

Appendix D-2: Crawford County Annual Nonroad Emission by Category

Equipment Type	Fuel	Pollutant	Tons/Year			
			2002	2004	2009	2018
Recreational	Diesel	VOC	0.308716	0.299793	0.263364	0.171216
Recreational	Gasoline	VOC	276.629526	328.036673	372.257937	253.757492
Recreational	CNG	VOC	0.308716	0.299793	0.263364	0.171216
Recreational	LPG	VOC	0.025298	0.024920	0.021359	0.013941
Construction	Diesel	VOC	13.057113	83.203710	9.763931	6.119248
Construction	Gasoline	VOC	7.850063	6.847679	3.864279	3.670505
Construction	CNG	VOC	0.000019	0.000019	0.000015	0.000007
Construction	LPG	VOC	0.123194	0.118266	0.072572	0.020862
Industrial	Diesel	VOC	6.755873	6.163856	4.784163	2.740492
Industrial	Gasoline	VOC	10.878035	9.127445	4.376389	1.887630
Industrial	CNG	VOC	0.194690	0.178620	0.089210	0.014224
Industrial	LPG	VOC	37.071163	36.015970	20.807119	3.063984
Lawn and Garden	Diesel	VOC	2.082517	2.005443	1.683692	1.221660
Lawn and Garden	Gasoline	VOC	342.253487	306.513089	207.429659	213.355053
Lawn and Garden	CNG	VOC	0.000000	0.000000	0.000000	0.000000
Lawn and Garden	LPG	VOC	0.288190	0.272754	0.138466	0.019058
Farm	Diesel	VOC	22.209178	20.116518	15.555942	9.324617
Farm	Gasoline	VOC	4.007093	3.812354	3.113941	2.524120
Farm	CNG	VOC	0.006518	0.003836	0.000469	0.000011
Farm	LPG	VOC	0.002035	0.001924	0.001280	0.000617
Light Commercial	Diesel	VOC	2.548979	2.475291	2.129469	1.331298
Light Commercial	Gasoline	VOC	35.961296	33.295116	25.190588	28.261878
Light Commercial	CNG	VOC	0.029861	0.015800	0.007487	0.005896
Light Commercial	LPG	VOC	0.619670	0.644560	0.536330	0.287424
Logging	Diesel	VOC	0.430746	0.374932	0.266863	0.127942
Logging	Gasoline	VOC	3.072183	2.912402	1.717544	2.085462
Logging	CNG	VOC	0.000000	0.000000	0.000000	0.000000
Logging	LPG	VOC	0.000000	0.000000	0.000000	0.000000
Airport Service	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
Airport Service	Gasoline	VOC	0.000000	0.000000	0.000000	0.000000
Airport Service	CNG	VOC	0.000000	0.000000	0.000000	0.000000
Airport Service	LPG	VOC	0.000000	0.000000	0.000000	0.000000
Railway Maintenance	Diesel	VOC	0.009277	0.009125	0.008207	0.005346
Railway Maintenance	Gasoline	VOC	0.003089	0.002800	0.002082	0.002159
Railway Maintenance	CNG	VOC	0.000000	0.000000	0.000000	0.000000
Railway Maintenance	LPG	VOC	0.000032	0.000032	0.000024	0.000007
Recreational Marine Vessels	Diesel	VOC	1.416032	1.486510	1.535911	1.508059
Recreational Marine Vessels	Gasoline	VOC	1116.181430	1031.053639	794.254224	563.713974
Recreational Marine Vessels	CNG	VOC	0.000000	0.000000	0.000000	0.000000
Recreational Marine Vessels	LPG	VOC	0.000000	0.000000	0.000000	0.000000
Aircraft	Other	VOC	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Coal	VOC	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Residual Oil	VOC	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Gasoline	VOC	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Other	VOC	0.000000	0.000000	0.000000	0.000000
Railroads	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
Crawford County VOC Totals			1884.324018	1875.312867	1470.135881	1095.405396

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Equipment Type	Fuel	Pollutant	Tons/Year			
			2002	2004	2009	2018
Recreational	Diesel	NOx	0.965567	0.977663	0.968325	0.790560
Recreational	Gasoline	NOx	8.311474	8.643746	10.092507	12.554049
Recreational	CNG	NOx	0.965567	0.977663	0.968325	0.790560
Recreational	LPG	NOx	0.093374	0.091782	0.077736	0.050473
Construction	Diesel	NOx	112.992992	11.886244	94.899494	49.302348
Construction	Gasoline	NOx	0.987718	0.908901	0.662054	0.525941
Construction	CNG	NOx	0.001181	0.001169	0.000931	0.000434
Construction	LPG	NOx	0.451799	0.430456	0.260113	0.090375
Industrial	Diesel	NOx	64.420159	62.662576	54.220646	27.348680
Industrial	Gasoline	NOx	7.846481	6.585445	3.141049	0.847578
Industrial	CNG	NOx	12.010373	10.912178	5.409883	1.397443
Industrial	LPG	NOx	135.960532	130.899093	73.693160	17.547958
Lawn and Garden	Diesel	NOx	13.930925	14.461357	14.935427	13.164060
Lawn and Garden	Gasoline	NOx	37.721244	35.881725	29.598532	30.709646
Lawn and Garden	CNG	NOx	0.000000	0.000000	0.000000	0.000000
Lawn and Garden	LPG	NOx	1.053671	0.987920	0.490167	0.115733
Farm	Diesel	NOx	182.530297	177.286198	159.473097	102.127067
Farm	Gasoline	NOx	1.768204	1.739197	1.369952	1.010184
Farm	CNG	NOx	0.386885	0.224030	0.026987	0.000627
Farm	LPG	NOx	0.007451	0.007006	0.004598	0.002335
Light Commercial	Diesel	NOx	14.564020	14.917697	14.924606	11.790687
Light Commercial	Gasoline	NOx	7.244705	7.170293	6.304996	6.856219
Light Commercial	CNG	NOx	1.888320	1.036185	0.635790	0.511558
Light Commercial	LPG	NOx	2.861199	2.967820	2.458526	1.418989
Logging	Diesel	NOx	5.923598	5.236755	3.505408	0.734227
Logging	Gasoline	NOx	0.131935	0.140586	0.138182	0.157952
Logging	CNG	NOx	0.000000	0.000000	0.000000	0.000000
Logging	LPG	NOx	0.000000	0.000000	0.000000	0.000000
Airport Service	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
Airport Service	Gasoline	NOx	0.000000	0.000000	0.000000	0.000000
Airport Service	CNG	NOx	0.000000	0.000000	0.000000	0.000000
Airport Service	LPG	NOx	0.000000	0.000000	0.000000	0.000000
Railway Maintenance	Diesel	NOx	0.047824	0.048049	0.046086	0.033128
Railway Maintenance	Gasoline	NOx	0.000905	0.000818	0.000671	0.000670
Railway Maintenance	CNG	NOx	0.000000	0.000000	0.000000	0.000000
Railway Maintenance	LPG	NOx	0.000118	0.000116	0.000085	0.000027
Recreational Marine Vessels	Diesel	NOx	37.060838	39.140617	41.742232	44.042406
Recreational Marine Vessels	Gasoline	NOx	49.658130	55.189288	69.924260	90.232641
Recreational Marine Vessels	CNG	NOx	0.000000	0.000000	0.000000	0.000000
Recreational Marine Vessels	LPG	NOx	0.000000	0.000000	0.000000	0.000000
Aircraft	Other	NOx	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Coal	NOx	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Residual Oil	NOx	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Gasoline	NOx	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Other	NOx	0.000000	0.000000	0.000000	0.000000
Railroads	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
Crawford County NOx Totals			701.787487	591.412574	589.973826	414.154551

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Equipment Type	Fuel	Pollutant	Tons/Year			
			2002	2004	2009	2018
Recreational	Diesel	CO	1.148820	1.119911	1.005514	0.664667
Recreational	Gasoline	CO	1411.093081	1560.055775	1813.631745	1931.911988
Recreational	CNG	CO	1.148820	1.119911	1.005514	0.664667
Recreational	LPG	CO	0.373572	0.377285	0.347351	0.246885
Construction	Diesel	CO	63.226821	11.886244	50.762289	25.761369
Construction	Gasoline	CO	107.212978	108.258426	106.855898	107.126179
Construction	CNG	CO	0.004706	0.004865	0.004433	0.002475
Construction	LPG	CO	1.823070	1.873412	1.440276	0.513929
Industrial	Diesel	CO	29.085471	27.461038	26.997702	9.772690
Industrial	Gasoline	CO	328.098292	302.953445	220.633153	132.148865
Industrial	CNG	CO	49.020359	49.851005	32.741781	7.730683
Industrial	LPG	CO	548.585652	573.370762	442.940686	101.898860
Lawn and Garden	Diesel	CO	7.300973	7.251156	6.870977	5.319042
Lawn and Garden	Gasoline	CO	5003.537154	5227.849770	5685.493618	6589.058711
Lawn and Garden	CNG	CO	0.000000	0.000000	0.000000	0.000000
Lawn and Garden	LPG	CO	4.269077	4.380158	3.101964	0.662796
Farm	Diesel	CO	106.246862	98.627786	82.053781	45.631155
Farm	Gasoline	CO	94.247114	95.816025	95.380733	98.290968
Farm	CNG	CO	1.661503	0.982873	0.121337	0.002807
Farm	LPG	CO	0.030125	0.029843	0.023344	0.011472
Light Commercial	Diesel	CO	9.280863	9.207341	8.741072	5.999556
Light Commercial	Gasoline	CO	903.428547	970.008060	1135.255076	1405.801018
Light Commercial	CNG	CO	7.454805	7.200473	2.322519	2.140597
Light Commercial	LPG	CO	8.380465	9.293318	9.290024	5.890329
Logging	Diesel	CO	2.037937	1.664968	1.370204	0.261451
Logging	Gasoline	CO	22.540149	23.779971	26.769356	34.625304
Logging	CNG	CO	0.000000	0.000000	0.000000	0.000000
Logging	LPG	CO	0.000000	0.000000	0.000000	0.000000
Airport Service	Diesel	CO	0.000000	0.000000	0.000000	0.000000
Airport Service	Gasoline	CO	0.000000	0.000000	0.000000	0.000000
Airport Service	CNG	CO	0.000000	0.000000	0.000000	0.000000
Airport Service	LPG	CO	0.000000	0.000000	0.000000	0.000000
Railway Maintenance	Diesel	CO	0.039494	0.038512	0.035009	0.022076
Railway Maintenance	Gasoline	CO	0.109727	0.114947	0.124482	0.135563
Railway Maintenance	CNG	CO	0.000000	0.000000	0.000000	0.000000
Railway Maintenance	LPG	CO	0.000472	0.000489	0.000426	0.000170
Recreational Marine Vessels	Diesel	CO	5.940323	6.258982	7.049699	8.454060
Recreational Marine Vessels	Gasoline	CO	2866.191674	2772.039795	2503.027235	2221.567308
Recreational Marine Vessels	CNG	CO	0.000000	0.000000	0.000000	0.000000
Recreational Marine Vessels	LPG	CO	0.000000	0.000000	0.000000	0.000000
Aircraft	Other	CO	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Coal	CO	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Diesel	CO	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Residual Oil	CO	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Gasoline	CO	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Other	CO	0.000000	0.000000	0.000000	0.000000
Railroads	Diesel	CO	0.000000	0.000000	0.000000	0.000000
Crawford County CO Totals			11583.518905	11872.876543	12265.397199	12742.317641

