-02	6.72E-02
696	420337.13	3726998.17	Worker	2.57E-02	2.86E-02	3.91E-01	4.74E-01	4.83E-01	8.22E-02	9.14E-02
697	420337.09	3727859.11	Worker	1.36E-02	1.52E-02	3.06E-01	3.70E-01	3.77E-01	6.42E-02	7.14E-02
698	420357.12	3726087.48	Sensitive	6.13E-03	6.91E-03	2.37E-01	2.88E-01	2.93E-01	5.10E-02	5.66E-02
699	420364.86	3727375.54	Worker	2.67E-02	2.98E-02	4.16E-01	5.03E-01	5.13E-01	8.72E-02	9.69E-02
700	420384.56	3727086.21	Worker	2.55E-02	2.84E-02	3.91E-01	4.73E-01	4.82E-01	8.20E-02	9.12E-02
701	420400.00	3725900.00	Worker	4.06E-03	4.58E-03	2.09E-01	2.54E-01	2.59E-01	4.49E-02	4.98E-02
702	420400.00	3726000.00	Worker	4.91E-03	5.54E-03	2.17E-01	2.63E-01	2.69E-01	4.66E-02	5.18E-02
703	420400.00	3726100.00	Worker	5.92E-03	6.67E-03	2.33E-01	2.83E-01	2.88E-01	5.01E-02	5.56E-02
704	420400.00	3726200.00	Resident	7.05E-03	7.94E-03	2.44E-01	2.97E-01	3.02E-01	5.24E-02	5.82E-02
705	420400.00	3726300.00	Resident	8.35E-03	9.39E-03	2.54E-01	3.08E-01	3.14E-01	5.44E-02	6.04E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
706	420400.00	3726400.00	Worker	9.88E-03	1.11E-02	2.69E-01	3.27E-01	3.33E-01	5.76E-02	6.40E-02
707	420400.00	3726500.00	Worker	1.15E-02	1.29E-02	2.81E-01	3.41E-01	3.48E-01	5.99E-02	6.66E-02
708	420400.00	3726600.00	Worker	1.34E-02	1.50E-02	2.85E-01	3.46E-01	3.53E-01	6.07E-02	6.74E-02
709	420400.00	3726700.00	Worker	1.55E-02	1.73E-02	3.06E-01	3.71E-01	3.78E-01	6.50E-02	7.22E-02
710	420400.00	3726800.00	Worker	1.78E-02	1.98E-02	3.25E-01	3.93E-01	4.01E-01	6.87E-02	7.63E-02
711	420400.00	3726900.00	Worker	2.02E-02	2.25E-02	3.40E-01	4.12E-01	4.20E-01	7.18E-02	7.98E-02
712	420400.00	3727000.00	Worker	2.28E-02	2.55E-02	3.65E-01	4.42E-01	4.50E-01	7.68E-02	8.53E-02
713	420400.00	3727100.00	Worker	2.54E-02	2.83E-02	3.86E-01	4.68E-01	4.77E-01	8.11E-02	9.02E-02
714	420400.00	3727400.00	Worker	2.47E-02	2.75E-02	3.96E-01	4.79E-01	4.88E-01	8.31E-02	9.24E-02
715	420400.00	3727500.00	Worker	2.20E-02	2.46E-02	3.76E-01	4.55E-01	4.64E-01	7.90E-02	8.78E-02
716	420400.00	3727600.00	Worker	1.93E-02	2.16E-02	3.51E-01	4.25E-01	4.33E-01	7.37E-02	8.20E-02
717	420400.00	3727700.00	Worker	1.68E-02	1.88E-02	3.33E-01	4.03E-01	4.11E-01	6.99E-02	7.77E-02
718	420400.00	3727800.00	Worker	1.46E-02	1.64E-02	3.13E-01	3.78E-01	3.86E-01	6.56E-02	7.30E-02
719	420400.00	3727900.00	Worker	1.27E-02	1.42E-02	2.89E-01	3.50E-01	3.57E-01	6.07E-02	6.75E-02
