Estimated Emission Reductions for The Chattanooga EAC 2007 -Revised by Errol Reksten 11/19/03 & T. Miller 11/21/03

Chattanooga EAC - Parameters																		
2000 Population	307896	307896	307896	27776	27776	27776	11086	11086	11086	53282	53282	53282	61053	61053	61053	461093		
2007 DVMT	12342381	12342381	12342381	2426137	2426137	2426137	290189	290189	290189	2349060	2349060	2349060	1614788	1614788	1614788	19022555		
2007 Diesel DVMT	1028258	1028258	1028258	356892	356892	356892	17917	17917	17917	250076	250076	250076	75449	75449	75449	1728592		
2007 Arterial DVMT	290119	290119	290119	50507	50507	50507	17127	17127	17127	49324	49324	49324	60440	60440	60440	467517		
Truck Parking Spaces	1028	1028	1028	357	357	357	18	18	18	250	250	250	75	75	75	1729		
	Hamilton, TN			Marion, TN			Meigs, TN			Catoosa, GA			Walker, GA			**Totals**	**Totals**	**Totals**
Control Measure by	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	**NOx**	**VOC**	**CO**
Source Category	TPD	TPD	TPD	TPD	TPD	TPD	TPD	TPD	TPD	TPD	TPD	TPD	TPD	TPD	TPD	**TPD**	**TPD**	**TPD**
Area Sources																		
Open Burning Ban -resid. Garbage2A.	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.00	0.03	0.04	0.19	0.12	0.05	0.22	0.15	0.10	0.42	0.4
Open Burning Ban -yard waste2B.	0.14	0.51	9.60	0.03	0.10	0.04	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.02	0.09	0.18	0.63	9.7
Open Burning Ban - Land clearing2C.	0.44	1.10	6.32	0.44	1.10	2.59	0.00	0.11	0.67	0.37	1.10	4.87	0.00	0.00	0.00	1.25	3.42	14.5
Lower gas RVP (from 9.0 to 7.8)	-0.08	1.59	9.57	-0.03	0.28	2.02	0	0.04	0.26	-0.01	0.27	1.66	-0.02	0.31	1.9	-0.14	2.49	15.4
Stage I Controls at Gas Stations.	0	2.47	0	0	0.49	0	0	0.06	0	0	0	0	0	0.32	0	0.00	3.33	0.0
Stage II Controls at Gas Stations.	0	1.54	0	0	0.44	0	0	0.05	0	0	0.42	0	0	0.29	0	0.00	2.74	0.0
Ozone Action Day (Reduce VMT 1%)	0.12	0.16	1.80	0.02	0.03	0.35	0.00	0.00	0.04	0.02	0.03	0.34	0.02	0.02	0.23	0.19	0.25	2.8
Nonroad Mobile																		
Construction Equipment (10% New).	0.053	0.007	0.024	0.008	0.001	0.004	0.001	0.001	0.005	0.006	0.001	0.003	0.012	0.001	0.005	0.08	0.01	0.0
New airport vehicles (10% New)	0.00036	0.00003	0.00022	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.0
Onroad Mobile																		
Inspection & Maintenance (OBD only) I/M.	2.0	2.5	43.2	0.4	0.7	8.5	0.1	0.1	1.0	0.4	0.6	8.2	0.2	0.48	5.7	3.12	4.42	66.6
Lower interstate truck speeds by 10 mph.	1.8	0.0	0.45	1.7	0.0	0.41	0.0	0.0	0	0.4	0.0	0.58	0.0	0.0	0	3.80	-0.02	1.4
Truck stop electrification (10% of sites)	0.084	0.008	0.071	0.029	0.003	0.025	0.000	0.000	0.000	0.021	0.002	0.017	0.000	0.000	0.000	0.13	0.01	0.1
Cetane to Diesel (-3% NOx)(10% effective)	0.11	0	0	0.04	0	0										0.15	0.00	0.0
Anti-idling Legis. (1% veh idle 5 min/day)	0.0040	0.0040	0.0271	0.0004	0.0004	0.0024	0.0001	0.0001	0.0010	0.0007	0.0007	0.0047	0.0008	0.0008	0.0054	0.01	0.01	0.0
Transit (increase bus ridership 10%)	0.003	0.004	0.043	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.0
Point Sources (50% NOx Reduction)																		
50 Ton NOx/Year RACT Rule																		
Dupont, Bunge, Rock-TN, & Velsicol	1.16	0	0				0	0	0	0	0	0	0	0	0	1.16	0.00	0.0
Summary of Results for 2007																		
Total TPD Potential Reductions	5.8	9.9	71.1	2.6	3.2	14.0	0.10	0.35	2.1	1.2	2.7	15.8	0.3	1.66	8.1	10.03	17.71	111.1
TPD County Em. Without Controls	53.9	65.7	295.4	13.9	8.7	49.0	4.1	3.7	18.3	10.4	13.7	61.2	5.8	9.9	41.4	88.05	101.67	465.2
Percent Reduction from New Controls	10.8	15.0	24.1	18.7	36.6	28.6	2.4	9.5	11.3	11.5	19.5	25.9	5.2	16.7	19.5	11.4	17.4	23.9
Emission Reductions by Source Category in Tons/Day																		
Area (open burning , stage I & II)	0.58	5.62	15.92	0.47	2.13	2.70	0.01	0.23	0.72	0.41	1.72	4.99	0.05	0.85	0.24	1.52	10.54	24.6
Motor Vehicle (RVP & O3 Action Day)	4.04	4.26	55.16	2.11	1.03	11.29	0.08	0.12	1.34	0.79	0.94	10.84	0.24	0.81	7.82	7.26	7.16	86.5
Non-road	0.05	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.08	0.01	0.0
Point Low Level	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.0
Elevated Point	1.16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.16	0.00	0.0
2007 Baseline Emissions by Source Category in Tons/Day																		
Area (open burning , stage I & II)	1.62	39.20	17.69	0.60	4.52	3.00	0.04	1.55	0.80	0.46	8.27	5.54	0.54	6.05	7.05	3.26	59.59	34.1
Motor Vehicle (RVP & O3 Action Day)	27.92	16.88	179.24	11.06	3.52	42.66	1.25	1.23	12.47	6.96	4.62	43.01	4.01	2.87	24.72	51.20	29.12	302.1
Non-road	14.23	5.32	92.88	2.17	0.56	5.08	2.76	0.94	5.00	2.65	0.78	12.37	1.28	0.70	9.61	23.09	8.30	124.9
Point Low Level	3.39	4.25	5.22	0.04	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	3.43	4.61	5.3
Elevated Point	6.71	0.04	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.23	0.00	0.00	0.00	7.07	0.04	0.6
Percentage Reduction in Emissions by Source Category																		
Area (open burning , stage I & II)	35.80	14.33	89.99	78.31	47.12	89.98	29.85	14.68	89.71	89.13	20.78	90.07	9.76	14.01	3.34	46.76	17.69	72.07
Motor Vehicle (RVP & O3 Action Day)	14.49	25.21	30.77	19.10	29.29	26.47	6.64	10.06	10.77	11.28	20.36	25.21	5.91	28.26	31.64	14.18	24.59	28.62
Non-road	0.37	0.12	0.03	0.36	0.18	0.07	0.04	0.15	0.10	0.22	0.09	0.02	0.91	0.20	0.05	0.34	0.13	0.03
Point Low Level	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Elevated Point	17.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.41	0.00	0.00