Appendix D-2: Crawford County Annual Nonroad Emission by SCC
Tons per Year

SCC	Classification	Equipment Type	Engine Type	Pollutant Code	2002 Emissions	2004 Emissions	2009 Emissions	2018 Emissions
2265005035	Agricultural Equipment	Sprayers	4 Stroke	NOx	0.238257	0.242667	0.216738	0.174898
2265005040	Agricultural Equipment	Tillers > 6 HP	4 Stroke	NOx	0.228390	0.242003	0.269316	0.316765
2265005045	Agricultural Equipment	Swathers	4 Stroke	NOx	0.231970	0.231219	0.201358	0.137079
2265005055	Agricultural Equipment	Other Agricultural Equipment	4 Stroke	NOx	0.277308	0.276455	0.241762	0.173430
2265005060	Agricultural Equipment	Irrigation Sets	4 Stroke	NOx	0.403580	0.373670	0.169253	0.048446
2265006005	Commercial Equipment	Generator Sets	4 Stroke	NOx	3.074011	3.118644	2.913972	3.371345
2265006010	Commercial Equipment	Pumps	4 Stroke	NOx	0.930311	0.910185	0.725795	0.733210
2265006015	Commercial Equipment	Air Compressors	4 Stroke	NOx	0.641080	0.620383	0.469664	0.368067
2265006025	Commercial Equipment	Welders	4 Stroke	NOx	1.157525	1.091474	0.968447	0.941251
2265006030	Commercial Equipment	Pressure Washers	4 Stroke	NOx	1.356089	1.335688	1.124944	1.318124
2265006035	Commercial Equipment	Hydro Power Units	4 Stroke	NOx	0.067592	0.063110	0.057569	0.068993
2265007010	Logging Equipment	Shredders > 6 HP	4 Stroke	NOx	0.100974	0.110566	0.118441	0.132951
2265007015	Logging Equipment	Forest Eq - Feller/Bunch/Skidder	4 Stroke	NOx	0.001135	0.001152	0.000889	0.001126
2265008005	Airport Equipment	Airport Ground Support Equipment	4 Stroke	NOx	0.000000	0.000000	0.000000	0.000000
2265010010	Industrial Equipment	Other Oil Field Equipment	4 Stroke	NOx	0.532614	0.465005	0.429377	0.434411
2267001060	Recreational Equipment	Specialty Vehicle Carts	LPG	NOx	0.093374	0.0917782	0.077736	0.050473
2267002003	Construction and Mining Equipment	Pavers	LPG	NOx	0.018611	0.017741	0.010334	0.002859
2267002015	Construction and Mining Equipment	Rollers	LPG	NOx	0.031354	0.028759	0.012284	0.003348
2267002021	Construction and Mining Equipment	Paving Equipment	LPG	NOx	0.004907	0.004839	0.003747	0.001542
2267002024	Construction and Mining Equipment	Surfacing Equipment	LPG	NOx	0.003203	0.003032	0.001642	0.000469
2267002030	Construction and Mining Equipment	Trenchers	LPG	NOx	0.056967	0.054532	0.03018	0.008882
2267002033	Construction and Mining Equipment	Bore/Drill Rigs	LPG	NOx	0.018748	0.018787	0.016335	0.010843
2267002039	Construction and Mining Equipment	Concrete/Industrial Saws	LPG	NOx	0.054301	0.047875	0.014531	0.005551
2267002045	Construction and Mining Equipment	Cranes	LPG	NOx	0.020056	0.019773	0.015266	0.006124
2267002054	Construction and Mining Equipment	Crushing/Proc. Equipment	LPG	NOx	0.003339	0.003284	0.002491	0.000903
2267002057	Construction and Mining Equipment	Rough Terrain Forklifts	LPG	NOx	0.036219	0.035062	0.023368	0.006268
2267002060	Construction and Mining Equipment	Rubber Tire Loaders	LPG	NOx	0.090118	0.085438	0.046659	0.010304
2267002066	Construction and Mining Equipment	Tractors/Loaders/Backhoes	LPG	NOx	0.009574	0.008907	0.004099	0.001001
2267002072	Construction and Mining Equipment	Skid Steer Loaders	LPG	NOx	0.074461	0.072795	0.052763	0.021385
2267002081	Construction and Mining Equipment	Other Construction Equipment	LPG	NOx	0.029941	0.029633	0.023575	0.010895
2267003010	Industrial Equipment	Aerial Lifts	LPG	NOx	1.406195	1.406281	1.111212	0.540672
2267003020	Industrial Equipment	Forklifts	LPG	NOx	132.540054	127.635668	71.851125	16.759627
2267003030	Industrial Equipment	Sweepers/Scrubbers	LPG	NOx	1.011392	0.933533	0.375047	0.119520
2267003040	Industrial Equipment	Other General Industrial Equipm	LPG	NOx	0.309314	0.291993	0.141085	0.036770
2267003050	Industrial Equipment	Other Material Handling Equipment	LPG	NOx	0.075950	0.075803	0.058869	0.022034
2267003070	Industrial Equipment	Terminal Tractors	LPG	NOx	0.617628	0.555817	0.155823	0.069334
2267004066	Lawn and Garden Equipment (Com)	Chippers/Stump Grinders	LPG	NOx	1.053671	0.987920	0.490167	0.115733
2267005055	Agricultural Equipment	Other Agricultural Equipment	LPG	NOx	0.004045	0.003931	0.003280	0.002068
2267005060	Agricultural Equipment	Irrigation Sets	LPG	NOx	0.003405	0.003075	0.001318	0.000267
2267006005	Commercial Equipment	Generator Sets	LPG	NOx	1.527906	1.606892	1.474144	1.063708
2267006010	Commercial Equipment	Pumps	LPG	NOx	0.355817	0.365513	0.284311	0.142380
2267006015	Commercial Equipment	Air Compressors	LPG	NOx	0.428967	0.433652	0.296646	0.091140
2267006025	Commercial Equipment	Welders	LPG	NOx	0.534820	0.547815	0.393428	0.117305
2267006030	Commercial Equipment	Pressure Washers	LPG	NOx	0.007028	0.007353	0.006271	0.003134
2267006035	Commercial Equipment	Hydro Power Units	LPG	NOx	0.006661	0.006596	0.003726	0.001321
2267008005	Airport Equipment	Airport Ground Support Equipment	LPG	NOx	0.000000	0.000000	0.000000	0.000000
2268002081	Construction and Mining Equipment	Other Construction Equipment	CNG	NOx	0.001181	0.001169	0.000931	0.000434
2268003020	Industrial Equipment	Forklifts	CNG	NOx	9.649958	9.208333	5.147291	1.202125
2268003030	Industrial Equipment	Sweepers/Scrubbers	CNG	NOx	0.011532	0.010991	0.006071	0.001412
2268003040	Industrial Equipment	Other General Industrial Equipment	CNG	NOx	0.007539	0.007146	0.003710	0.000892
2268003060	Industrial Equipment	AC/Refrigeration	CNG	NOx	0.011401	0.010643	0.004771	0.001497
2268003070	Industrial Equipment	Terminal Tractors	CNG	NOx	0.043477	0.038824	0.010817	0.004822
2268005055	Agricultural Equipment	Other Agricultural Equipment	CNG	NOx	0.004894	0.003999	0.002236	0.000627
2268005060	Agricultural Equipment	Irrigation Sets	CNG	NOx	0.381991	0.220031	0.024751	0.000000
2268006005	Commercial Equipment	Generator Sets	CNG	NOx	0.500797	0.510256	0.455489	0.323532
2268006010	Commercial Equipment	Pumps	CNG	NOx	0.025111	0.025173	0.020173	0.010889
2268006015	Commercial Equipment	Air Compressors	CNG	NOx	0.035920	0.035195	0.023664	0.006605
2268006020	Commercial Equipment	Gas Compressors	CNG	NOx	1.326492	0.465561	0.136464	0.170532
2268006035	Commercial Equipment	Hydro Power Units	CNG	NOx	0.000000	0.000000	0.000000	0.000000
2268010010	Industrial Equipment	Other Oil Field Equipment	CNG	NOx	2.286465	1.363241	0.237224	0.186695
2270001060	Recreational Equipment	Specialty Vehicle Carts	Diesel	NOx	0.965567	0.977663	0.968325	0.790560
2270002003	Construction and Mining Equipment	Pavers	Diesel	NOx	1.502109	1.433335	1.223522	0.560306
2270002006	Construction and Mining Equipment	Tampers/Rammers	Diesel	NOx	0.003301	0.003219	0.002769	0.002368
2270002009	Construction and Mining Equipment	Plate Compactors	Diesel	NOx	0.051497	0.050070	0.043361	0.038807
2270002015	Construction and Mining Equipment	Rollers	Diesel	NOx	3.726985	3.598850	3.159818	1.594448
2270002018	Construction and Mining Equipment	Scrapers	Diesel	NOx	4.315000	4.146950	3.449191	1.510632
2270002021	Construction and Mining Equipment	Paving Equipment	Diesel	NOx	0.237539	0.229605	0.199069	0.113121
2270002024	Construction and Mining Equipment	Surfacing Equipment	Diesel	NOx	0.160056	0.157292	0.143941	0.098280
2270002027	Construction and Mining Equipment	Signal Boards/Light Plants	Diesel	NOx	0.450077	0.439463	0.399595	0.374299
2270002030	Construction and Mining Equipment	Trenchers	Diesel	NOx	1.733742	1.713847	1.594444	1.112153
2270002033	Construction and Mining Equipment	Bore/Drill Rigs	Diesel	NOx	2.058342	2.040137	1.884662	1.325605
2270002036	Construction and Mining Equipment	Excavators	Diesel	NOx	14.897271	14.033073	11.518309	3.948500
2270002039	Construction and Mining Equipment	Concrete/Industrial Saws	Diesel	NOx	0.116572	0.115013	0.109480	0.080165
2270002042	Construction and Mining Equipment	Cement & Mortar Mixers	Diesel	NOx	0.077334	0.077119	0.072859	0.056037
2270002045	Construction and Mining Equipment	Cranes	Diesel	NOx	4.056971	3.896602	3.268055	1.515041
2270002048	Construction and Mining Equipment	Graders	Diesel	NOx	3.785197	3.541316	2.899419	0.983727
2270002051	Construction and Mining Equipment	Off-highway Trucks	Diesel	NOx	14.050921	13.595688	11.377840	5.626937
2270002054	Construction and Mining Equipment	Crushing/Proc. Equipment	Diesel	NOx	0.712293	0.691268	0.598929	0.334215
2270002057	Construction and Mining Equipment	Rough Terrain Forklifts	Diesel	NOx	4.761823	4.701706	4.250440	2.209221
2270002060	Construction and Mining Equipment	Rubber Tire Loaders	Diesel	NOx	18.241942	17.617306	15.193567	7.676684
2270002066	Construction and Mining Equipment	Tractors/Loaders/Backhoes	Diesel	NOx	11.082816	10.967443	10.268503	6.794457
2270002069	Construction and Mining Equipment	Crawler Tractor/Dozers	Diesel	NOx	16.028952	15.333099	12.931485	5.680450
2270002072	Construction and Mining Equipment	Skid Steer Loaders	Diesel	NOx	7.105971	7.168510	7.015264	5.727078
2270002075	Construction and Mining Equipment	Off-Highway Tractors	Diesel	NOx	1.934681	1.893231	1.666220	0.980809

Appendix D-2: Crawford County Annual Nonroad Emission by SCC
Tons per Year

SCC	Classification	Equipment Type	Engine Type	Pollutant Code	2002 Emissions	2004 Emissions	2009 Emissions	2018 Emissions
2270002078	Construction and Mining Equipment	Dumpers/Tenders	Diesel	NOx	0.022871	0.023050	0.022852	0.018667
2270002081	Construction and Mining Equipment	Other Construction Equipment	Diesel	NOx	1.878730	1.828876	1.606098	0.940339
2270003010	Industrial Equipment	Aerial Lifts	Diesel	NOx	1.462091	1.466044	1.414881	1.186473
2270003020	Industrial Equipment	Forklifts	Diesel	NOx	15.429558	15.289011	13.093923	4.895849
2270003030	Industrial Equipment	Sweepers/Scrubbers	Diesel	NOx	8.180177	7.825266	6.794673	2.851566
2270003040	Industrial Equipment	Other General Industrial Eqp	Diesel	NOx	9.316487	9.018097	7.714945	3.834316
2270003050	Industrial Equipment	Other Material Handling Eqp	Diesel	NOx	0.430907	0.425100	0.390731	0.275719
2270003060	Industrial Equipment	AC/Refrigeration	Diesel	NOx	12.857761	12.749662	12.151032	9.994545
2270003070	Industrial Equipment	Terminal Tractors	Diesel	NOx	10.556412	10.132090	8.192584	2.274735
2270004031	Lawn and Garden Equipment (Com)	Leafblowers/Vacuums	Diesel	NOx	0.000781	0.000823	0.000894	0.000938
2270004036	Lawn and Garden Equipment (Com)	Snowblowers	Diesel	NOx	0.157833	0.164672	0.167776	0.128046
2270004046	Lawn and Garden Equipment (Com)	Front Mowers	Diesel	NOx	4.799555	4.962383	5.153632	5.244834
2270004056	Lawn and Garden Equipment (Com)	Lawn & Garden Tractors	Diesel	NOx	1.059192	1.064574	1.030885	1.134520
2270004066	Lawn and Garden Equipment (Com)	Chippers/Stump Grinders	Diesel	NOx	7.171495	7.523418	7.832603	6.140957
2270004071	Lawn and Garden Equipment (Com)	Commercial Turf Equipment	Diesel	NOx	0.723247	0.725749	0.728732	0.494445
2270004076	Lawn and Garden Equipment (Com)	Other Lawn & Garden Eqp.	Diesel	NOx	0.018822	0.019738	0.020906	0.020319
2270005010	Agricultural Equipment	2-Wheel Tractors	Diesel	NOx	0.003667	0.003408	0.002646	0.002698
2270005015	Agricultural Equipment	Agricultural Tractors	Diesel	NOx	158.690491	153.830439	138.039324	87.738315
2270005020	Agricultural Equipment	Combines	Diesel	NOx	16.089637	15.806557	14.424549	9.815421
2270005025	Agricultural Equipment	Balers	Diesel	NOx	0.068966	0.069853	0.069118	0.056673
2270005030	Agricultural Equipment	Agricultural Mowers	Diesel	NOx	0.014704	0.014538	0.013543	0.009433
2270005035	Agricultural Equipment	Sprayers	Diesel	NOx	1.140283	1.145519	1.103539	0.798612
2270005040	Agricultural Equipment	Tillers > 6 HP	Diesel	NOx	0.001875	0.001882	0.001792	0.001283
2270005045	Agricultural Equipment	Swathers	Diesel	NOx	1.126588	1.116751	1.049582	0.767106
2270005055	Agricultural Equipment	Other Agricultural Equipment	Diesel	NOx	3.314956	3.240379	2.910772	1.900514
2270005060	Agricultural Equipment	Irrigation Sets	Diesel	NOx	2.079131	2.056873	1.858232	1.037012
2270006005	Commercial Equipment	Generator Sets	Diesel	NOx	6.652293	6.830885	6.927266	5.801145
2270006010	Commercial Equipment	Pumps	Diesel	NOx	1.583686	1.626018	1.641256	1.352033
2270006015	Commercial Equipment	Air Compressors	Diesel	NOx	3.997408	4.060290	3.891016	2.472692
2270006020	Commercial Equipment	Gas Compressors	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
2270006025	Commercial Equipment	Welders	Diesel	NOx	1.935502	1.997825	2.066580	1.855917
2270006030	Commercial Equipment	Pressure Washers	Diesel	NOx	0.222224	0.227821	0.230253	0.194169
2270006035	Commercial Equipment	Hydro Power Units	Diesel	NOx	0.172907	0.174859	0.168234	0.114731
2270007010	Logging Equipment	Shredders > 6 HP	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
2270007015	Logging Equipment	Forest Eq - Feller/Bunch/Skidder	Diesel	NOx	5.923598	5.236755	3.505408	0.734227
2270008005	Airport Equipment	Airport Ground Support Equipment	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
2270009010	Construction and Mining Equipment	Other Underground Mining Equipment	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
2270010010	Industrial Equipment	Other Oil Field Equipment	Diesel	NOx	6.186767	5.757305	4.467876	2.035477
2275000000	Aircraft	All Aircraft Types and Operations	Other	NOx				
2275070000	Aircraft	Auxiliary Power Units	Other	NOx				
2280000000	Marine Vessels	Commercial	All Fuels	NOx	0.000000	0.000000	0.000000	0.000000
2280001000	Marine Vessels	Commercial	Coal	NOx	0.000000	0.000000	0.000000	0.000000
2280002000	Marine Vessels	Commercial	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
2280003000	Marine Vessels	Commercial	Residual Fuel	NOx	0.000000	0.000000	0.000000	0.000000
2280004000	Marine Vessels	Commercial	Gasoline	NOx	0.000000	0.000000	0.000000	0.000000
2282005010	Pleasure Craft	Outboard	2 Stroke	NOx	12.546537	15.137490	22.209589	31.649836
2282005015	Pleasure Craft	Personal Water Craft	2 Stroke	NOx	3.512561	4.642043	7.253389	9.366278
2282010005	Pleasure Craft	Inboard/Sterndrive	4 Stroke	NOx	33.599032	35.409755	40.461283	49.216527
2282020005	Pleasure Craft	Inboard/Sterndrive	Diesel	NOx	36.921810	38.998481	41.594195	43.885626
2282020010	Pleasure Craft	Outboards	Diesel	NOx	0.139028	0.142137	0.148037	0.156779
2285002005	Railroad Equipment	Line Haul Locomotives	Diesel	NOx				
2285002010	Railroad Equipment	Yard Locomotive	Diesel	NOx				
2285002015	Railroad Equipment	Railway Maintenance	Diesel	NOx	0.047824	0.048049	0.046086	0.033128
2285004015	Railroad Equipment	Railway Maintenance	4 Stroke	NOx	0.000905	0.000818	0.000671	0.000670
2285006015	Railroad Equipment	Railway Maintenance	LPG	NOx	0.000118	0.000116	0.000085	0.000027
Crawford County Total Annual NOx Emissions					700.821920	687.844735	589.005501	413.363992