720	420400.00	3728000.00	Worker	1.11E-02	1.25E-02	2.71E-01	3.28E-01	3.35E-01	5.70E-02	6.34E-02
721	420400.00	3728100.00	Worker	9.78E-03	1.09E-02	2.57E-01	3.11E-01	3.17E-01	5.41E-02	6.01E-02
722	420400.00	3728200.00	Worker	8.60E-03	9.62E-03	2.45E-01	2.97E-01	3.03E-01	5.17E-02	5.75E-02
723	420400.00	3728300.00	Worker	7.57E-03	8.48E-03	2.32E-01	2.81E-01	2.86E-01	4.89E-02	5.44E-02
724	420400.00	3728400.00	Worker	6.70E-03	7.49E-03	2.17E-01	2.63E-01	2.68E-01	4.58E-02	5.09E-02
725	420400.00	3728500.00	Worker	5.95E-03	6.66E-03	2.02E-01	2.44E-01	2.49E-01	4.26E-02	4.74E-02
726	420400.00	3728600.00	Worker	5.32E-03	5.95E-03	1.87E-01	2.26E-01	2.30E-01	3.94E-02	4.38E-02
727	420432.00	3727174.24	Worker	2.48E-02	2.76E-02	3.72E-01	4.51E-01	4.59E-01	7.82E-02	8.70E-02
728	420450.00	3725450.00	Worker	1.77E-03	2.00E-03	1.77E-01	2.15E-01	2.19E-01	3.82E-02	4.23E-02
729	420450.00	3725700.00	Worker	2.66E-03	3.00E-03	1.93E-01	2.35E-01	2.40E-01	4.17E-02	4.63E-02
730	420450.00	3725950.00	Worker	4.19E-03	4.73E-03	2.06E-01	2.50E-01	2.55E-01	4.42E-02	4.90E-02
731	420450.00	3728700.00	Worker	4.93E-03	5.52E-03	1.77E-01	2.14E-01	2.18E-01	3.73E-02	4.15E-02
732	420450.00	3728950.00	Worker	3.85E-03	4.31E-03	1.50E-01	1.82E-01	1.85E-01	3.17E-02	3.52E-02
733	420452.91	3727328.13	Worker	2.36E-02	2.63E-02	3.83E-01	4.63E-01	4.72E-01	8.05E-02	8.95E-02
734	420479.43	3727262.27	Worker	2.23E-02	2.48E-02	3.74E-01	4.53E-01	4.61E-01	7.87E-02	8.75E-02
735	420500.00	3726000.00	Worker	4.32E-03	4.87E-03	2.06E-01	2.51E-01	2.55E-01	4.43E-02	4.92E-02
736	420500.00	3726100.00	Resident	5.16E-03	5.81E-03	2.18E-01	2.65E-01	2.71E-01	4.69E-02	5.21E-02
737	420500.00	3726200.00	Resident	6.10E-03	6.87E-03	2.27E-01	2.76E-01	2.82E-01	4.88E-02	5.42E-02
738	420500.00	3726300.00	Worker	7.19E-03	8.09E-03	2.36E-01	2.86E-01	2.92E-01	5.05E-02	5.61E-02
739	420500.00	3726400.00	Worker	8.44E-03	9.48E-03	2.50E-01	3.03E-01	3.09E-01	5.34E-02	5.93E-02
740	420500.00	3726500.00	Worker	9.79E-03	1.10E-02	2.56E-01	3.10E-01	3.16E-01	5.45E-02	6.05E-02
741	420500.00	3726600.00	Resident	1.13E-02	1.27E-02	2.61E-01	3.17E-01	3.23E-01	5.56E-02	6.18E-02
742	420500.00	3726700.00	Worker	1.29E-02	1.44E-02	2.76E-01	3.34E-01	3.41E-01	5.86E-02	6.51E-02
743	420500.00	3726800.00	Worker	1.47E-02	1.64E-02	2.92E-01	3.54E-01	3.61E-01	6.19E-02	6.88E-02
744	420500.00	3726900.00	Worker	1.66E-02	1.85E-02	3.05E-01	3.70E-01	3.77E-01	6.46E-02	7.18E-02
745	420500.00	3727000.00	Worker	1.85E-02	2.07E-02	3.24E-01	3.92E-01	4.00E-01	6.83E-02	7.59E-02
746	420500.00	3727100.00	Worker	2.01E-02	2.25E-02	3.39E-01	4.10E-01	4.18E-01	7.13E-02	7.93E-02
747	420500.00	3727200.00	Worker	2.10E-02	2.34E-02	3.45E-01	4.18E-01	4.26E-01	7.26E-02	8.07E-02
748	420500.00	3727300.00	Worker	2.18E-02	2.43E-02	3.57E-01	4.32E-01	4.40E-01	7.51E-02	8.35E-02
749	420500.00	3727400.00	Worker	2.10E-02	2.35E-02	3.55E-01	4.29E-01	4.38E-01	7.47E-02	8.30E-02
750	420500.00	3727500.00	Worker	1.95E-02	2.18E-02	3.42E-01	4.14E-01	4.22E-01	7.20E-02	8.00E-02
751	420500.00	3727600.00	Worker	1.77E-02	1.97E-02	3.25E-01	3.94E-01	4.02E-01	6.86E-02	7.62E-02
752	420500.00	3727700.00	Worker	1.58E-02	1.77E-02	3.09E-01	3.74E-01	3.82E-01	6.51E-02	7.23E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
753	420500.00	3727800.00	Worker	1.41E-02	1.58E-02	2.92E-01	3.54E-01	3.61E-01	6.15E-02	6.84E-02
754	420500.00	3727900.00	Worker	1.25E-02	1.39E-02	2.80E-01	3.38E-01	3.45E-01	5.88E-02	6.53E-02
755	420500.00	3728000.00	Worker	1.11E-02	1.24E-02	2.61E-01	3.16E-01	3.22E-01	5.49E-02	6.11E-02
756	420500.00	3728100.00	Worker	9.87E-03	1.10E-02	2.48E-01	3.00E-01	3.05E-01	5.20E-02	5.79E-02
757	420500.00	3728200.00	Worker	8.77E-03	9.82E-03	2.33E-01	2.82E-01	2.87E-01	4.90E-02	5.45E-02
758	420500.00	3728300.00	Worker	7.83E-03	8.77E-03	2.22E-01	2.69E-01	2.74E-01	4.68E-02	5.20E-02
759	420500.00	3728400.00	Worker	6.98E-03	7.82E-03	2.13E-01	2.58E-01	2.63E-01	4.50E-02	5.00E-02
760	420500.00	3728500.00	Worker	6.25E-03	7.00E-03	2.03E-01	2.46E-01	2.51E-01	4.29E-02	4.77E-02
761	420500.00	3728600.00	Worker	5.61E-03	6.28E-03	1.92E-01	2.32E-01	2.37E-01	4.05E-02	4.50E-02
762	420600.00	3726100.00	Worker	4.53E-03	5.11E-03	2.06E-01	2.50E-01	2.55E-01	4.42E-02	4.90E-02
763	420600.00	3726200.00	Worker	5.37E-03	6.04E-03	2.14E-01	2.59E-01	2.64E-01	4.58E-02	5.09E-02
764	420600.00	3726300.00	Worker	6.27E-03	7.05E-03	2.21E-01	2.68E-01	2.73E-01	4.73E-02	5.25E-02
765	420600.00	3726400.00	Worker	7.28E-03	8.18E-03	2.32E-01	2.81E-01	2.87E-01	4.95E-02	5.50E-02
766	420600.00	3726500.00	Resident	8.42E-03	9.45E-03	2.38E-01	2.89E-01	2.94E-01	5.08E-02	5.64E-02
767	420600.00	3726600.00	Resident	9.65E-03	1.08E-02	2.41E-01	2.92E-01	2.98E-01	5.13E-02	5.70E-02