Appendix D-2: Crawford County Annual Nonroad Emission by SCC
Tons per Year

SCC	Classification	Equipment Type	Engine Type	Pollutant Code	2002 Emissions	2004 Emissions	2009 Emissions	2018 Emissions
2265005035	Agricultural Equipment	Sprayers	4 Stroke	VOC	0.812203	0.787616	0.657155	0.520186
2265005040	Agricultural Equipment	Tillers > 6 HP	4 Stroke	VOC	1.585613	1.571409	1.504132	1.325482
2265005045	Agricultural Equipment	Swathers	4 Stroke	VOC	0.190403	0.190762	0.168583	0.114433
2265005055	Agricultural Equipment	Other Agricultural Equipment	4 Stroke	VOC	0.308131	0.299159	0.255894	0.202488
2265005060	Agricultural Equipment	Irrigation Sets	4 Stroke	VOC	0.327692	0.306672	0.134366	0.041702
2265006005	Commercial Equipment	Generator Sets	4 Stroke	VOC	14.063264	13.707549	11.739983	13.014556
2265006010	Commercial Equipment	Pumps	4 Stroke	VOC	4.270121	4.353373	2.622698	3.075459
2265006015	Commercial Equipment	Air Compressors	4 Stroke	VOC	1.727137	1.728422	1.168660	1.318742
2265006025	Commercial Equipment	Welders	4 Stroke	VOC	2.684307	2.492839	2.336114	2.691465
2265006030	Commercial Equipment	Pressure Washers	4 Stroke	VOC	7.464623	7.526388	5.458517	5.900384
2265006035	Commercial Equipment	Hydro Power Units	4 Stroke	VOC	0.263793	0.254701	0.202876	0.250017
2265007010	Logging Equipment	Shredders > 6 HP	4 Stroke	VOC	0.479228	0.457330	0.405905	0.424318
2265007015	Logging Equipment	Forest Eq - Feller/Bunch/Skidder	4 Stroke	VOC	0.008663	0.009095	0.004845	0.006136
2265008005	Airport Equipment	Airport Ground Support Equipment	4 Stroke	VOC	0.000000	0.000000	0.000000	0.000000
2265010010	Industrial Equipment	Other Oil Field Equipment	4 Stroke	VOC	1.517186	1.285987	1.164130	1.177778
2267001060	Recreational Equipment	Specialty Vehicle Carts	LPG	VOC	0.025298	0.024920	0.021359	0.013941
2267002003	Construction and Mining Equipment	Pavers	LPG	VOC	0.005073	0.004874	0.002896	0.000595
2267002015	Construction and Mining Equipment	Rollers	LPG	VOC	0.008607	0.007983	0.003447	0.000537
2267002021	Construction and Mining Equipment	Paving Equipment	LPG	VOC	0.001327	0.001315	0.001038	0.000403
2267002024	Construction and Mining Equipment	Surfacing Equipment	LPG	VOC	0.000875	0.000835	0.000461	0.000095
2267002030	Construction and Mining Equipment	Trenchers	LPG	VOC	0.015525	0.014972	0.009261	0.001864
2267002033	Construction and Mining Equipment	Bore/Drill Rigs	LPG	VOC	0.005038	0.005065	0.004468	0.002972
2267002039	Construction and Mining Equipment	Concrete/Industrial Saws	LPG	VOC	0.015046	0.013462	0.003982	0.000847
2267002045	Construction and Mining Equipment	Cranes	LPG	VOC	0.005426	0.005376	0.004234	0.001605
2267002054	Construction and Mining Equipment	Crushing/Proc. Equipment	LPG	VOC	0.000904	0.000893	0.000692	0.000232
2267002057	Construction and Mining Equipment	Rough Terrain Forklifts	LPG	VOC	0.009846	0.009593	0.006544	0.001384
2267002060	Construction and Mining Equipment	Rubber Tire Loaders	LPG	VOC	0.024630	0.023550	0.013208	0.001771
2267002066	Construction and Mining Equipment	Tractors/Loaders/Backhoes	LPG	VOC	0.002626	0.002468	0.001160	0.000157
2267002072	Construction and Mining Equipment	Skid Steer Loaders	LPG	VOC	0.020183	0.019840	0.014665	0.005480
2267002081	Construction and Mining Equipment	Other Construction Equipment	LPG	VOC	0.008087	0.008040	0.006517	0.002917
2267003010	Industrial Equipment	Aerial Lifts	LPG	VOC	0.378782	0.381014	0.307030	0.142554
2267003020	Industrial Equipment	Forklifts	LPG	VOC	36.138600	35.118029	20.296092	2.880190
2267003030	Industrial Equipment	Sweepers/Scrubbers	LPG	VOC	0.278342	0.260102	0.104911	0.019210
2267003040	Industrial Equipment	Other General Industrial Equipment	LPG	VOC	0.084576	0.080676	0.039720	0.005951
2267003050	Industrial Equipment	Other Material Handling Equipment	LPG	VOC	0.020479	0.020563	0.016320	0.005625
2267003070	Industrial Equipment	Terminal Tractors	LPG	VOC	0.170384	0.155587	0.043046	0.010454
2267004066	Lawn and Garden Equipment (Com)	Chippers/Stump Grinders	LPG	VOC	0.288190	0.272754	0.138466	0.019058
2267005055	Agricultural Equipment	Other Agricultural Equipment	LPG	VOC	0.001099	0.001071	0.000905	0.000575
2267005060	Agricultural Equipment	Irrigation Sets	LPG	VOC	0.000936	0.000853	0.000375	0.000042
2267006005	Commercial Equipment	Generator Sets	LPG	VOC	0.310260	0.326954	0.303302	0.219044
2267006010	Commercial Equipment	Pumps	LPG	VOC	0.073170	0.075345	0.058984	0.027788
2267006015	Commercial Equipment	Air Compressors	LPG	VOC	0.088967	0.090198	0.061886	0.015463
2267006025	Commercial Equipment	Welders	LPG	VOC	0.144013	0.148713	0.109676	0.024098
2267006030	Commercial Equipment	Pressure Washers	LPG	VOC	0.001873	0.001973	0.001719	0.000812
2267006035	Commercial Equipment	Hydro Power Units	LPG	VOC	0.001387	0.001377	0.000762	0.000220
2267008005	Airport Equipment	Airport Ground Support Equipment	LPG	VOC	0.000000	0.000000	0.000000	0.000000
2268002081	Construction and Mining Equipment	Other Construction Equipment	CNG	VOC	0.000019	0.000019	0.000015	0.000007
2268003020	Industrial Equipment	Forklifts	CNG	VOC	0.155272	0.149451	0.085835	0.012372
2268003030	Industrial Equipment	Sweepers/Scrubbers	CNG	VOC	0.000186	0.000179	0.000101	0.000014
2268003040	Industrial Equipment	Other General Industrial Equipment	CNG	VOC	0.000121	0.000116	0.000062	0.000009
2268003060	Industrial Equipment	AC/Refrigeration	CNG	VOC	0.000184	0.000174	0.000079	0.000016
2268003070	Industrial Equipment	Terminal Tractors	CNG	VOC	0.000707	0.000641	0.000177	0.000044
2268005055	Agricultural Equipment	Other Agricultural Equipment	CNG	VOC	0.000084	0.000069	0.000039	0.000011
2268005060	Agricultural Equipment	Irrigation Sets	CNG	VOC	0.006435	0.003767	0.000430	0.000000
2268006005	Commercial Equipment	Generator Sets	CNG	VOC	0.006052	0.006178	0.005572	0.003981
2268006010	Commercial Equipment	Pumps	CNG	VOC	0.000306	0.000307	0.000248	0.000131
2268006015	Commercial Equipment	Air Compressors	CNG	VOC	0.000441	0.000434	0.000294	0.000068
2268006020	Commercial Equipment	Gas Compressors	CNG	VOC	0.023061	0.008882	0.001373	0.001716
2268006035	Commercial Equipment	Hydro Power Units	CNG	VOC	0.000000	0.000000	0.000000	0.000000
2268010010	Industrial Equipment	Other Oil Field Equipment	CNG	VOC	0.038220	0.028060	0.002957	0.001770
2270001060	Recreational Equipment	Specialty Vehicle Carts	Diesel	VOC	0.308716	0.299793	0.263364	0.171216
2270002003	Construction and Mining Equipment	Pavers	Diesel	VOC	0.144859	0.130452	0.101134	0.058465
2270002006	Construction and Mining Equipment	Tampers/Rammers	Diesel	VOC	0.000537	0.000522	0.000430	0.000331
2270002009	Construction and Mining Equipment	Plate Compactors	Diesel	VOC	0.009000	0.008565	0.006726	0.005032
2270002015	Construction and Mining Equipment	Rollers	Diesel	VOC	0.410628	0.365935	0.274026	0.157753
2270002018	Construction and Mining Equipment	Scrapers	Diesel	VOC	0.301298	0.268842	0.199702	0.152621
2270002021	Construction and Mining Equipment	Paving Equipment	Diesel	VOC	0.026473	0.024346	0.018348	0.011274
2270002024	Construction and Mining Equipment	Surfacing Equipment	Diesel	VOC	0.018265	0.016581	0.012462	0.007918
2270002027	Construction and Mining Equipment	Signal Boards/Light Plants	Diesel	VOC	0.088778	0.080070	0.053906	0.036425
2270002030	Construction and Mining Equipment	Trenchers	Diesel	VOC	0.244494	0.219984	0.159148	0.087040
2270002033	Construction and Mining Equipment	Bore/Drill Rigs	Diesel	VOC	0.191705	0.184486	0.158770	0.108687
2270002036	Construction and Mining Equipment	Excavators	Diesel	VOC	1.188870	1.068036	0.869691	0.543763
2270002039	Construction and Mining Equipment	Concrete/Industrial Saws	Diesel	VOC	0.019696	0.017224	0.011707	0.006403
2270002042	Construction and Mining Equipment	Cement & Mortar Mixers	Diesel	VOC	0.009219	0.009063	0.008225	0.006062
2270002045	Construction and Mining Equipment	Cranes	Diesel	VOC	0.309704	0.284561	0.222995	0.144910
2270002048	Construction and Mining Equipment	Graders	Diesel	VOC	0.296015	0.265785	0.218864	0.138058
2270002051	Construction and Mining Equipment	Off-highway Trucks	Diesel	VOC	1.024618	0.885180	0.633702	0.554957
2270002054	Construction and Mining Equipment	Crushing/Proc. Equipment	Diesel	VOC	0.063135	0.057769	0.044090	0.026766
2270002057	Construction and Mining Equipment	Rough Terrain Forklifts	Diesel	VOC	0.590450	0.545763	0.411066	0.222830
2270002060	Construction and Mining Equipment	Rubber Tire Loaders	Diesel	VOC	1.477798	1.375184	1.086152	0.711271
2270002066	Construction and Mining Equipment	Tractors/Loaders/Backhoes	Diesel	VOC	2.551118	2.484310	2.172571	1.241003
2270002069	Construction and Mining Equipment	Crawler Tractor/Dozers	Diesel	VOC	1.284087	1.152981	0.886197	0.554950
2270002072	Construction and Mining Equipment	Skid Steer Loaders	Diesel	VOC	2.463037	2.367096	1.980163	1.146745
2270002075	Construction and Mining Equipment	Off-Highway Tractors	Diesel	VOC	0.173731	0.154337	0.109713	0.076367

Appendix D-2: Crawford County Annual Nonroad Emission by SCC
Tons per Year

SCC	Classification	Equipment Type	Engine Type	Pollutant Code	2002 Emissions	2004 Emissions	2009 Emissions	2018 Emissions
2270002078	Construction and Mining Equipment	Dumpers/Tenders	Diesel	VOC	0.007486	0.007354	0.006563	0.004078
2270002081	Construction and Mining Equipment	Other Construction Equipment	Diesel	VOC	0.162113	0.149543	0.117581	0.075437
2270003010	Industrial Equipment	Aerial Lifts	Diesel	VOC	0.431141	0.426440	0.388093	0.257920
2270003020	Industrial Equipment	Forklifts	Diesel	VOC	1.521881	1.447882	1.108615	0.589554
2270003030	Industrial Equipment	Sweepers/Scrubbers	Diesel	VOC	0.787130	0.699177	0.549442	0.314792
2270003040	Industrial Equipment	Other General Industrial Eqp	Diesel	VOC	0.852057	0.802523	0.630227	0.384765
2270003050	Industrial Equipment	Other Material Handling Eqp	Diesel	VOC	0.080197	0.078764	0.070887	0.046807
2270003060	Industrial Equipment	AC/Refrigeration	Diesel	VOC	1.742488	1.480945	1.084145	0.582811
2270003070	Industrial Equipment	Terminal Tractors	Diesel	VOC	0.833798	0.794723	0.669806	0.401071
2270004031	Lawn and Garden Equipment (Com)	Leafblowers/Vacuums	Diesel	VOC	0.000158	0.000160	0.000155	0.000130
2270004036	Lawn and Garden Equipment (Com)	Snowblowers	Diesel	VOC	0.015155	0.014960	0.013721	0.010416
2270004046	Lawn and Garden Equipment (Com)	Front Mowers	Diesel	VOC	0.945996	0.898842	0.701640	0.477006
2270004056	Lawn and Garden Equipment (Com)	Lawn & Garden Tractors	Diesel	VOC	0.209504	0.195760	0.145293	0.120597
2270004066	Lawn and Garden Equipment (Com)	Chippers/Stump Grinders	Diesel	VOC	0.810917	0.811404	0.758977	0.569979
2270004071	Lawn and Garden Equipment (Com)	Commercial Turf Equipment	Diesel	VOC	0.097776	0.081308	0.061130	0.041403
2270004076	Lawn and Garden Equipment (Com)	Other Lawn & Garden Eqp.	Diesel	VOC	0.003012	0.003009	0.002776	0.002130
2270005010	Agricultural Equipment	2-Wheel Tractors	Diesel	VOC	0.000658	0.000609	0.000429	0.000370
2270005015	Agricultural Equipment	Agricultural Tractors	Diesel	VOC	19.707814	17.724913	13.525564	7.960885
2270005020	Agricultural Equipment	Combines	Diesel	VOC	1.435281	1.402656	1.255194	0.894372
2270005025	Agricultural Equipment	Balers	Diesel	VOC	0.014529	0.013737	0.011225	0.006937
2270005030	Agricultural Equipment	Agricultural Mowers	Diesel	VOC	0.002339	0.002237	0.001873	0.001165
2270005035	Agricultural Equipment	Sprayers	Diesel	VOC	0.209366	0.194771	0.152200	0.089723
2270005040	Agricultural Equipment	Tillers > 6 HP	Diesel	VOC	0.000217	0.000204	0.000169	0.000111
2270005045	Agricultural Equipment	Swathers	Diesel	VOC	0.129220	0.128419	0.119719	0.086536
2270005055	Agricultural Equipment	Other Agricultural Equipment	Diesel	VOC	0.439331	0.403418	0.306364	0.183870
2270005060	Agricultural Equipment	Irrigation Sets	Diesel	VOC	0.270423	0.245555	0.183205	0.100649
2270006005	Commercial Equipment	Generator Sets	Diesel	VOC	1.009619	0.987073	0.872330	0.590252
2270006010	Commercial Equipment	Pumps	Diesel	VOC	0.222010	0.218409	0.195619	0.139281
2270006015	Commercial Equipment	Air Compressors	Diesel	VOC	0.500447	0.473987	0.376656	0.215833
2270006020	Commercial Equipment	Gas Compressors	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
2270006025	Commercial Equipment	Welders	Diesel	VOC	0.761855	0.742888	0.639620	0.354628
2270006030	Commercial Equipment	Pressure Washers	Diesel	VOC	0.031736	0.031266	0.028545	0.021363
2270006035	Commercial Equipment	Hydro Power Units	Diesel	VOC	0.023312	0.021668	0.016698	0.009941
2270007010	Logging Equipment	Shredders > 6 HP	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
2270007015	Logging Equipment	Forest Eq - Feller/Bunch/Skidder	Diesel	VOC	0.430746	0.374932	0.266863	0.127942
2270008005	Airport Equipment	Airport Ground Support Equipment	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
2270009010	Construction and Mining Equipment	Other Underground Mining Equipment	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
2270010010	Industrial Equipment	Other Oil Field Equipment	Diesel	VOC	0.507180	0.433402	0.282948	0.162773
2275000000	Aircraft	All Aircraft Types and Operations	Other	VOC				
2275070000	Aircraft	Auxiliary Power Units	Other	VOC				
2280000000	Marine Vessels	Commercial	All Fuels	VOC	0.000000	0.000000	0.000000	0.000000
2280001000	Marine Vessels	Commercial	Coal	VOC	0.000000	0.000000	0.000000	0.000000
2280002000	Marine Vessels	Commercial	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
2280003000	Marine Vessels	Commercial	Residual Fuel	VOC	0.000000	0.000000	0.000000	0.000000
2280004000	Marine Vessels	Commercial	Gasoline	VOC	0.000000	0.000000	0.000000	0.000000
2282005010	Pleasure Craft	Outboard	2 Stroke	VOC	787.909249	732.838436	580.427480	404.226488
2282005015	Pleasure Craft	Personal Water Craft	2 Stroke	VOC	276.426166	246.585474	163.244494	110.651505
2282010005	Pleasure Craft	Inboard/Sterndrive	4 Stroke	VOC	51.846015	51.629730	50.582250	48.835980
2282020005	Pleasure Craft	Inboard/Sterndrive	Diesel	VOC	1.381329	1.453446	1.508384	1.491770
2282020010	Pleasure Craft	Outboards	Diesel	VOC	0.034703	0.033063	0.027528	0.016289
2285002005	Railroad Equipment	Line Haul Locomotives	Diesel	VOC				
2285002010	Railroad Equipment	Yard Locomotive	Diesel	VOC				
2285002015	Railroad Equipment	Railway Maintenance	Diesel	VOC	0.009277	0.009125	0.008207	0.005346
2285004015	Railroad Equipment	Railway Maintenance	4 Stroke	VOC	0.003089	0.002800	0.002082	0.002159
2285006015	Railroad Equipment	Railway Maintenance	LPG	VOC	0.000032	0.000032	0.000024	0.000007
Crawford County Total Annual VOC Emissions					1884.022305	1803.940375	1469.879656	1095.241495

Appendix D-2: Crawford County Annual Nonroad Emission by SCC
Tons per Year

SCC	Classification	Equipment Type	Engine Type	Pollutant Code	2002	2004	2009	2018
					Emissions	Emissions	Emissions	Emissions
2265005035	Agricultural Equipment	Sprayers	4 Stroke	CO	17.652354	18.067717	19.168585	21.024171
2265005040	Agricultural Equipment	Tillers > 6 HP	4 Stroke	CO	43.894801	45.019235	47.999771	53.870568
2265005045	Agricultural Equipment	Swathers	4 Stroke	CO	3.862116	3.881585	3.489996	2.462906
2265005055	Agricultural Equipment	Other Agricultural Equipment	4 Stroke	CO	8.013007	8.164085	8.177651	7.732282
2265005060	Agricultural Equipment	Irrigation Sets	4 Stroke	CO	7.516682	7.189406	3.941079	1.574209
2265006005	Commercial Equipment	Generator Sets	4 Stroke	CO	425.521300	455.568447	541.341372	678.742502
2265006010	Commercial Equipment	Pumps	4 Stroke	CO	98.326891	106.292191	121.810240	149.167036
2265006015	Commercial Equipment	Air Compressors	4 Stroke	CO	48.844100	52.714499	59.435810	71.028250
2265006025	Commercial Equipment	Welders	4 Stroke	CO	122.709647	133.811598	154.548375	186.814994
2265006030	Commercial Equipment	Pressure Washers	4 Stroke	CO	186.363130	201.497256	237.283079	294.359921
2265006035	Commercial Equipment	Hydro Power Units	4 Stroke	CO	9.430686	10.308210	12.075212	14.948462
2265007010	Logging Equipment	Shredders > 6 HP	4 Stroke	CO	15.265564	16.252017	19.311803	25.180550
2265007015	Logging Equipment	Forest Eq - Feller/Bunch/Skidder	4 Stroke	CO	0.182024	0.197829	0.230291	0.291686
2265008005	Airport Equipment	Airport Ground Support Equipment	4 Stroke	CO	0.000000	0.000000	0.000000	0.000000
2265010010	Industrial Equipment	Other Oil Field Equipment	4 Stroke	CO	94.490721	96.696342	97.867106	99.014505
2267001060	Recreational Equipment	Specialty Vehicle Carts	LPG	CO	0.373572	0.377285	0.347285	0.246885
2267002003	Construction and Mining Equipment	Pavers	LPG	CO	0.075066	0.077149	0.059304	0.016542
2267002015	Construction and Mining Equipment	Rollers	LPG	CO	0.127649	0.130450	0.082748	0.018678
2267002021	Construction and Mining Equipment	Paving Equipment	LPG	CO	0.019585	0.020232	0.018156	0.009201
2267002024	Construction and Mining Equipment	Surfacing Equipment	LPG	CO	0.012959	0.013305	0.009870	0.002730
2267002030	Construction and Mining Equipment	Trenchers	LPG	CO	0.229709	0.236234	0.185415	0.051664
2267002033	Construction and Mining Equipment	Bore/Drill Rigs	LPG	CO	0.074183	0.076833	0.073570	0.053853
2267002039	Construction and Mining Equipment	Concrete/Industrial Saws	LPG	CO	0.223839	0.227444	0.114495	0.029070
2267002045	Construction and Mining Equipment	Cranes	LPG	CO	0.080093	0.082736	0.074172	0.037286
2267002054	Construction and Mining Equipment	Crushing/Proc. Equipment	LPG	CO	0.013341	0.013776	0.012229	0.005722
2267002057	Construction and Mining Equipment	Rough Terrain Forklifts	LPG	CO	0.145549	0.149932	0.124119	0.037055
2267002060	Construction and Mining Equipment	Rubber Tire Loaders	LPG	CO	0.364768	0.374608	0.280915	0.060032
2267002066	Construction and Mining Equipment	Tractors/Loaders/Backhoes	LPG	CO	0.038939	0.039878	0.027153	0.005504
2267002072	Construction and Mining Equipment	Skid Steer Loaders	LPG	CO	0.298082	0.307518	0.265758	0.123862
2267002081	Construction and Mining Equipment	Other Construction Equipment	LPG	CO	0.119306	0.123317	0.112373	0.062732
2267003010	Industrial Equipment	Aerial Lifts	LPG	CO	5.582588	5.871279	5.407653	3.003452
2267003020	Industrial Equipment	Forklifts	LPG	CO	534.785745	558.969863	432.250033	97.531236
2267003030	Industrial Equipment	Sweepers/Scrubbers	LPG	CO	4.131569	4.289293	2.674914	0.657734
2267003040	Industrial Equipment	Other General Industrial Equipm	LPG	CO	1.252738	1.305157	0.916167	0.207578
2267003050	Industrial Equipment	Other Material Handling Equipment	LPG	CO	0.301936	0.317429	0.290053	0.139684
2267003070	Industrial Equipment	Terminal Tractors	LPG	CO	2.531077	2.617742	1.401865	0.359176
2267004066	Lawn and Garden Equipment (Com)	Chippers/Stump Grinders	LPG	CO	4.269077	4.380158	3.101964	0.662796
2267005055	Agricultural Equipment	Other Agricultural Equipment	LPG	CO	0.016246	0.016175	0.014559	0.010007
2267005060	Agricultural Equipment	Irrigation Sets	LPG	CO	0.013879	0.013667	0.008785	0.001465
2267006005	Commercial Equipment	Generator Sets	LPG	CO	4.071856	4.527305	4.831892	4.069362
2267006010	Commercial Equipment	Pumps	LPG	CO	0.964450	1.068598	1.050143	0.626751
2267006015	Commercial Equipment	Air Compressors	LPG	CO	1.176042	1.299994	1.205598	0.476074
2267006025	Commercial Equipment	Welders	LPG	CO	2.122250	2.346653	2.154490	0.692699
2267006030	Commercial Equipment	Pressure Washers	LPG	CO	0.027512	0.030533	0.030726	0.018605
2267006035	Commercial Equipment	Hydro Power Units	LPG	CO	0.018356	0.020235	0.017174	0.006838
2267008005	Airport Equipment	Airport Ground Support Equipment	LPG	CO	0.000000	0.000000	0.000000	0.000000
2268002081	Construction and Mining Equipment	Other Construction Equipment	CNG	CO	0.004706	0.004865	0.004433	0.002475
2268003020	Industrial Equipment	Forklifts	CNG	CO	39.000229	40.311634	30.766375	6.742786
2268003030	Industrial Equipment	Sweepers/Scrubbers	CNG	CO	0.046641	0.048200	0.036565	0.007885
2268003040	Industrial Equipment	Other General Industrial Equipment	CNG	CO	0.030485	0.031478	0.023188	0.004902
2268003060	Industrial Equipment	AC/Refrigeration	CNG	CO	0.046304	0.047707	0.032374	0.007959
2268003070	Industrial Equipment	Terminal Tractors	CNG	CO	0.178252	0.182502	0.096248	0.023859
2268005055	Agricultural Equipment	Other Agricultural Equipment	CNG	CO	0.021395	0.017581	0.009943	0.002807
2268005060	Agricultural Equipment	Irrigation Sets	CNG	CO	1.640108	0.965293	0.111394	0.000000
2268006005	Commercial Equipment	Generator Sets	CNG	CO	1.352091	1.437611	1.450106	1.174208
2268006010	Commercial Equipment	Pumps	CNG	CO	0.068498	0.072636	0.069310	0.044713
2268006015	Commercial Equipment	Air Compressors	CNG	CO	0.099177	0.104825	0.092289	0.033411
2268006020	Commercial Equipment	Gas Compressors	CNG	CO	5.935040	5.585401	0.710814	0.888265
2268006035	Commercial Equipment	Hydro Power Units	CNG	CO	0.000000	0.000000	0.000000	0.000000
2268010010	Industrial Equipment	Other Oil Field Equipment	CNG	CO	9.718449	9.229484	1.787031	0.943292
2270001060	Recreational Equipment	Specialty Vehicle Carts	Diesel	CO	1.148820	1.119911	1.005514	0.664667
2270002003	Construction and Mining Equipment	Pavers	Diesel	CO	0.762408	0.669392	0.563981	0.244370
2270002006	Construction and Mining Equipment	Tampers/Rammers	Diesel	CO	0.001922	0.001969	0.002055	0.002318
2270002009	Construction and Mining Equipment	Plate Compactors	Diesel	CO	0.030786	0.030853	0.030256	0.032353
2270002015	Construction and Mining Equipment	Rollers	Diesel	CO	2.193803	1.982857	1.670410	0.807700
2270002018	Construction and Mining Equipment	Scrapers	Diesel	CO	1.982344	1.807676	1.517008	0.706976
2270002021	Construction and Mining Equipment	Paving Equipment	Diesel	CO	0.142327	0.130585	0.104409	0.057992
2270002024	Construction and Mining Equipment	Surfacing Equipment	Diesel	CO	0.107381	0.100310	0.082887	0.046851
2270002027	Construction and Mining Equipment	Signal Boards/Light Plants	Diesel	CO	0.280269	0.264058	0.211903	0.174186
2270002030	Construction and Mining Equipment	Trenchers	Diesel	CO	1.317051	1.233171	1.037390	0.551046
2270002033	Construction and Mining Equipment	Bore/Drill Rigs	Diesel	CO	0.791159	0.758204	0.661936	0.405189
2270002036	Construction and Mining Equipment	Excavators	Diesel	CO	6.085843	5.156948	4.670229	1.448620
2270002039	Construction and Mining Equipment	Concrete/Industrial Saws	Diesel	CO	0.101849	0.094431	0.078361	0.041880
2270002042	Construction and Mining Equipment	Cement & Mortar Mixers	Diesel	CO	0.034940	0.034724	0.033716	0.027321
2270002045	Construction and Mining Equipment	Cranes	Diesel	CO	1.111057	1.020816	0.836932	0.404593
2270002048	Construction and Mining Equipment	Graders	Diesel	CO	1.433572	1.174416	1.038514	0.363390
2270002051	Construction and Mining Equipment	Off-highway Trucks	Diesel	CO	6.218457	5.209037	3.843895	0.812510
2270002054	Construction and Mining Equipment	Crushing/Proc. Equipment	Diesel	CO	0.260210	0.239539	0.201714	0.107473
2270002057	Construction and Mining Equipment	Rough Terrain Forklifts	Diesel	CO	3.275725	3.078141	2.677620	1.450633
2270002060	Construction and Mining Equipment	Rubber Tire Loaders	Diesel	CO	8.426151	7.723996	6.343976	2.977161
2270002066	Construction and Mining Equipment	Tractors/Loaders/Backhoes	Diesel	CO	10.292636	10.188717	9.774309	6.344809
2270002069	Construction and Mining Equipment	Crawler Tractor/Dozers	Diesel	CO	7.210833	6.403084	5.415374	2.244379
2270002072	Construction and Mining Equipment	Skid Steer Loaders	Diesel	CO	9.001020	8.945189	8.406515	5.743825
2270002075	Construction and Mining Equipment	Off-Highway Tractors	Diesel	CO	1.092564	0.979709	0.751212	0.333646

**Appendix D-2: Crawford County Annual Nonroad Emission by SCC
Tons per Year**

SCC	Classification	Equipment Type	Engine Type	Pollutant Code	2002 Emissions	2004 Emissions	2009 Emissions	2018 Emissions
2270002078	Construction and Mining Equipment	Dumpers/Tenders	Diesel	CO	0.025732	0.026052	0.025622	0.018400
2270002081	Construction and Mining Equipment	Other Construction Equipment	Diesel	CO	1.046781	0.966520	0.782067	0.413748
2270003010	Industrial Equipment	Aerial Lifts	Diesel	CO	1.482416	1.515744	1.527085	1.155157
2270003020	Industrial Equipment	Forklifts	Diesel	CO	9.002780	8.972236	9.571255	1.659742
2270003030	Industrial Equipment	Sweepers/Scrubbers	Diesel	CO	2.770229	2.452629	2.269847	0.973553
2270003040	Industrial Equipment	Other General Industrial Eqp	Diesel	CO	3.004614	2.824600	2.401882	1.352641
2270003050	Industrial Equipment	Other Material Handling Eqp	Diesel	CO	0.275315	0.273650	0.262931	0.181149
2270003060	Industrial Equipment	AC\Refrigeration	Diesel	CO	6.648754	6.176022	6.140884	3.185526
2270003070	Industrial Equipment	Terminal Tractors	Diesel	CO	3.807245	3.462505	3.593180	0.803309
2270004031	Lawn and Garden Equipment (Com)	Leafblowers/Vacuums	Diesel	CO	0.000477	0.000500	0.000544	0.000561
2270004036	Lawn and Garden Equipment (Com)	Snowblowers	Diesel	CO	0.061565	0.060611	0.056065	0.035717
2270004046	Lawn and Garden Equipment (Com)	Front Mowers	Diesel	CO	3.015645	2.990756	2.741080	2.219075
2270004056	Lawn and Garden Equipment (Com)	Lawn & Garden Tractors	Diesel	CO	0.658966	0.646464	0.571806	0.585955
2270004066	Lawn and Garden Equipment (Com)	Chippers/Stump Grinders	Diesel	CO	3.214511	3.239208	3.208638	2.312075
2270004071	Lawn and Garden Equipment (Com)	Commercial Turf Equipment	Diesel	CO	0.339052	0.302562	0.281405	0.155611
2270004076	Lawn and Garden Equipment (Com)	Other Lawn & Garden Eqp.	Diesel	CO	0.010759	0.011054	0.011438	0.010048
2270005010	Agricultural Equipment	2-Wheel Tractors	Diesel	CO	0.003588	0.003593	0.003324	0.002845
2270005015	Agricultural Equipment	Agricultural Tractors	Diesel	CO	96.172997	88.799958	72.927814	39.754322
2270005020	Agricultural Equipment	Combines	Diesel	CO	5.990228	5.899664	5.612038	3.680026
2270005025	Agricultural Equipment	Balers	Diesel	CO	0.049994	0.049857	0.048545	0.035563
2270005030	Agricultural Equipment	Agricultural Mowers	Diesel	CO	0.011487	0.011446	0.011254	0.008088
2270005035	Agricultural Equipment	Sprayers	Diesel	CO	0.674629	0.649782	0.580092	0.363344
2270005040	Agricultural Equipment	Tillers > 6 HP	Diesel	CO	0.001301	0.001238	0.001059	0.000641
2270005045	Agricultural Equipment	Swathers	Diesel	CO	0.576282	0.596218	0.641278	0.513391
2270005055	Agricultural Equipment	Other Agricultural Equipment	Diesel	CO	1.910401	1.799769	1.507943	0.851730
2270005060	Agricultural Equipment	Irrigation Sets	Diesel	CO	0.855955	0.816260	0.720434	0.421205
2270006005	Commercial Equipment	Generator Sets	Diesel	CO	3.563563	3.540608	3.385938	2.481433
2270006010	Commercial Equipment	Pumps	Diesel	CO	0.828713	0.826711	0.802791	0.614613
2270006015	Commercial Equipment	Air Compressors	Diesel	CO	1.890493	1.844406	1.746034	1.085715
2270006020	Commercial Equipment	Gas Compressors	Diesel	CO	0.000000	0.000000	0.000000	0.000000
2270006025	Commercial Equipment	Welders	Diesel	CO	2.805369	2.806983	2.628909	1.691751
2270006030	Commercial Equipment	Pressure Washers	Diesel	CO	0.107306	0.106196	0.100957	0.076621
2270006035	Commercial Equipment	Hydro Power Units	Diesel	CO	0.085418	0.082436	0.076443	0.049424
2270007010	Logging Equipment	Shredders > 6 HP	Diesel	CO	0.000000	0.000000	0.000000	0.000000
2270007015	Logging Equipment	Forest Eq - Feller/Bunch/Skidder	Diesel	CO	2.037937	1.664968	1.370204	0.261451
2270008005	Airport Equipment	Airport Ground Support Equipment	Diesel	CO	0.000000	0.000000	0.000000	0.000000
2270009010	Construction and Mining Equipment	Other Underground Mining Equipment	Diesel	CO	0.000000	0.000000	0.000000	0.000000
2270010010	Industrial Equipment	Other Oil Field Equipment	Diesel	CO	2.094118	1.783652	1.230639	0.461613
2275000000	Aircraft	All Aircraft Types and Operations	Other	CO				
2275070000	Aircraft	Auxiliary Power Units	Other	CO				
2280000000	Marine Vessels	Commercial	All Fuels	CO	0.000000	0.000000	0.000000	0.000000
2280001000	Marine Vessels	Commercial	Coal	CO	0.000000	0.000000	0.000000	0.000000
2280002000	Marine Vessels	Commercial	Diesel	CO	0.000000	0.000000	0.000000	0.000000
2280003000	Marine Vessels	Commercial	Residual Fuel	CO	0.000000	0.000000	0.000000	0.000000
2280004000	Marine Vessels	Commercial	Gasoline	CO	0.000000	0.000000	0.000000	0.000000
2282005010	Pleasure Craft	Outboard	2 Stroke	CO	1543.346614	1482.333554	1305.324020	1131.643608
2282005015	Pleasure Craft	Personal Water Craft	2 Stroke	CO	558.512595	542.858778	509.081940	505.310603
2282010005	Pleasure Craft	Inboard/Stern Drive	4 Stroke	CO	764.332466	746.847463	688.621274	584.613096
2282020005	Pleasure Craft	Inboard/Stern Drive	Diesel	CO	5.840082	6.161026	6.961149	8.387362
2282020010	Pleasure Craft	Outboards	Diesel	CO	0.100241	0.097956	0.088550	0.066698
2285002005	Railroad Equipment	Line Haul Locomotives	Diesel	CO				
2285002010	Railroad Equipment	Yard Locomotive	Diesel	CO				
2285002015	Railroad Equipment	Railway Maintenance	Diesel	CO	0.039494	0.038512	0.035009	0.022076
2285004015	Railroad Equipment	Railway Maintenance	4 Stroke	CO	0.109727	0.114947	0.124482	0.135563
2285006015	Railroad Equipment	Railway Maintenance	LPG	CO	0.000472	0.000489	0.000426	0.000170
Crawford County Total Annual CO Emissions					11582.370087	11918.090783	12264.391685	12741.652973