768	420600.00	3726700.00	Worker	1.09E-02	1.22E-02	2.51E-01	3.05E-01	3.11E-01	5.34E-02	5.93E-02
769	420600.00	3726800.00	Worker	1.24E-02	1.39E-02	2.66E-01	3.22E-01	3.28E-01	5.64E-02	6.26E-02
770	420600.00	3726900.00	Worker	1.39E-02	1.55E-02	2.79E-01	3.38E-01	3.44E-01	5.90E-02	6.56E-02
771	420600.00	3727000.00	Worker	1.54E-02	1.72E-02	2.92E-01	3.54E-01	3.60E-01	6.16E-02	6.85E-02
772	420600.00	3727100.00	Worker	1.68E-02	1.88E-02	3.05E-01	3.69E-01	3.76E-01	6.42E-02	7.14E-02
773	420600.00	3727200.00	Worker	1.78E-02	1.99E-02	3.05E-01	3.70E-01	3.77E-01	6.44E-02	7.15E-02
774	420600.00	3727300.00	Worker	1.83E-02	2.04E-02	3.10E-01	3.76E-01	3.83E-01	6.55E-02	7.28E-02
775	420600.00	3727400.00	Worker	1.77E-02	1.98E-02	3.32E-01	4.02E-01	4.10E-01	7.00E-02	7.78E-02
776	420600.00	3727500.00	Worker	1.72E-02	1.92E-02	3.11E-01	3.76E-01	3.84E-01	6.55E-02	7.28E-02
777	420600.00	3727600.00	Worker	1.60E-02	1.79E-02	3.01E-01	3.64E-01	3.71E-01	6.34E-02	7.05E-02
778	420600.00	3727700.00	Worker	1.46E-02	1.64E-02	2.87E-01	3.47E-01	3.54E-01	6.04E-02	6.72E-02
779	420600.00	3727800.00	Worker	1.34E-02	1.49E-02	2.76E-01	3.34E-01	3.41E-01	5.81E-02	6.46E-02
780	420600.00	3727900.00	Worker	1.20E-02	1.34E-02	2.59E-01	3.13E-01	3.19E-01	5.45E-02	6.06E-02
781	420600.00	3728000.00	Worker	1.08E-02	1.21E-02	2.52E-01	3.04E-01	3.10E-01	5.29E-02	5.88E-02
782	420600.00	3728100.00	Worker	9.74E-03	1.09E-02	2.39E-01	2.89E-01	2.94E-01	5.02E-02	5.58E-02
783	420600.00	3728200.00	Worker	8.75E-03	9.80E-03	2.25E-01	2.72E-01	2.78E-01	4.73E-02	5.26E-02
784	420600.00	3728300.00	Worker	7.90E-03	8.85E-03	2.15E-01	2.60E-01	2.65E-01	4.53E-02	5.03E-02
785	420600.00	3728400.00	Worker	7.14E-03	8.00E-03	2.03E-01	2.45E-01	2.50E-01	4.27E-02	4.75E-02
786	420600.00	3728500.00	Worker	6.45E-03	7.22E-03	1.95E-01	2.36E-01	2.41E-01	4.11E-02	4.57E-02
787	420600.00	3728600.00	Worker	5.83E-03	6.53E-03	1.88E-01	2.28E-01	2.32E-01	3.97E-02	4.41E-02
788	420684.43	3726176.60	Sensitive	4.65E-03	5.23E-03	2.02E-01	2.45E-01	2.50E-01	4.32E-02	4.80E-02
789	420700.00	3725700.00	Worker	2.15E-03	2.42E-03	1.67E-01	2.03E-01	2.07E-01	3.60E-02	3.99E-02
790	420700.00	3725950.00	Worker	3.19E-03	3.60E-03	1.82E-01	2.21E-01	2.25E-01	3.90E-02	4.33E-02
791	420700.00	3726200.00	Worker	4.73E-03	5.32E-03	2.01E-01	2.44E-01	2.49E-01	4.31E-02	4.78E-02
792	420700.00	3726300.00	Worker	5.52E-03	6.21E-03	2.07E-01	2.51E-01	2.56E-01	4.43E-02	4.92E-02
793	420700.00	3726400.00	Worker	6.38E-03	7.17E-03	2.17E-01	2.63E-01	2.68E-01	4.63E-02	5.14E-02
794	420700.00	3726450.00	Worker	6.84E-03	7.69E-03	2.20E-01	2.67E-01	2.72E-01	4.70E-02	5.22E-02
795	420700.00	3726500.00	Worker	7.33E-03	8.22E-03	2.23E-01	2.70E-01	2.75E-01	4.75E-02	5.28E-02
796	420700.00	3726600.00	Worker	8.34E-03	9.35E-03	2.25E-01	2.73E-01	2.79E-01	4.79E-02	5.33E-02
797	420700.00	3726700.00	Worker	9.45E-03	1.06E-02	2.32E-01	2.82E-01	2.87E-01	4.94E-02	5.49E-02
798	420700.00	3726800.00	Worker	1.06E-02	1.19E-02	2.43E-01	2.95E-01	3.01E-01	5.17E-02	5.74E-02
799	420700.00	3726900.00	Worker	1.18E-02	1.33E-02	2.56E-01	3.11E-01	3.17E-01	5.43E-02	6.03E-02

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John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
800	420700.00	3727000.00	Worker	1.31E-02	1.46E-02	2.67E-01	3.23E-01	3.29E-01	5.64E-02	6.27E-02
801	420700.00	3727100.00	Worker	1.42E-02	1.58E-02	2.77E-01	3.35E-01	3.42E-01	5.85E-02	6.50E-02
802	420700.00	3727200.00	Worker	1.51E-02	1.68E-02	2.77E-01	3.36E-01	3.42E-01	5.85E-02	6.50E-02
803	420700.00	3727300.00	Worker	1.55E-02	1.73E-02	2.74E-01	3.32E-01	3.39E-01	5.80E-02	6.44E-02
804	420700.00	3727400.00	Worker	1.56E-02	1.75E-02	2.83E-01	3.43E-01	3.49E-01	5.97E-02	6.64E-02
805	420700.00	3727500.00	Worker	1.52E-02	1.70E-02	2.85E-01	3.45E-01	3.52E-01	6.01E-02	6.68E-02
806	420700.00	3727600.00	Worker	1.45E-02	1.62E-02	2.78E-01	3.37E-01	3.43E-01	5.86E-02	6.51E-02
807	420700.00	3727700.00	Worker	1.35E-02	1.51E-02	2.68E-01	3.25E-01	3.31E-01	5.66E-02	6.29E-02
808	420700.00	3727800.00	Worker	1.25E-02	1.40E-02	2.56E-01	3.10E-01	3.16E-01	5.40E-02	6.00E-02
809	420700.00	3727900.00	Worker	1.14E-02	1.28E-02	2.48E-01	3.00E-01	3.06E-01	5.23E-02	5.81E-02
810	420700.00	3728000.00	Worker	1.04E-02	1.16E-02	2.34E-01	2.84E-01	2.89E-01	4.94E-02	5.49E-02
811	420700.00	3728100.00	Worker	9.48E-03	1.06E-02	2.27E-01	2.75E-01	2.80E-01	4.78E-02	5.32E-02
812	420700.00	3728200.00	Worker	8.63E-03	9.66E-03	2.18E-01	2.64E-01	2.69E-01	4.60E-02	5.11E-02
813	420700.00	3728300.00	Worker	7.85E-03	8.79E-03	2.06E-01	2.49E-01	2.54E-01	4.33E-02	4.82E-02
814	420700.00	3728400.00	Worker	7.16E-03	8.02E-03	1.98E-01	2.40E-01	2.44E-01	4.17E-02	4.63E-02
815	420700.00	3728450.00	Worker	6.83E-03	7.66E-03	1.94E-01	2.35E-01	2.39E-01	4.09E-02	4.54E-02