**Appendix D-2: Crawford County Daily Nonroad Emission by Category
Tons per Day**

Tons/Summer Day

Equipment Type	Fuel	Pollutant	2002	2004	2009	2018
Recreational	Diesel	VOC	0.001062	0.001032	0.000906	0.000589
Recreational	Gasoline	VOC	0.709749	0.866949	1.013505	0.656250
Recreational	CNG	VOC	0.000000	0.000000	0.000000	0.000000
Recreational	LPG	VOC	0.000087	0.000086	0.000073	0.000048
Construction	Diesel	VOC	0.048061	0.044626	0.035939	0.022524
Construction	Gasoline	VOC	0.029008	0.025358	0.014494	0.013314
Construction	CNG	VOC	0.000000	0.000000	0.000000	0.000000
Construction	LPG	VOC	0.000453	0.000435	0.000267	0.000077
Industrial	Diesel	VOC	0.020513	0.018759	0.014578	0.008368
Industrial	Gasoline	VOC	0.033871	0.028473	0.013924	0.006129
Industrial	CNG	VOC	0.000619	0.000566	0.000280	0.000045
Industrial	LPG	VOC	0.116263	0.112953	0.065255	0.009609
Lawn and Garden	Diesel	VOC	0.009944	0.009574	0.008033	0.005826
Lawn and Garden	Gasoline	VOC	1.354766	1.206856	0.806575	0.739434
Lawn and Garden	CNG	VOC	0.000000	0.000000	0.000000	0.000000
Lawn and Garden	LPG	VOC	0.001386	0.001312	0.000666	0.000092
Farm	Diesel	VOC	0.111277	0.100792	0.077941	0.046720
Farm	Gasoline	VOC	0.020019	0.019076	0.015691	0.011475
Farm	CNG	VOC	0.000033	0.000019	0.000002	0.000000
Farm	LPG	VOC	0.000010	0.000010	0.000006	0.000003
Light Commercial	Diesel	VOC	0.007994	0.007763	0.006678	0.004175
Light Commercial	Gasoline	VOC	0.117530	0.109778	0.086738	0.086969
Light Commercial	CNG	VOC	0.000094	0.000050	0.000023	0.000018
Light Commercial	LPG	VOC	0.001943	0.002021	0.001682	0.000901
Logging	Diesel	VOC	0.001351	0.001176	0.000837	0.000401
Logging	Gasoline	VOC	0.009791	0.009307	0.005605	0.006495
Logging	CNG	VOC	0.000000	0.000000	0.000000	0.000000
Logging	LPG	VOC	0.000000	0.000000	0.000000	0.000000
Airport Service	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
Airport Service	Gasoline	VOC	0.000000	0.000000	0.000000	0.000000
Airport Service	CNG	VOC	0.000000	0.000000	0.000000	0.000000
Airport Service	LPG	VOC	0.000000	0.000000	0.000000	0.000000
Railway Maintenance	Diesel	VOC	0.000031	0.000031	0.000028	0.000018
Railway Maintenance	Gasoline	VOC	0.000011	0.000010	0.000007	0.000007
Railway Maintenance	CNG	VOC	0.000000	0.000000	0.000000	0.000000
Railway Maintenance	LPG	VOC	0.000000	0.000000	0.000000	0.000000
Recreational Marine Vessels	Diesel	VOC	0.003649	0.003830	0.003958	0.003886
Recreational Marine Vessels	Gasoline	VOC	3.236067	3.022449	2.426389	1.471669
Recreational Marine Vessels	CNG	VOC	0.000000	0.000000	0.000000	0.000000
Recreational Marine Vessels	LPG	VOC	0.000000	0.000000	0.000000	0.000000
Aircraft	Other	VOC	0.010107	0.006367	0.006266	0.005660
Marine Vessels	Coal	VOC	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Residual Oil	VOC	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Gasoline	VOC	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Other	VOC	0.000000	0.000000	0.000000	0.000000
Railroads	Diesel	VOC	0.019975	0.020620	0.019609	0.019735
Crawford County VOC Totals			5.865664	5.620279	4.625957	3.120438

**Appendix D-2: Crawford County Daily Nonroad Emission by Category
Tons per Day**

Tons/Summer Day

Equipment Type	Fuel	Pollutant	2002	2004	2009	2018
Recreational	Diesel	NOx	0.003322	0.003364	0.003332	0.002720
Recreational	Gasoline	NOx	0.022801	0.023667	0.026705	0.033508
Recreational	CNG	NOx	0.000000	0.000000	0.000000	0.000000
Recreational	LPG	NOx	0.000321	0.000316	0.000267	0.000174
Construction	Diesel	NOx	0.415906	0.402298	0.349307	0.181473
Construction	Gasoline	NOx	0.003074	0.002829	0.002057	0.001936
Construction	CNG	NOx	0.000004	0.000004	0.000003	0.000002
Construction	LPG	NOx	0.001663	0.001584	0.000957	0.000333
Industrial	Diesel	NOx	0.197572	0.192018	0.165540	0.081720
Industrial	Gasoline	NOx	0.020678	0.017359	0.008316	0.002749
Industrial	CNG	NOx	0.038142	0.034561	0.017014	0.004421
Industrial	LPG	NOx	0.426399	0.410526	0.231117	0.055034
Lawn and Garden	Diesel	NOx	0.066248	0.068767	0.071032	0.062703
Lawn and Garden	Gasoline	NOx	0.137777	0.130374	0.106255	0.130441
Lawn and Garden	CNG	NOx	0.000000	0.000000	0.000000	0.000000
Lawn and Garden	LPG	NOx	0.005068	0.004752	0.002358	0.000557
Farm	Diesel	NOx	0.914547	0.888272	0.799022	0.511696
Farm	Gasoline	NOx	0.007413	0.007292	0.005745	0.005061
Farm	CNG	NOx	0.001938	0.001122	0.000135	0.000003
Farm	LPG	NOx	0.000037	0.000035	0.000023	0.000012
Light Commercial	Diesel	NOx	0.045676	0.046785	0.046807	0.036978
Light Commercial	Gasoline	NOx	0.019018	0.018829	0.016566	0.021502
Light Commercial	CNG	NOx	0.005922	0.003250	0.001994	0.001604
Light Commercial	LPG	NOx	0.008973	0.009308	0.007710	0.004450
Logging	Diesel	NOx	0.018578	0.016424	0.010994	0.002303
Logging	Gasoline	NOx	0.000361	0.000384	0.000372	0.000495
Logging	CNG	NOx	0.000000	0.000000	0.000000	0.000000
Logging	LPG	NOx	0.000000	0.000000	0.000000	0.000000
Airport Service	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
Airport Service	Gasoline	NOx	0.000000	0.000000	0.000000	0.000000
Airport Service	CNG	NOx	0.000000	0.000000	0.000000	0.000000
Airport Service	LPG	NOx	0.000000	0.000000	0.000000	0.000000
Railway Maintenance	Diesel	NOx	0.000162	0.000163	0.000156	0.000112
Railway Maintenance	Gasoline	NOx	0.000003	0.000002	0.000002	0.000002
Railway Maintenance	CNG	NOx	0.000000	0.000000	0.000000	0.000000
Railway Maintenance	LPG	NOx	0.000000	0.000000	0.000000	0.000000
Recreational Marine Vessels	Diesel	NOx	0.095497	0.100856	0.107560	0.113487
Recreational Marine Vessels	Gasoline	NOx	0.113812	0.127302	0.163144	0.232509
Recreational Marine Vessels	CNG	NOx	0.000000	0.000000	0.000000	0.000000
Recreational Marine Vessels	LPG	NOx	0.000000	0.000000	0.000000	0.000000
Aircraft	Other	NOx	0.018548	0.011685	0.011500	0.010387
Marine Vessels	Coal	NOx	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Residual Oil	NOx	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Gasoline	NOx	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Other	NOx	0.000000	0.000000	0.000000	0.000000
Railroads	Diesel	NOx	0.462155	0.418204	0.349389	0.302850
Crawford County NOx Totals			3.051616	2.942332	2.505379	1.801221

**Appendix D-2: Crawford County Daily Nonroad Emission by Category
Tons per Day**

Equipment Type	Fuel	Pollutant	Tons/Summer Day			
			2002	2004	2009	2018
Recreational	Diesel	CO	0.003953	0.003853	0.003460	0.002287
Recreational	Gasoline	CO	4.296344	4.758271	5.605227	6.008217
Recreational	CNG	CO	0.000000	0.000000	0.000000	0.000000
Recreational	LPG	CO	0.001285	0.001298	0.001195	0.000849
Construction	Diesel	CO	0.232726	0.214298	0.186846	0.094823
Construction	Gasoline	CO	0.405687	0.409737	0.404634	0.394311
Construction	CNG	CO	0.000017	0.000018	0.000016	0.000009
Construction	LPG	CO	0.006710	0.006896	0.005301	0.001892
Industrial	Diesel	CO	0.088678	0.083731	0.082177	0.029319
Industrial	Gasoline	CO	1.081917	1.001052	0.734985	0.435104
Industrial	CNG	CO	0.155756	0.158258	0.103045	0.024439
Industrial	LPG	CO	1.720475	1.798206	1.389151	0.319575
Lawn and Garden	Diesel	CO	0.034821	0.034586	0.032780	0.025413
Lawn and Garden	Gasoline	CO	21.846250	22.862475	24.852235	27.925564
Lawn and Garden	CNG	CO	0.000000	0.000000	0.000000	0.000000
Lawn and Garden	LPG	CO	0.020534	0.021068	0.014920	0.003188
Farm	Diesel	CO	0.532338	0.494163	0.411121	0.228630
Farm	Gasoline	CO	0.487236	0.495368	0.493149	0.492476
Farm	CNG	CO	0.008325	0.004925	0.000608	0.000014
Farm	LPG	CO	0.000151	0.000150	0.000117	0.000057
Light Commercial	Diesel	CO	0.029107	0.028876	0.027414	0.018816
Light Commercial	Gasoline	CO	2.922972	3.138719	3.673694	4.408874
Light Commercial	CNG	CO	0.023380	0.022582	0.007284	0.006713
Light Commercial	LPG	CO	0.026283	0.029146	0.029135	0.018473
Logging	Diesel	CO	0.006391	0.005222	0.004297	0.000820
Logging	Gasoline	CO	0.072244	0.076233	0.085920	0.108592
Logging	CNG	CO	0.000000	0.000000	0.000000	0.000000
Logging	LPG	CO	0.000000	0.000000	0.000000	0.000000
Airport Service	Diesel	CO	0.000000	0.000000	0.000000	0.000000
Airport Service	Gasoline	CO	0.000000	0.000000	0.000000	0.000000
Airport Service	CNG	CO	0.000000	0.000000	0.000000	0.000000
Airport Service	LPG	CO	0.000000	0.000000	0.000000	0.000000
Railway Maintenance	Diesel	CO	0.000134	0.000130	0.000119	0.000075
Railway Maintenance	Gasoline	CO	0.000384	0.000402	0.000435	0.000459
Railway Maintenance	CNG	CO	0.000000	0.000000	0.000000	0.000000
Railway Maintenance	LPG	CO	0.000002	0.000002	0.000001	0.000001
Recreational Marine Vessels	Diesel	CO	0.015307	0.016128	0.018165	0.021784
Recreational Marine Vessels	Gasoline	CO	7.448680	7.204628	6.506634	5.724468
Recreational Marine Vessels	CNG	CO	0.000000	0.000000	0.000000	0.000000
Recreational Marine Vessels	LPG	CO	0.000000	0.000000	0.000000	0.000000
Aircraft	Other	CO	0.465458	0.293238	0.288584	0.260656
Marine Vessels	Coal	CO	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Diesel	CO	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Residual Oil	CO	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Gasoline	CO	0.000000	0.000000	0.000000	0.000000
Marine Vessels	Other	CO	0.000000	0.000000	0.000000	0.000000
Railroads	Diesel	CO	0.050896	0.052538	0.056878	0.065613
Crawford County CO Totals			41.984439	43.216197	45.019527	46.621511

**Appendix D-2: Crawford County Daily Nonroad Emission by SCC
Tons per Day**

SCC	Classification	Equipment Type	Engine Type	Pollutant Code	2002 Emissions	2004 Emissions	2009 Emissions	2018 Emissions
2260001010	Recreational Equipment	Motorcycles: Off-Road	2 Stroke	NOx	0.000618	0.000719	0.001176	0.001905
2260001020	Recreational Equipment	Snowmobiles	2 Stroke	NOx	0.000000	0.000000	0.000000	0.000000
2260001030	Recreational Equipment	ATVs	2 Stroke	NOx	0.000625	0.000860	0.001632	0.002765
2260001060	Recreational Equipment	Specialty Vehicles/Carts	2 Stroke	NOx	0.000924	0.000866	0.000706	0.000727
2260002006	Construction and Mining Equipment	Tampers/Rammers	2 Stroke	NOx	0.000058	0.000056	0.000030	0.000031
2260002009	Construction and Mining Equipment	Plate Compactors	2 Stroke	NOx	0.000001	0.000001	0.000002	0.000002
2260002021	Construction and Mining Equipment	Paving Equipment	2 Stroke	NOx	0.000001	0.000002	0.000002	0.000002
2260002027	Construction and Mining Equipment	Signal Boards/Light Plants	2 Stroke	NOx	0.000000	0.000000	0.000000	0.000000
2260002039	Construction and Mining Equipment	Concrete/Industrial Saws	2 Stroke	NOx	0.000140	0.000127	0.000078	0.000080
2260002054	Construction and Mining Equipment	Crushing/Proc. Equipment	2 Stroke	NOx	0.000000	0.000000	0.000000	0.000000
2260003030	Industrial Equipment	Sweepers/Scrubbers	2 Stroke	NOx	0.000002	0.000003	0.000002	0.000001
2260003040	Industrial Equipment	Other General Industrial Eqp	2 Stroke	NOx	0.000000	0.000000	0.000000	0.000000
2260004015	Lawn and Garden Equipment (Res)	Rotary Tillers < 6 HP	2 Stroke	NOx	0.000006	0.000007	0.000014	0.000018
2260004016	Lawn and Garden Equipment (Com)	Rotary Tillers < 6 HP	2 Stroke	NOx	0.000054	0.000077	0.000146	0.000175
2260004020	Lawn and Garden Equipment (Res)	Chain Saws < 6 HP	2 Stroke	NOx	0.000047	0.000067	0.000129	0.000154
2260004021	Lawn and Garden Equipment (Com)	Chain Saws < 6 HP	2 Stroke	NOx	0.001549	0.001521	0.001041	0.001213
2260004025	Lawn and Garden Equipment (Res)	Trimmers/Edgers/Brush Cutter	2 Stroke	NOx	0.000114	0.000157	0.000288	0.000344
2260004026	Lawn and Garden Equipment (Com)	Trimmers/Edgers/Brush Cutter	2 Stroke	NOx	0.000740	0.001054	0.001463	0.001701
2260004030	Lawn and Garden Equipment (Res)	Leafblowers/Vacuums	2 Stroke	NOx	0.000068	0.000097	0.000184	0.000220
2260004031	Lawn and Garden Equipment (Com)	Leafblowers/Vacuums	2 Stroke	NOx	0.001178	0.001386	0.001365	0.001577
2260004035	Lawn and Garden Equipment (Res)	Snowblowers	2 Stroke	NOx	0.000000	0.000000	0.000000	0.000000
2260004036	Lawn and Garden Equipment (Com)	Snowblowers	2 Stroke	NOx	0.000000	0.000000	0.000000	0.000000
2260004071	Lawn and Garden Equipment (Com)	Commercial Turf Equipment	2 Stroke	NOx	0.000000	0.000000	0.000001	0.000001
2260005035	Agricultural Equipment	Sprayers	2 Stroke	NOx	0.000005	0.000008	0.000013	0.000014
2260006005	Commercial Equipment	Generator Sets	2 Stroke	NOx	0.000006	0.000011	0.000018	0.000022
2260006010	Commercial Equipment	Pumps	2 Stroke	NOx	0.000050	0.000085	0.000121	0.000150
2260006015	Commercial Equipment	Air Compressors	2 Stroke	NOx	0.000000	0.000000	0.000000	0.000000
2260006035	Commercial Equipment	Hydro Power Units	2 Stroke	NOx	0.000000	0.000001	0.000001	0.000001
2260007005	Logging Equipment	Chain Saws > 6 HP	2 Stroke	NOx	0.000094	0.000091	0.000059	0.000075
2265001010	Recreational Equipment	Motorcycles: Off-Road	4 Stroke	NOx	0.000862	0.001003	0.001276	0.001686
2265001030	Recreational Equipment	ATVs	4 Stroke	NOx	0.007784	0.009440	0.011604	0.013387
2265001050	Recreational Equipment	Golf Carts	4 Stroke	NOx	0.011187	0.009955	0.009485	0.012087
2265001060	Recreational Equipment	Specialty Vehicles/Carts	4 Stroke	NOx	0.000801	0.000824	0.000827	0.000950
2265002003	Construction and Mining Equipment	Pavers	4 Stroke	NOx	0.000105	0.000094	0.000068	0.000062
2265002006	Construction and Mining Equipment	Tampers/Rammers	4 Stroke	NOx	0.000001	0.000001	0.000000	0.000001
2265002009	Construction and Mining Equipment	Plate Compactors	4 Stroke	NOx	0.000125	0.000120	0.000084	0.000093
2265002015	Construction and Mining Equipment	Rollers	4 Stroke	NOx	0.000181	0.000159	0.000109	0.000108
2265002021	Construction and Mining Equipment	Paving Equipment	4 Stroke	NOx	0.000263	0.000246	0.000189	0.000215
2265002024	Construction and Mining Equipment	Surfacing Equipment	4 Stroke	NOx	0.000109	0.000097	0.000078	0.000092
2265002027	Construction and Mining Equipment	Signal Boards/Light Plants	4 Stroke	NOx	0.000005	0.000005	0.000004	0.000004
2265002030	Construction and Mining Equipment	Trenchers	4 Stroke	NOx	0.000318	0.000289	0.000203	0.000179
2265002033	Construction and Mining Equipment	Bore/Drill Rigs	4 Stroke	NOx	0.000100	0.000098	0.000074	0.000065
2265002039	Construction and Mining Equipment	Concrete/Industrial Saws	4 Stroke	NOx	0.000541	0.000473	0.000365	0.000421
2265002042	Construction and Mining Equipment	Cement & Mortar Mixers	4 Stroke	NOx	0.000204	0.000210	0.000178	0.000185
2265002045	Construction and Mining Equipment	Cranes	4 Stroke	NOx	0.000052	0.000050	0.000037	0.000018
2265002054	Construction and Mining Equipment	Crushing/Proc. Equipment	4 Stroke	NOx	0.000035	0.000032	0.000025	0.000027
2265002057	Construction and Mining Equipment	Rough Terrain Forklifts	4 Stroke	NOx	0.000090	0.000085	0.000054	0.000017
2265002060	Construction and Mining Equipment	Rubber Tire Loaders	4 Stroke	NOx	0.000223	0.000206	0.000107	0.000027
2265002066	Construction and Mining Equipment	Tractors/Loaders/Backhoes	4 Stroke	NOx	0.000170	0.000148	0.000123	0.000141
2265002072	Construction and Mining Equipment	Skid Steer Loaders	4 Stroke	NOx	0.000238	0.000223	0.000160	0.000102
2265002078	Construction and Mining Equipment	Dumpers/Tenders	4 Stroke	NOx	0.000033	0.000034	0.000030	0.000032
2265002081	Construction and Mining Equipment	Other Construction Equipment	4 Stroke	NOx	0.000078	0.000075	0.000057	0.000030
2265003010	Industrial Equipment	Aerial Lifts	4 Stroke	NOx	0.002685	0.002326	0.001423	0.000512
2265003020	Industrial Equipment	Forklifts	4 Stroke	NOx	0.011334	0.009541	0.004155	0.000375
2265003030	Industrial Equipment	Sweepers/Scrubbers	4 Stroke	NOx	0.002018	0.001619	0.000569	0.000115
2265003040	Industrial Equipment	Other General Industrial Eqp	4 Stroke	NOx	0.001783	0.001484	0.000680	0.000235
2265003050	Industrial Equipment	Other Material Handling Eqp	4 Stroke	NOx	0.000178	0.000152	0.000092	0.000026
2265003060	Industrial Equipment	AC/Refrigeration	4 Stroke	NOx	0.000017	0.000013	0.000008	0.000003
2265003070	Industrial Equipment	Terminal Tractors	4 Stroke	NOx	0.001171	0.000919	0.000186	0.000028
2265004010	Lawn and Garden Equipment (Res)	Lawn mowers	4 Stroke	NOx	0.005006	0.005384	0.004869	0.004323
2265004011	Lawn and Garden Equipment (Com)	Lawn mowers	4 Stroke	NOx	0.008318	0.008668	0.005665	0.006866
2265004015	Lawn and Garden Equipment (Res)	Rotary Tillers < 6 HP	4 Stroke	NOx	0.000425	0.000456	0.000411	0.000362
2265004016	Lawn and Garden Equipment (Com)	Rotary Tillers < 6 HP	4 Stroke	NOx	0.004193	0.004445	0.003753	0.003534
2265004025	Lawn and Garden Equipment (Res)	Trimmers/Edgers/Brush Cutter	4 Stroke	NOx	0.000029	0.000030	0.000025	0.000024
2265004026	Lawn and Garden Equipment (Com)	Trimmers/Edgers/Brush Cutter	4 Stroke	NOx	0.000216	0.000207	0.000166	0.000212
2265004030	Lawn and Garden Equipment (Res)	Leafblowers/Vacuums	4 Stroke	NOx	0.000055	0.000058	0.000049	0.000046
2265004031	Lawn and Garden Equipment (Com)	Leafblowers/Vacuums	4 Stroke	NOx	0.014235	0.013079	0.010669	0.010619
2265004035	Lawn and Garden Equipment (Res)	Snowblowers	4 Stroke	NOx	0.000000	0.000000	0.000000	0.000000
2265004036	Lawn and Garden Equipment (Com)	Snowblowers	4 Stroke	NOx	0.000000	0.000000	0.000000	0.000000
2265004040	Lawn and Garden Equipment (Res)	Rear Engine Riding Mowers	4 Stroke	NOx	0.001306	0.001271	0.001127	0.001508
2265004041	Lawn and Garden Equipment (Com)	Rear Engine Riding Mowers	4 Stroke	NOx	0.001154	0.001028	0.000964	0.001342
2265004046	Lawn and Garden Equipment (Com)	Front Mowers	4 Stroke	NOx	0.001217	0.001274	0.001222	0.001536
2265004051	Lawn and Garden Equipment (Com)	Shredders < 6 HP	4 Stroke	NOx	0.000477	0.000510	0.000445	0.000407
2265004055	Lawn and Garden Equipment (Res)	Lawn & Garden Tractors	4 Stroke	NOx	0.017940	0.017418	0.015179	0.020228
2265004056	Lawn and Garden Equipment (Com)	Lawn & Garden Tractors	4 Stroke	NOx	0.016116	0.014188	0.013118	0.018247
2265004066	Lawn and Garden Equipment (Com)	Chippers/Stump Grinders	4 Stroke	NOx	0.005150	0.004762	0.002991	0.002324