816	420700.00	3728500.00	Worker	6.53E-03	7.32E-03	1.89E-01	2.29E-01	2.34E-01	3.99E-02	4.43E-02
817	420700.00	3728700.00	Worker	5.45E-03	6.11E-03	1.73E-01	2.10E-01	2.14E-01	3.66E-02	4.06E-02
818	420700.00	3728950.00	Worker	4.36E-03	4.88E-03	1.58E-01	1.92E-01	1.95E-01	3.34E-02	3.71E-02
819	420800.00	3726600.00	Worker	7.28E-03	8.17E-03	2.13E-01	2.59E-01	2.64E-01	4.54E-02	5.05E-02
820	420800.00	3726700.00	Worker	8.24E-03	9.23E-03	2.16E-01	2.62E-01	2.67E-01	4.59E-02	5.10E-02
821	420800.00	3726800.00	Worker	9.20E-03	1.03E-02	2.25E-01	2.73E-01	2.78E-01	4.78E-02	5.31E-02
822	420800.00	3726900.00	Worker	1.02E-02	1.15E-02	2.36E-01	2.87E-01	2.92E-01	5.01E-02	5.57E-02
823	420800.00	3727000.00	Worker	1.13E-02	1.26E-02	2.46E-01	2.98E-01	3.04E-01	5.21E-02	5.79E-02
824	420800.00	3727100.00	Worker	1.22E-02	1.36E-02	2.53E-01	3.07E-01	3.12E-01	5.36E-02	5.95E-02
825	420800.00	3727200.00	Worker	1.30E-02	1.45E-02	2.56E-01	3.11E-01	3.17E-01	5.42E-02	6.02E-02
826	420800.00	3727300.00	Worker	1.32E-02	1.48E-02	2.54E-01	3.07E-01	3.13E-01	5.37E-02	5.97E-02
827	420800.00	3727400.00	Worker	1.36E-02	1.52E-02	2.54E-01	3.07E-01	3.13E-01	5.37E-02	5.97E-02
828	420800.00	3727500.00	Worker	1.34E-02	1.50E-02	2.57E-01	3.11E-01	3.17E-01	5.42E-02	6.02E-02
829	420800.00	3727600.00	Worker	1.30E-02	1.45E-02	2.57E-01	3.12E-01	3.18E-01	5.43E-02	6.04E-02
830	420800.00	3727700.00	Worker	1.22E-02	1.37E-02	2.50E-01	3.02E-01	3.08E-01	5.27E-02	5.86E-02
831	420800.00	3727800.00	Worker	1.16E-02	1.29E-02	2.42E-01	2.93E-01	2.99E-01	5.11E-02	5.68E-02
832	420800.00	3727900.00	Worker	1.08E-02	1.21E-02	2.31E-01	2.79E-01	2.85E-01	4.86E-02	5.41E-02
833	420800.00	3728000.00	Worker	9.94E-03	1.11E-02	2.25E-01	2.72E-01	2.78E-01	4.74E-02	5.27E-02
834	420800.00	3728100.00	Worker	9.16E-03	1.02E-02	2.14E-01	2.59E-01	2.64E-01	4.51E-02	5.01E-02
835	420800.00	3728200.00	Worker	8.41E-03	9.41E-03	2.06E-01	2.50E-01	2.54E-01	4.34E-02	4.83E-02
836	420800.00	3728300.00	Worker	7.71E-03	8.64E-03	2.00E-01	2.42E-01	2.47E-01	4.22E-02	4.69E-02
837	420862.31	3726041.93	Sensitive	3.12E-03	3.51E-03	1.76E-01	2.14E-01	2.18E-01	3.78E-02	4.19E-02
838	420900.00	3726700.00	Worker	7.23E-03	8.11E-03	2.02E-01	2.45E-01	2.49E-01	4.30E-02	4.77E-02
839	420900.00	3726800.00	Worker	8.08E-03	9.06E-03	2.10E-01	2.54E-01	2.59E-01	4.45E-02	4.94E-02
840	420900.00	3726900.00	Worker	8.94E-03	1.00E-02	2.20E-01	2.67E-01	2.72E-01	4.67E-02	5.19E-02
841	420900.00	3727000.00	Worker	9.80E-03	1.10E-02	2.28E-01	2.76E-01	2.81E-01	4.83E-02	5.36E-02
842	420900.00	3727100.00	Worker	1.06E-02	1.18E-02	2.32E-01	2.82E-01	2.87E-01	4.92E-02	5.47E-02
843	420900.00	3727200.00	Worker	1.10E-02	1.23E-02	2.36E-01	2.86E-01	2.91E-01	4.99E-02	5.55E-02
844	420900.00	3727300.00	Worker	1.17E-02	1.31E-02	2.37E-01	2.87E-01	2.93E-01	5.02E-02	5.58E-02
845	420900.00	3727400.00	Worker	1.20E-02	1.34E-02	2.31E-01	2.80E-01	2.86E-01	4.90E-02	5.45E-02
846	420900.00	3727500.00	Worker	1.19E-02	1.33E-02	2.35E-01	2.85E-01	2.90E-01	4.97E-02	5.52E-02

Table E-1. Health Risk Assessment Results for All Receptors
John Wayne Airport General Aviation Improvement Program
Orange County, California

Receptor ID	X-Coordinate (m)	Y-Coordinate (m)	Receptor Type	Incremental Chronic Hazard Index		Acute Hazard Index			Incremental Acute Hazard Index	
				Proposed Project vs. Baseline	Alternative 1 vs. Baseline	Baseline	Proposed Project	Alternative 1	Proposed Project vs. Baseline	Alternative 1 vs. Baseline
847	420900.00	3727600.00	Worker	1.17E-02	1.30E-02	2.35E-01	2.85E-01	2.91E-01	4.97E-02	5.53E-02
848	420900.00	3727700.00	Worker	1.12E-02	1.26E-02	2.34E-01	2.83E-01	2.89E-01	4.94E-02	5.49E-02
849	420900.00	3727800.00	Worker	1.07E-02	1.19E-02	2.28E-01	2.77E-01	2.82E-01	4.82E-02	5.36E-02
850	420900.00	3727900.00	Worker	9.99E-03	1.12E-02	2.20E-01	2.67E-01	2.72E-01	4.65E-02	5.17E-02
851	420900.00	3728000.00	Worker	9.43E-03	1.06E-02	2.10E-01	2.55E-01	2.60E-01	4.44E-02	4.93E-02
852	420900.00	3728100.00	Worker	8.77E-03	9.81E-03	2.05E-01	2.48E-01	2.53E-01	4.33E-02	4.81E-02
853	420900.00	3728200.00	Worker	8.13E-03	9.10E-03	1.97E-01	2.38E-01	2.43E-01	4.15E-02	4.62E-02
854	420950.00	3726200.00	Worker	3.61E-03	4.06E-03	1.74E-01	2.11E-01	2.15E-01	3.72E-02	4.13E-02
855	420950.00	3726450.00	Worker	5.05E-03	5.68E-03	1.90E-01	2.31E-01	2.36E-01	4.07E-02	4.52E-02
856	420950.00	3726700.00	Worker	6.79E-03	7.61E-03	1.96E-01	2.38E-01	2.43E-01	4.18E-02	4.65E-02
857	420950.00	3726950.00	Worker	8.79E-03	9.84E-03	2.17E-01	2.63E-01	2.68E-01	4.60E-02	5.11E-02
858	420950.00	3727700.00	Resident	1.07E-02	1.20E-02	2.26E-01	2.74E-01	2.79E-01	4.78E-02	5.31E-02
859	420950.00	3727950.00	Worker	9.46E-03	1.06E-02	2.11E-01	2.56E-01	2.61E-01	4.47E-02	4.97E-02
860	420950.00	3728200.00	Worker	7.96E-03	8.91E-03	1.93E-01	2.34E-01	2.39E-01	4.08E-02	4.53E-02