**Appendix D-2: Crawford County Daily Nonroad Emission by SCC
Tons per Day**

SCC	Classification	Equipment Type	Engine Type	Pollutant Code	2002 Emissions	2004 Emissions	2009 Emissions	2018 Emissions
2265004071	Lawn and Garden Equipment (Com)	Commercial Turf Equipment	4 Stroke	NOx	0.056441	0.051353	0.039134	0.051507
2265004075	Lawn and Garden Equipment (Res)	Other Lawn & Garden Eqp.	4 Stroke	NOx	0.000492	0.000529	0.000519	0.000553
2265004076	Lawn and Garden Equipment (Com)	Other Lawn & Garden Eqp.	4 Stroke	NOx	0.001252	0.001345	0.001318	0.001399
2265005010	Agricultural Equipment	2-Wheel Tractors	4 Stroke	NOx	0.000078	0.000067	0.000063	0.000085
2265005015	Agricultural Equipment	Agricultural Tractors	4 Stroke	NOx	0.000864	0.000810	0.000472	0.000192
2265005020	Agricultural Equipment	Combines	4 Stroke	NOx	0.000006	0.000006	0.000006	0.000005
2265005025	Agricultural Equipment	Balers	4 Stroke	NOx	0.000614	0.000612	0.000533	0.000434
2265005030	Agricultural Equipment	Agricultural Mowers	4 Stroke	NOx	0.000063	0.000062	0.000055	0.000070
2265005035	Agricultural Equipment	Sprayers	4 Stroke	NOx	0.000999	0.001017	0.000909	0.000876
2265005040	Agricultural Equipment	Tillers > 6 HP	4 Stroke	NOx	0.000957	0.001014	0.001129	0.001587
2265005045	Agricultural Equipment	Swathers	4 Stroke	NOx	0.000972	0.000969	0.000844	0.000687
2265005055	Agricultural Equipment	Other Agricultural Equipment	4 Stroke	NOx	0.001162	0.001159	0.001013	0.000869
2265005060	Agricultural Equipment	Irrigation Sets	4 Stroke	NOx	0.001692	0.001566	0.000709	0.000243
2265006005	Commercial Equipment	Generator Sets	4 Stroke	NOx	0.008065	0.008183	0.007646	0.010573
2265006010	Commercial Equipment	Pumps	4 Stroke	NOx	0.002441	0.002388	0.001904	0.002299
2265006015	Commercial Equipment	Air Compressors	4 Stroke	NOx	0.001682	0.001628	0.001232	0.001154
2265006025	Commercial Equipment	Welders	4 Stroke	NOx	0.003037	0.002864	0.002541	0.002952
2265006030	Commercial Equipment	Pressure Washers	4 Stroke	NOx	0.003558	0.003505	0.002952	0.004134
2265006035	Commercial Equipment	Hydro Power Units	4 Stroke	NOx	0.000177	0.000166	0.000151	0.000216
2265007010	Logging Equipment	Shredders > 6 HP	4 Stroke	NOx	0.000265	0.000290	0.000311	0.000417
2265007015	Logging Equipment	Forest Eqp - Feller/Bunch/Skidder	4 Stroke	NOx	0.000003	0.000003	0.000002	0.000004
2265008005	Airport Equipment	Airport Ground Support Equipment	4 Stroke	NOx	0.000000	0.000000	0.000000	0.000000
2265010010	Industrial Equipment	Other Oil Field Equipment	4 Stroke	NOx	0.001491	0.001302	0.001202	0.001454
2267001060	Recreational Equipment	Specialty Vehicle Carts	LPG	NOx	0.000321	0.000316	0.000267	0.000174
2267002003	Construction and Mining Equipment	Pavers	LPG	NOx	0.000069	0.000065	0.000038	0.000011
2267002015	Construction and Mining Equipment	Rollers	LPG	NOx	0.000115	0.000106	0.000045	0.000012
2267002021	Construction and Mining Equipment	Paving Equipment	LPG	NOx	0.000018	0.000018	0.000014	0.000006
2267002024	Construction and Mining Equipment	Surfacing Equipment	LPG	NOx	0.000012	0.000011	0.000006	0.000002
2267002030	Construction and Mining Equipment	Trenchers	LPG	NOx	0.000210	0.000201	0.000122	0.000033
2267002033	Construction and Mining Equipment	Bore/Drill Rigs	LPG	NOx	0.000069	0.000069	0.000060	0.000040
2267002039	Construction and Mining Equipment	Concrete/Industrial Saws	LPG	NOx	0.000200	0.000176	0.000053	0.000020
2267002045	Construction and Mining Equipment	Cranes	LPG	NOx	0.000074	0.000073	0.000056	0.000023
2267002054	Construction and Mining Equipment	Crushing/Proc. Equipment	LPG	NOx	0.000012	0.000012	0.000009	0.000003
2267002057	Construction and Mining Equipment	Rough Terrain Forklifts	LPG	NOx	0.000133	0.000129	0.000086	0.000023
2267002060	Construction and Mining Equipment	Rubber Tire Loaders	LPG	NOx	0.000332	0.000314	0.000172	0.000038
2267002066	Construction and Mining Equipment	Tractors/Loaders/Backhoes	LPG	NOx	0.000035	0.000033	0.000015	0.000004
2267002072	Construction and Mining Equipment	Skid Steer Loaders	LPG	NOx	0.000274	0.000268	0.000194	0.000079
2267002081	Construction and Mining Equipment	Other Construction Equipment	LPG	NOx	0.000110	0.000109	0.000087	0.000040
2267003010	Industrial Equipment	Aerial Lifts	LPG	NOx	0.004410	0.004410	0.003485	0.001696
2267003020	Industrial Equipment	Forklifts	LPG	NOx	0.415672	0.400291	0.225340	0.052562
2267003030	Industrial Equipment	Sweepers/Scrubbers	LPG	NOx	0.003172	0.002928	0.001176	0.000375
2267003040	Industrial Equipment	Other General Industrial Equipm	LPG	NOx	0.000970	0.000916	0.000442	0.000115
2267003050	Industrial Equipment	Other Material Handling Equipment	LPG	NOx	0.000238	0.000238	0.000185	0.000069
2267003070	Industrial Equipment	Terminal Tractors	LPG	NOx	0.001937	0.001743	0.000489	0.000217
2267004066	Lawn and Garden Equipment (Com)	Chippers/Stump Grinders	LPG	NOx	0.005068	0.004752	0.002358	0.000557
2267005055	Agricultural Equipment	Other Agricultural Equipment	LPG	NOx	0.000020	0.000020	0.000016	0.000010
2267005060	Agricultural Equipment	Irrigation Sets	LPG	NOx	0.000017	0.000015	0.000007	0.000001
2267006005	Commercial Equipment	Generator Sets	LPG	NOx	0.004792	0.005040	0.004623	0.003336
2267006010	Commercial Equipment	Pumps	LPG	NOx	0.001116	0.001146	0.000892	0.000447
2267006015	Commercial Equipment	Air Compressors	LPG	NOx	0.001345	0.001360	0.000930	0.000286
2267006025	Commercial Equipment	Welders	LPG	NOx	0.001677	0.001718	0.001234	0.000368
2267006030	Commercial Equipment	Pressure Washers	LPG	NOx	0.000022	0.000023	0.000020	0.000010
2267006035	Commercial Equipment	Hydro Power Units	LPG	NOx	0.000021	0.000021	0.000012	0.000004
2267008005	Airport Equipment	Airport Ground Support Equipment	LPG	NOx	0.000000	0.000000	0.000000	0.000000
2268002081	Construction and Mining Equipment	Other Construction Equipment	CNG	NOx	0.000004	0.000004	0.000003	0.000002
2268003020	Industrial Equipment	Forklifts	CNG	NOx	0.030264	0.028879	0.016143	0.003770
2268003030	Industrial Equipment	Sweepers/Scrubbers	CNG	NOx	0.000036	0.000034	0.000019	0.000004
2268003040	Industrial Equipment	Other General Industrial Equipment	CNG	NOx	0.000024	0.000022	0.000012	0.000003
2268003060	Industrial Equipment	AC/Refrigeration	CNG	NOx	0.000031	0.000029	0.000013	0.000004
2268003070	Industrial Equipment	Terminal Tractors	CNG	NOx	0.000136	0.000122	0.000034	0.000015
2268005055	Agricultural Equipment	Other Agricultural Equipment	CNG	NOx	0.000025	0.000020	0.000011	0.000003
2268005060	Agricultural Equipment	Irrigation Sets	CNG	NOx	0.001914	0.001102	0.000124	0.000000
2268006005	Commercial Equipment	Generator Sets	CNG	NOx	0.001571	0.001600	0.001429	0.001015
2268006010	Commercial Equipment	Pumps	CNG	NOx	0.000079	0.000079	0.000063	0.000034
2268006015	Commercial Equipment	Air Compressors	CNG	NOx	0.000113	0.000110	0.000074	0.000021
2268006020	Commercial Equipment	Gas Compressors	CNG	NOx	0.004160	0.001460	0.000428	0.000535
2268006035	Commercial Equipment	Hydro Power Units	CNG	NOx	0.000000	0.000000	0.000000	0.000000
2268010010	Industrial Equipment	Other Oil Field Equipment	CNG	NOx	0.007651	0.005475	0.000794	0.000625
2270001060	Recreational Equipment	Specialty Vehicle Carts	Diesel	NOx	0.003322	0.003364	0.003332	0.002720
2270002003	Construction and Mining Equipment	Pavers	Diesel	NOx	0.005529	0.005276	0.004504	0.002062
2270002006	Construction and Mining Equipment	Tampers/Rammers	Diesel	NOx	0.000012	0.000012	0.000010	0.000009
2270002009	Construction and Mining Equipment	Plate Compactors	Diesel	NOx	0.000190	0.000184	0.000160	0.000143
2270002015	Construction and Mining Equipment	Rollers	Diesel	NOx	0.013718	0.013247	0.011631	0.005869
2270002018	Construction and Mining Equipment	Scrapers	Diesel	NOx	0.015883	0.015264	0.012696	0.005560
2270002021	Construction and Mining Equipment	Paving Equipment	Diesel	NOx	0.000874	0.000845	0.000733	0.000416
2270002024	Construction and Mining Equipment	Surfacing Equipment	Diesel	NOx	0.000589	0.000579	0.000530	0.000362

**Appendix D-2: Crawford County Daily Nonroad Emission by SCC
Tons per Day**

SCC	Classification	Equipment Type	Engine Type	Pollutant Code	2002 Emissions	2004 Emissions	2009 Emissions	2018 Emissions
2270002027	Construction and Mining Equipment	Signal Boards/Light Plants	Diesel	NOx	0.001657	0.001618	0.001471	0.001378
2270002030	Construction and Mining Equipment	Trenchers	Diesel	NOx	0.006382	0.006308	0.005869	0.004094
2270002033	Construction and Mining Equipment	Bore/Drill Rigs	Diesel	NOx	0.007576	0.007509	0.006937	0.004879
2270002036	Construction and Mining Equipment	Excavators	Diesel	NOx	0.054834	0.051653	0.042397	0.014534
2270002039	Construction and Mining Equipment	Concrete/Industrial Saws	Diesel	NOx	0.000429	0.000423	0.000403	0.000295
2270002042	Construction and Mining Equipment	Cement & Mortar Mixers	Diesel	NOx	0.000285	0.000284	0.000268	0.000206
2270002045	Construction and Mining Equipment	Cranes	Diesel	NOx	0.014933	0.014343	0.012029	0.005577
2270002048	Construction and Mining Equipment	Graders	Diesel	NOx	0.013933	0.013035	0.010672	0.003621
2270002051	Construction and Mining Equipment	Off-highway Trucks	Diesel	NOx	0.051719	0.050043	0.041880	0.020712
2270002054	Construction and Mining Equipment	Crushing/Proc. Equipment	Diesel	NOx	0.002622	0.002544	0.002205	0.001230
2270002057	Construction and Mining Equipment	Rough Terrain Forklifts	Diesel	NOx	0.017527	0.017306	0.015645	0.008132
2270002060	Construction and Mining Equipment	Rubber Tire Loaders	Diesel	NOx	0.067145	0.064846	0.055925	0.028256
2270002066	Construction and Mining Equipment	Tractors/Loaders/Backhoes	Diesel	NOx	0.040794	0.040369	0.037796	0.025009
2270002069	Construction and Mining Equipment	Crawler Tractor/Dozers	Diesel	NOx	0.059000	0.056438	0.047588	0.020909
2270002072	Construction and Mining Equipment	Skid Steer Loaders	Diesel	NOx	0.026156	0.026386	0.025822	0.021080
2270002075	Construction and Mining Equipment	Off-Highway Tractors	Diesel	NOx	0.007121	0.006969	0.006133	0.003610
2270002078	Construction and Mining Equipment	Dumpers/Tenders	Diesel	NOx	0.000084	0.000085	0.000083	0.000069
2270002081	Construction and Mining Equipment	Other Construction Equipment	Diesel	NOx	0.006915	0.006732	0.005912	0.003461
2270003010	Industrial Equipment	Aerial Lifts	Diesel	NOx	0.004585	0.004598	0.004437	0.003721
2270003020	Industrial Equipment	Forklifts	Diesel	NOx	0.048390	0.047949	0.041065	0.015354
2270003030	Industrial Equipment	Sweepers/Scrubbers	Diesel	NOx	0.025655	0.024542	0.021309	0.008943
2270003040	Industrial Equipment	Other General Industrial Eqp	Diesel	NOx	0.029218	0.028283	0.024196	0.012025
2270003050	Industrial Equipment	Other Material Handling Eqp	Diesel	NOx	0.001351	0.001333	0.001225	0.000865
2270003060	Industrial Equipment	AC\Refrigeration	Diesel	NOx	0.034564	0.034273	0.032664	0.026867
2270003070	Industrial Equipment	Terminal Tractors	Diesel	NOx	0.033107	0.031776	0.025694	0.007134
2270004031	Lawn and Garden Equipment (Com)	Leafblowers/Vacuums	Diesel	NOx	0.000004	0.000004	0.000004	0.000005
2270004036	Lawn and Garden Equipment (Com)	Snowblowers	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
2270004046	Lawn and Garden Equipment (Com)	Front Mowers	Diesel	NOx	0.023086	0.023869	0.024789	0.025228
2270004056	Lawn and Garden Equipment (Com)	Lawn & Garden Tractors	Diesel	NOx	0.005095	0.005121	0.004959	0.005457
2270004066	Lawn and Garden Equipment (Com)	Chippers/Stump Grinders	Diesel	NOx	0.034495	0.036187	0.037675	0.029538
2270004071	Lawn and Garden Equipment (Com)	Commercial Turf Equipment	Diesel	NOx	0.003479	0.003491	0.003505	0.002378
2270004076	Lawn and Garden Equipment (Com)	Other Lawn & Garden Eqp.	Diesel	NOx	0.000091	0.000095	0.000101	0.000098
2270005010	Agricultural Equipment	2-Wheel Tractors	Diesel	NOx	0.000018	0.000017	0.000013	0.000014
2270005015	Agricultural Equipment	Agricultural Tractors	Diesel	NOx	0.795101	0.770750	0.691630	0.439603
2270005020	Agricultural Equipment	Combines	Diesel	NOx	0.080615	0.079197	0.072273	0.049179
2270005025	Agricultural Equipment	Balers	Diesel	NOx	0.000346	0.000350	0.000346	0.000284
2270005030	Agricultural Equipment	Agricultural Mowers	Diesel	NOx	0.000074	0.000073	0.000068	0.000047
2270005035	Agricultural Equipment	Sprayers	Diesel	NOx	0.005713	0.005739	0.005529	0.004001
2270005040	Agricultural Equipment	Tillers > 6 HP	Diesel	NOx	0.000009	0.000009	0.000009	0.000006
2270005045	Agricultural Equipment	Swathers	Diesel	NOx	0.005645	0.005595	0.005259	0.003843
2270005055	Agricultural Equipment	Other Agricultural Equipment	Diesel	NOx	0.016609	0.016236	0.014584	0.009522
2270005060	Agricultural Equipment	Irrigation Sets	Diesel	NOx	0.010417	0.010306	0.009310	0.005196
2270006005	Commercial Equipment	Generator Sets	Diesel	NOx	0.020863	0.021423	0.021725	0.018194
2270006010	Commercial Equipment	Pumps	Diesel	NOx	0.004967	0.005100	0.005147	0.004240
2270006015	Commercial Equipment	Air Compressors	Diesel	NOx	0.012537	0.012734	0.012203	0.007755
2270006020	Commercial Equipment	Gas Compressors	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
2270006025	Commercial Equipment	Welders	Diesel	NOx	0.006070	0.006266	0.006481	0.005821
2270006030	Commercial Equipment	Pressure Washers	Diesel	NOx	0.000697	0.000714	0.000722	0.000609
2270006035	Commercial Equipment	Hydro Power Units	Diesel	NOx	0.000542	0.000548	0.000528	0.000360
2270007010	Logging Equipment	Shredders > 6 HP	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
2270007015	Logging Equipment	Forest Eqp - Feller/Bunch/Skidder	Diesel	NOx	0.018578	0.016424	0.010994	0.002303
2270008005	Airport Equipment	Airport Ground Support Equipment	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
2270009010	Construction and Mining Equipment	Other Underground Mining Equipment	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
2270010010	Industrial Equipment	Other Oil Field Equipment	Diesel	NOx	0.020701	0.019264	0.014950	0.006811
2275000000	Aircraft	All Aircraft Types and Operations	Other	NOx	0.018548	0.011685	0.011500	0.010387
2275070000	Aircraft	Auxiliary Power Units	Other	NOx	0.000000	0.000000	0.000000	0.000000
2280000000	Marine Vessels	Commercial	All Fuels	NOx	0.000000	0.000000	0.000000	0.000000
2280001000	Marine Vessels	Commercial	Coal	NOx	0.000000	0.000000	0.000000	0.000000
2280002000	Marine Vessels	Commercial	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
2280003000	Marine Vessels	Commercial	Residual Fuel	NOx	0.000000	0.000000	0.000000	0.000000
2280004000	Marine Vessels	Commercial	Gasoline	NOx	0.000000	0.000000	0.000000	0.000000
2282005010	Pleasure Craft	Outboard	2 Stroke	NOx	0.032330	0.039006	0.057229	0.081554
2282005015	Pleasure Craft	Personal Water Craft	2 Stroke	NOx	0.009051	0.011961	0.018690	0.024135
2282010005	Pleasure Craft	Inboard/Sterndrive	4 Stroke	NOx	0.072431	0.076334	0.087224	0.126820
2282020005	Pleasure Craft	Inboard/Sterndrive	Diesel	NOx	0.095139	0.100490	0.107179	0.113083
2282020010	Pleasure Craft	Outboards	Diesel	NOx	0.000358	0.000366	0.000381	0.000404
2285002005	Railroad Equipment	Line Haul Locomotives	Diesel	NOx	0.462155	0.418204	0.349389	0.302850
2285002010	Railroad Equipment	Yard Locomotive	Diesel	NOx	0.000000	0.000000	0.000000	0.000000
2285002015	Railroad Equipment	Railway Maintenance	Diesel	NOx	0.000162	0.000163	0.000156	0.000112
2285004015	Railroad Equipment	Railway Maintenance	4 Stroke	NOx	0.000003	0.000002	0.000002	0.000002
2285006015	Railroad Equipment	Railway Maintenance	LPG	NOx	0.000000	0.000000	0.000000	0.000000
Crawford County Total Summer Day NOx Emissions					3.051616	2.942332	2.505379	1.801221

**Appendix D-2: Crawford County Daily Nonroad Emission by SCC
Tons per Day**

SCC	Classification	Equipment Type	Engine Type	Pollutant Code	2002 Emissions	2004 Emissions	2009 Emissions	2018 Emissions
2260001010	Recreational Equipment	Motorcycles: Off-Road	2 Stroke	VOC	0.260587	0.302596	0.346720	0.278016
2260001020	Recreational Equipment	Snowmobiles	2 Stroke	VOC	0.012894	0.014078	0.015232	0.004513
2260001030	Recreational Equipment	ATVs	2 Stroke	VOC	0.260097	0.359120	0.431212	0.170734
2260001060	Recreational Equipment	Specialty Vehicles/Carts	2 Stroke	VOC	0.005953	0.005609	0.004924	0.003901
2260002006	Construction and Mining Equipment	Tampers/Rammers	2 Stroke	VOC	0.004897	0.004690	0.002122	0.002078
2260002009	Construction and Mining Equipment	Plate Compactors	2 Stroke	VOC	0.000297	0.000181	0.000076	0.000075
2260002021	Construction and Mining Equipment	Paving Equipment	2 Stroke	VOC	0.000354	0.000209	0.000090	0.000089
2260002027	Construction and Mining Equipment	Signal Boards/Light Plants	2 Stroke	VOC	0.000003	0.000001	0.000001	0.000001
2260002039	Construction and Mining Equipment	Concrete/Industrial Saws	2 Stroke	VOC	0.013048	0.010740	0.005214	0.005320
2260002054	Construction and Mining Equipment	Crushing/Proc. Equipment	2 Stroke	VOC	0.000066	0.000035	0.000018	0.000018
2260003030	Industrial Equipment	Sweepers/Scrubbers	2 Stroke	VOC	0.000479	0.000223	0.000085	0.000030
2260003040	Industrial Equipment	Other General Industrial Eqp	2 Stroke	VOC	0.000038	0.000018	0.000007	0.000002
2260004015	Lawn and Garden Equipment (Res)	Rotary Tillers < 6 HP	2 Stroke	VOC	0.002323	0.002030	0.000970	0.000685
2260004016	Lawn and Garden Equipment (Com)	Rotary Tillers < 6 HP	2 Stroke	VOC	0.020165	0.016626	0.005610	0.005477
2260004020	Lawn and Garden Equipment (Res)	Chain Saws < 6 HP	2 Stroke	VOC	0.018987	0.015939	0.006502	0.005706
2260004021	Lawn and Garden Equipment (Com)	Chain Saws < 6 HP	2 Stroke	VOC	0.152080	0.130617	0.065807	0.076467
2260004025	Lawn and Garden Equipment (Res)	Trimmers/Edgers/Brush Cutter	2 Stroke	VOC	0.044464	0.037614	0.016007	0.013415
2260004026	Lawn and Garden Equipment (Com)	Trimmers/Edgers/Brush Cutter	2 Stroke	VOC	0.191372	0.139505	0.053549	0.061403
2260004030	Lawn and Garden Equipment (Res)	Leafblowers/Vacuums	2 Stroke	VOC	0.030019	0.025727	0.012338	0.009669
2260004031	Lawn and Garden Equipment (Com)	Leafblowers/Vacuums	2 Stroke	VOC	0.183547	0.148295	0.062437	0.070931
2260004035	Lawn and Garden Equipment (Res)	Snowblowers	2 Stroke	VOC	0.004195	0.004372	0.004811	0.002557
2260004036	Lawn and Garden Equipment (Com)	Snowblowers	2 Stroke	VOC	0.000590	0.000615	0.000677	0.000360
2260004071	Lawn and Garden Equipment (Com)	Commercial Turf Equipment	2 Stroke	VOC	0.000082	0.000058	0.000021	0.000024
2260005035	Agricultural Equipment	Sprayers	2 Stroke	VOC	0.001824	0.001328	0.000464	0.000482
2260006005	Commercial Equipment	Generator Sets	2 Stroke	VOC	0.002203	0.001461	0.000655	0.000771
2260006010	Commercial Equipment	Pumps	2 Stroke	VOC	0.015025	0.008738	0.004657	0.005481
2260006015	Commercial Equipment	Air Compressors	2 Stroke	VOC	0.000005	0.000003	0.000002	0.000002
2260006035	Commercial Equipment	Hydro Power Units	2 Stroke	VOC	0.000083	0.000046	0.000027	0.000033
2260007005	Logging Equipment	Chain Saws > 6 HP	2 Stroke	VOC	0.008111	0.007678	0.004107	0.005189
2265001010	Recreational Equipment	Motorcycles: Off-Road	4 Stroke	VOC	0.010514	0.011843	0.014170	0.012922
2265001030	Recreational Equipment	ATVs	4 Stroke	VOC	0.108123	0.127104	0.156967	0.141200
2265001050	Recreational Equipment	Golf Carts	4 Stroke	VOC	0.045114	0.040319	0.038531	0.041290
2265001060	Recreational Equipment	Specialty Vehicles/Carts	4 Stroke	VOC	0.006466	0.006281	0.005749	0.003674
2265002003	Construction and Mining Equipment	Pavers	4 Stroke	VOC	0.000266	0.000235	0.000178	0.000162
2265002006	Construction and Mining Equipment	Tampers/Rammers	4 Stroke	VOC	0.000002	0.000002	0.000002	0.000002
2265002009	Construction and Mining Equipment	Plate Compactors	4 Stroke	VOC	0.001041	0.001018	0.000636	0.000511
2265002015	Construction and Mining Equipment	Rollers	4 Stroke	VOC	0.000431	0.000374	0.000304	0.000286
2265002021	Construction and Mining Equipment	Paving Equipment	4 Stroke	VOC	0.001500	0.001391	0.000963	0.000807
2265002024	Construction and Mining Equipment	Surfacing Equipment	4 Stroke	VOC	0.000536	0.000496	0.000332	0.000328
2265002027	Construction and Mining Equipment	Signal Boards/Light Plants	4 Stroke	VOC	0.000037	0.000036	0.000021	0.000021
2265002030	Construction and Mining Equipment	Trenchers	4 Stroke	VOC	0.001060	0.000983	0.000624	0.000570
2265002033	Construction and Mining Equipment	Bore/Drill Rigs	4 Stroke	VOC	0.000635	0.000631	0.000413	0.000291
2265002039	Construction and Mining Equipment	Concrete/Industrial Saws	4 Stroke	VOC	0.001542	0.001335	0.001156	0.001162
2265002042	Construction and Mining Equipment	Cement & Mortar Mixers	4 Stroke	VOC	0.001650	0.001522	0.001227	0.000802
2265002045	Construction and Mining Equipment	Cranes	4 Stroke	VOC	0.000054	0.000051	0.000039	0.000018
2265002054	Construction and Mining Equipment	Crushing/Proc. Equipment	4 Stroke	VOC	0.000141	0.000129	0.000089	0.000084
2265002057	Construction and Mining Equipment	Rough Terrain Forklifts	4 Stroke	VOC	0.000080	0.000075	0.000048	0.000011
2265002060	Construction and Mining Equipment	Rubber Tire Loaders	4 Stroke	VOC	0.000192	0.000177	0.000091	0.000012
2265002066	Construction and Mining Equipment	Tractors/Loaders/Backhoes	4 Stroke	VOC	0.000525	0.000451	0.000391	0.000383
2265002072	Construction and Mining Equipment	Skid Steer Loaders	4 Stroke	VOC	0.000372	0.000338	0.000256	0.000169
2265002078	Construction and Mining Equipment	Dumpers/Tenders	4 Stroke	VOC	0.000236	0.000217	0.000178	0.000122
2265002081	Construction and Mining Equipment	Other Construction Equipment	4 Stroke	VOC	0.000070	0.000067	0.000052	0.000021
2265003010	Industrial Equipment	Aerial Lifts	4 Stroke	VOC	0.003616	0.003041	0.001838	0.000542
2265003020	Industrial Equipment	Forklifts	4 Stroke	VOC	0.009678	0.008167	0.003535	0.000194
2265003030	Industrial Equipment	Sweepers/Scrubbers	4 Stroke	VOC	0.003052	0.002462	0.000987	0.000245
2265003040	Industrial Equipment	Other General Industrial Eqp	4 Stroke	VOC	0.010727	0.009293	0.003349	0.001142
2265003050	Industrial Equipment	Other Material Handling Eqp	4 Stroke	VOC	0.000258	0.000214	0.000128	0.000032
2265003060	Industrial Equipment	AC\Refrigeration	4 Stroke	VOC	0.000070	0.000054	0.000033	0.000011
2265003070	Industrial Equipment	Terminal Tractors	4 Stroke	VOC	0.001001	0.000788	0.000136	0.000012
2265004010	Lawn and Garden Equipment (Res)	Lawn mowers	4 Stroke	VOC	0.092578	0.092545	0.088711	0.052128
2265004011	Lawn and Garden Equipment (Com)	Lawn mowers	4 Stroke	VOC	0.099427	0.103622	0.059649	0.056455
2265004015	Lawn and Garden Equipment (Res)	Rotary Tillers < 6 HP	4 Stroke	VOC	0.007700	0.007747	0.007361	0.004129
2265004016	Lawn and Garden Equipment (Com)	Rotary Tillers < 6 HP	4 Stroke	VOC	0.047504	0.047095	0.039948	0.025813
2265004025	Lawn and Garden Equipment (Res)	Trimmers/Edgers/Brush Cutter	4 Stroke	VOC	0.000489	0.000502	0.000463	0.000270
2265004026	Lawn and Garden Equipment (Com)	Trimmers/Edgers/Brush Cutter	4 Stroke	VOC	0.001647	0.001654	0.001078	0.000995
2265004030	Lawn and Garden Equipment (Res)	Leafblowers/Vacuums	4 Stroke	VOC	0.001014	0.001042	0.000965	0.000548
2265004031	Lawn and Garden Equipment (Com)	Leafblowers/Vacuums	4 Stroke	VOC	0.033147	0.029482	0.024671	0.025416
2265004035	Lawn and Garden Equipment (Res)	Snowblowers	4 Stroke	VOC	0.008450	0.008807	0.009692	0.005132
2265004036	Lawn and Garden Equipment (Com)	Snowblowers	4 Stroke	VOC	0.001319	0.001375	0.001513	0.000804
2265004040	Lawn and Garden Equipment (Res)	Rear Engine Riding Mowers	4 Stroke	VOC	0.010113	0.010049	0.009984	0.007372
2265004041	Lawn and Garden Equipment (Com)	Rear Engine Riding Mowers	4 Stroke	VOC	0.003871	0.003434	0.003171	0.003600
2265004046	Lawn and Garden Equipment (Com)	Front Mowers	4 Stroke	VOC	0.006423	0.006129	0.005480	0.004558
2265004051	Lawn and Garden Equipment (Com)	Shredders < 6 HP	4 Stroke	VOC	0.005832	0.005676	0.004976	0.002996
2265004055	Lawn and Garden Equipment (Res)	Lawn & Garden Tractors	4 Stroke	VOC	0.115836	0.113299	0.108485	0.084048
2265004056	Lawn and Garden Equipment (Com)	Lawn & Garden Tractors	4 Stroke	VOC	0.052218	0.045260	0.040699	0.046658
2265004066	Lawn and Garden Equipment (Com)	Chippers/Stump Grinders	4 Stroke	VOC	0.007916	0.007140	0.005410	0.004837