861	420950.00	3728450.00	Worker	6.62E-03	7.41E-03	1.77E-01	2.14E-01	2.18E-01	3.73E-02	4.14E-02
862	420950.00	3728700.00	Worker	5.51E-03	6.18E-03	1.59E-01	1.93E-01	1.96E-01	3.35E-02	3.72E-02
863	421000.00	3726900.00	Worker	7.88E-03	8.83E-03	2.04E-01	2.48E-01	2.53E-01	4.34E-02	4.82E-02
864	421000.00	3727000.00	Worker	8.62E-03	9.64E-03	2.13E-01	2.58E-01	2.63E-01	4.52E-02	5.02E-02
865	421000.00	3727100.00	Worker	9.29E-03	1.04E-02	2.15E-01	2.60E-01	2.65E-01	4.55E-02	5.05E-02
866	421000.00	3727200.00	Worker	9.88E-03	1.10E-02	2.20E-01	2.67E-01	2.72E-01	4.67E-02	5.19E-02
867	421000.00	3727300.00	Worker	1.03E-02	1.15E-02	2.19E-01	2.66E-01	2.71E-01	4.65E-02	5.17E-02
868	421000.00	3727400.00	Worker	1.05E-02	1.18E-02	2.19E-01	2.65E-01	2.70E-01	4.64E-02	5.15E-02
869	421000.00	3727500.00	Sensitive	1.07E-02	1.19E-02	2.14E-01	2.60E-01	2.65E-01	4.55E-02	5.05E-02
870	421000.00	3727600.00	Resident	1.05E-02	1.18E-02	2.17E-01	2.63E-01	2.68E-01	4.59E-02	5.10E-02
871	421000.00	3727700.00	Resident	1.02E-02	1.15E-02	2.17E-01	2.63E-01	2.68E-01	4.58E-02	5.09E-02
872	421070.59	3727529.32	Sensitive	9.85E-03	1.10E-02	2.03E-01	2.45E-01	2.50E-01	4.30E-02	4.77E-02
873	421100.00	3727300.00	Worker	9.15E-03	1.02E-02	2.05E-01	2.49E-01	2.53E-01	4.35E-02	4.83E-02
874	421100.00	3727400.00	Worker	9.42E-03	1.05E-02	2.06E-01	2.49E-01	2.54E-01	4.36E-02	4.85E-02
875	421200.00	3726700.00	Worker	5.16E-03	5.79E-03	1.72E-01	2.08E-01	2.12E-01	3.66E-02	4.06E-02
876	421200.00	3726950.00	Worker	6.54E-03	7.33E-03	1.83E-01	2.21E-01	2.26E-01	3.88E-02	4.31E-02
877	421200.00	3727200.00	Worker	7.81E-03	8.74E-03	1.91E-01	2.31E-01	2.36E-01	4.05E-02	4.50E-02
878	421200.00	3727450.00	Worker	8.57E-03	9.58E-03	1.93E-01	2.34E-01	2.38E-01	4.10E-02	4.55E-02
879	421200.00	3727700.00	Worker	8.56E-03	9.57E-03	1.89E-01	2.29E-01	2.33E-01	4.00E-02	4.45E-02
880	421200.00	3727950.00	Worker	7.97E-03	8.92E-03	1.84E-01	2.23E-01	2.27E-01	3.88E-02	4.32E-02
881	421200.00	3728200.00	Worker	7.10E-03	7.95E-03	1.73E-01	2.10E-01	2.14E-01	3.66E-02	4.07E-02
882	421200.00	3728450.00	Worker	6.16E-03	6.90E-03	1.60E-01	1.94E-01	1.97E-01	3.37E-02	3.75E-02
883	421450.00	3727200.00	Worker	6.01E-03	6.73E-03	1.64E-01	1.99E-01	2.03E-01	3.48E-02	3.87E-02
884	421450.00	3727450.00	Worker	6.67E-03	7.47E-03	1.65E-01	2.00E-01	2.04E-01	3.50E-02	3.88E-02