**Appendix D-2: Crawford County Daily Nonroad Emission by SCC
Tons per Day**

SCC	Classification	Equipment Type	Engine Type	Pollutant Code	2002 Emissions	2004 Emissions	2009 Emissions	2018 Emissions
2265004071	Lawn and Garden Equipment (Com)	Commercial Turf Equipment	4 Stroke	VOC	0.192550	0.182275	0.148821	0.156352
2265004075	Lawn and Garden Equipment (Res)	Other Lawn & Garden Eqp.	4 Stroke	VOC	0.005700	0.005548	0.005136	0.003241
2265004076	Lawn and Garden Equipment (Com)	Other Lawn & Garden Eqp.	4 Stroke	VOC	0.013208	0.012778	0.011631	0.007387
2265005010	Agricultural Equipment	2-Wheel Tractors	4 Stroke	VOC	0.000268	0.000231	0.000213	0.000232
2265005015	Agricultural Equipment	Agricultural Tractors	4 Stroke	VOC	0.000872	0.000805	0.000502	0.000232
2265005020	Agricultural Equipment	Combines	4 Stroke	VOC	0.000006	0.000006	0.000006	0.000004
2265005025	Agricultural Equipment	Balers	4 Stroke	VOC	0.000675	0.000679	0.000606	0.000353
2265005030	Agricultural Equipment	Agricultural Mowers	4 Stroke	VOC	0.000279	0.000251	0.000208	0.000198
2265005035	Agricultural Equipment	Sprayers	4 Stroke	VOC	0.004066	0.003951	0.003333	0.002296
2265005040	Agricultural Equipment	Tillers > 6 HP	4 Stroke	VOC	0.007922	0.007860	0.007550	0.006006
2265005045	Agricultural Equipment	Swathers	4 Stroke	VOC	0.000975	0.000978	0.000868	0.000531
2265005055	Agricultural Equipment	Other Agricultural Equipment	4 Stroke	VOC	0.001537	0.001495	0.001287	0.000935
2265005060	Agricultural Equipment	Irrigation Sets	4 Stroke	VOC	0.001594	0.001492	0.000656	0.000207
2265006005	Commercial Equipment	Generator Sets	4 Stroke	VOC	0.048280	0.047580	0.042673	0.039672
2265006010	Commercial Equipment	Pumps	4 Stroke	VOC	0.013332	0.013617	0.008523	0.009551
2265006015	Commercial Equipment	Air Compressors	4 Stroke	VOC	0.005341	0.005356	0.003699	0.004111
2265006025	Commercial Equipment	Welders	4 Stroke	VOC	0.008497	0.007955	0.007544	0.008363
2265006030	Commercial Equipment	Pressure Washers	4 Stroke	VOC	0.023930	0.024215	0.018297	0.018207
2265006035	Commercial Equipment	Hydro Power Units	4 Stroke	VOC	0.000833	0.000808	0.000661	0.000776
2265007010	Logging Equipment	Shredders > 6 HP	4 Stroke	VOC	0.001654	0.001601	0.001484	0.001287
2265007015	Logging Equipment	Forest Eqp - Feller/Bunch/Skidder	4 Stroke	VOC	0.000026	0.000028	0.000015	0.000019
2265008005	Airport Equipment	Airport Ground Support Equipment	4 Stroke	VOC	0.000000	0.000000	0.000000	0.000000
2265010010	Industrial Equipment	Other Oil Field Equipment	4 Stroke	VOC	0.004951	0.004213	0.003824	0.003919
2267001060	Recreational Equipment	Specialty Vehicle Carts	LPG	VOC	0.000087	0.000086	0.000073	0.000048
2267002003	Construction and Mining Equipment	Pavers	LPG	VOC	0.000019	0.000018	0.000011	0.000002
2267002015	Construction and Mining Equipment	Rollers	LPG	VOC	0.000032	0.000029	0.000013	0.000002
2267002021	Construction and Mining Equipment	Paving Equipment	LPG	VOC	0.000005	0.000005	0.000004	0.000001
2267002024	Construction and Mining Equipment	Surfacing Equipment	LPG	VOC	0.000003	0.000003	0.000002	0.000000
2267002030	Construction and Mining Equipment	Trenchers	LPG	VOC	0.000057	0.000055	0.000034	0.000007
2267002033	Construction and Mining Equipment	Bore/Drill Rigs	LPG	VOC	0.000019	0.000019	0.000016	0.000011
2267002039	Construction and Mining Equipment	Concrete/Industrial Saws	LPG	VOC	0.000055	0.000050	0.000015	0.000003
2267002045	Construction and Mining Equipment	Cranes	LPG	VOC	0.000020	0.000020	0.000016	0.000006
2267002054	Construction and Mining Equipment	Crushing/Proc. Equipment	LPG	VOC	0.000003	0.000003	0.000003	0.000001
2267002057	Construction and Mining Equipment	Rough Terrain Forklifts	LPG	VOC	0.000036	0.000035	0.000024	0.000005
2267002060	Construction and Mining Equipment	Rubber Tire Loaders	LPG	VOC	0.000091	0.000087	0.000049	0.000007
2267002066	Construction and Mining Equipment	Tractors/Loaders/Backhoes	LPG	VOC	0.000010	0.000009	0.000004	0.000001
2267002072	Construction and Mining Equipment	Skid Steer Loaders	LPG	VOC	0.000074	0.000073	0.000054	0.000020
2267002081	Construction and Mining Equipment	Other Construction Equipment	LPG	VOC	0.000030	0.000030	0.000024	0.000011
2267003010	Industrial Equipment	Aerial Lifts	LPG	VOC	0.001188	0.001195	0.000963	0.000447
2267003020	Industrial Equipment	Forklifts	LPG	VOC	0.113338	0.110137	0.063653	0.009033
2267003030	Industrial Equipment	Sweepers/Scrubbers	LPG	VOC	0.000873	0.000816	0.000329	0.000060
2267003040	Industrial Equipment	Other General Industrial Equipm	LPG	VOC	0.000265	0.000253	0.000125	0.000019
2267003050	Industrial Equipment	Other Material Handling Equipment	LPG	VOC	0.000064	0.000064	0.000051	0.000018
2267003070	Industrial Equipment	Terminal Tractors	LPG	VOC	0.000534	0.000488	0.000135	0.000033
2267004066	Lawn and Garden Equipment (Com)	Chippers/Stump Grinders	LPG	VOC	0.001386	0.001312	0.000666	0.000092
2267005055	Agricultural Equipment	Other Agricultural Equipment	LPG	VOC	0.000006	0.000005	0.000005	0.000003
2267005060	Agricultural Equipment	Irrigation Sets	LPG	VOC	0.000005	0.000004	0.000002	0.000000
2267006005	Commercial Equipment	Generator Sets	LPG	VOC	0.000973	0.001025	0.000951	0.000687
2267006010	Commercial Equipment	Pumps	LPG	VOC	0.000229	0.000236	0.000185	0.000087
2267006015	Commercial Equipment	Air Compressors	LPG	VOC	0.000279	0.000283	0.000194	0.000048
2267006025	Commercial Equipment	Welders	LPG	VOC	0.000452	0.000466	0.000344	0.000076
2267006030	Commercial Equipment	Pressure Washers	LPG	VOC	0.000006	0.000006	0.000005	0.000003
2267006035	Commercial Equipment	Hydro Power Units	LPG	VOC	0.000004	0.000004	0.000002	0.000001
2267008005	Airport Equipment	Airport Ground Support Equipment	LPG	VOC	0.000000	0.000000	0.000000	0.000000
2268002081	Construction and Mining Equipment	Other Construction Equipment	CNG	VOC	0.000000	0.000000	0.000000	0.000000
2268003020	Industrial Equipment	Forklifts	CNG	VOC	0.000487	0.000469	0.000269	0.000039
2268003030	Industrial Equipment	Sweepers/Scrubbers	CNG	VOC	0.000001	0.000001	0.000000	0.000000
2268003040	Industrial Equipment	Other General Industrial Equipment	CNG	VOC	0.000000	0.000000	0.000000	0.000000
2268003060	Industrial Equipment	AC\Refrigeration	CNG	VOC	0.000000	0.000000	0.000000	0.000000
2268003070	Industrial Equipment	Terminal Tractors	CNG	VOC	0.000002	0.000002	0.000001	0.000000
2268005055	Agricultural Equipment	Other Agricultural Equipment	CNG	VOC	0.000000	0.000000	0.000000	0.000000
2268005060	Agricultural Equipment	Irrigation Sets	CNG	VOC	0.000032	0.000019	0.000002	0.000000
2268006005	Commercial Equipment	Generator Sets	CNG	VOC	0.000019	0.000019	0.000017	0.000012
2268006010	Commercial Equipment	Pumps	CNG	VOC	0.000001	0.000001	0.000001	0.000000
2268006015	Commercial Equipment	Air Compressors	CNG	VOC	0.000001	0.000001	0.000001	0.000000
2268006020	Commercial Equipment	Gas Compressors	CNG	VOC	0.000072	0.000028	0.000004	0.000005
2268006035	Commercial Equipment	Hydro Power Units	CNG	VOC	0.000000	0.000000	0.000000	0.000000
2268010010	Industrial Equipment	Other Oil Field Equipment	CNG	VOC	0.000128	0.000094	0.000010	0.000006
2270001060	Recreational Equipment	Specialty Vehicle Carts	Diesel	VOC	0.001062	0.001032	0.000906	0.000589
2270002003	Construction and Mining Equipment	Pavers	Diesel	VOC	0.000533	0.000480	0.000372	0.000215
2270002006	Construction and Mining Equipment	Tampers/Rammers	Diesel	VOC	0.000002	0.000002	0.000002	0.000001
2270002009	Construction and Mining Equipment	Plate Compactors	Diesel	VOC	0.000033	0.000032	0.000025	0.000019
2270002015	Construction and Mining Equipment	Rollers	Diesel	VOC	0.001511	0.001347	0.001009	0.000581
2270002018	Construction and Mining Equipment	Scrapers	Diesel	VOC	0.001109	0.000990	0.000735	0.000562
2270002021	Construction and Mining Equipment	Paving Equipment	Diesel	VOC	0.000097	0.000090	0.000068	0.000041
2270002024	Construction and Mining Equipment	Surfacing Equipment	Diesel	VOC	0.000067	0.000061	0.000046	0.000029

**Appendix D-2: Crawford County Daily Nonroad Emission by SCC
Tons per Day**

SCC	Classification	Equipment Type	Engine Type	Pollutant Code	2002 Emissions	2004 Emissions	2009 Emissions	2018 Emissions
2270002027	Construction and Mining Equipment	Signal Boards/Light Plants	Diesel	VOC	0.000327	0.000295	0.000198	0.000134
2270002030	Construction and Mining Equipment	Trenchers	Diesel	VOC	0.000900	0.000810	0.000586	0.000320
2270002033	Construction and Mining Equipment	Bore/Drill Rigs	Diesel	VOC	0.000706	0.000679	0.000584	0.000400
2270002036	Construction and Mining Equipment	Excavators	Diesel	VOC	0.004376	0.003931	0.003201	0.002001
2270002039	Construction and Mining Equipment	Concrete/Industrial Saws	Diesel	VOC	0.000072	0.000063	0.000043	0.000024
2270002042	Construction and Mining Equipment	Cement & Mortar Mixers	Diesel	VOC	0.000034	0.000033	0.000030	0.000022
2270002045	Construction and Mining Equipment	Cranes	Diesel	VOC	0.001140	0.001047	0.000821	0.000533
2270002048	Construction and Mining Equipment	Graders	Diesel	VOC	0.001090	0.000978	0.000806	0.000508
2270002051	Construction and Mining Equipment	Off-highway Trucks	Diesel	VOC	0.003771	0.003258	0.002333	0.002043
2270002054	Construction and Mining Equipment	Crushing/Proc. Equipment	Diesel	VOC	0.000232	0.000213	0.000162	0.000099
2270002057	Construction and Mining Equipment	Rough Terrain Forklifts	Diesel	VOC	0.002173	0.002009	0.001513	0.000820
2270002060	Construction and Mining Equipment	Rubber Tire Loaders	Diesel	VOC	0.005439	0.005062	0.003998	0.002618
2270002066	Construction and Mining Equipment	Tractors/Loaders/Backhoes	Diesel	VOC	0.009390	0.009144	0.007997	0.004568
2270002069	Construction and Mining Equipment	Crawler Tractor/Dozers	Diesel	VOC	0.004726	0.004244	0.003262	0.002190
2270002072	Construction and Mining Equipment	Skid Steer Loaders	Diesel	VOC	0.009066	0.008713	0.007289	0.004221
2270002075	Construction and Mining Equipment	Off-Highway Tractors	Diesel	VOC	0.000639	0.000568	0.000404	0.000281
2270002078	Construction and Mining Equipment	Dumpers/Tenders	Diesel	VOC	0.000028	0.000027	0.000024	0.000015
2270002081	Construction and Mining Equipment	Other Construction Equipment	Diesel	VOC	0.000597	0.000550	0.000433	0.000278
2270003010	Industrial Equipment	Aerial Lifts	Diesel	VOC	0.001352	0.001337	0.001217	0.000809
2270003020	Industrial Equipment	Forklifts	Diesel	VOC	0.004773	0.004541	0.003477	0.001849
2270003030	Industrial Equipment	Sweepers/Scrubbers	Diesel	VOC	0.002469	0.002193	0.001723	0.000987
2270003040	Industrial Equipment	Other General Industrial Eqp	Diesel	VOC	0.002672	0.002517	0.001977	0.001207
2270003050	Industrial Equipment	Other Material Handling Eqp	Diesel	VOC	0.000252	0.000247	0.000222	0.000147
2270003060	Industrial Equipment	AC\Refrigeration	Diesel	VOC	0.004684	0.003981	0.002914	0.001567
2270003070	Industrial Equipment	Terminal Tractors	Diesel	VOC	0.002615	0.002492	0.002101	0.001258
2270004031	Lawn and Garden Equipment (Com)	Leafblowers/Vacuums	Diesel	VOC	0.000001	0.000001	0.000001	0.000001
2270004036	Lawn and Garden Equipment (Com)	Snowblowers	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
2270004046	Lawn and Garden Equipment (Com)	Front Mowers	Diesel	VOC	0.004550	0.004323	0.003375	0.002294
2270004056	Lawn and Garden Equipment (Com)	Lawn & Garden Tractors	Diesel	VOC	0.001008	0.000942	0.000699	0.000580
2270004066	Lawn and Garden Equipment (Com)	Chippers/Stump Grinders	Diesel	VOC	0.003900	0.003903	0.003651	0.002742
2270004071	Lawn and Garden Equipment (Com)	Commercial Turf Equipment	Diesel	VOC	0.000470	0.000391	0.000294	0.000199
2270004076	Lawn and Garden Equipment (Com)	Other Lawn & Garden Eqp.	Diesel	VOC	0.000014	0.000014	0.000013	0.000010
2270005010	Agricultural Equipment	2-Wheel Tractors	Diesel	VOC	0.000003	0.000003	0.000002	0.000002
2270005015	Agricultural Equipment	Agricultural Tractors	Diesel	VOC	0.098744	0.088809	0.067768	0.039887
2270005020	Agricultural Equipment	Combines	Diesel	VOC	0.007191	0.007028	0.006289	0.004481
2270005025	Agricultural Equipment	Balers	Diesel	VOC	0.000073	0.000069	0.000056	0.000035
2270005030	Agricultural Equipment	Agricultural Mowers	Diesel	VOC	0.000012	0.000011	0.000009	0.000006
2270005035	Agricultural Equipment	Sprayers	Diesel	VOC	0.001049	0.000976	0.000763	0.000450
2270005040	Agricultural Equipment	Tillers > 6 HP	Diesel	VOC	0.000001	0.000001	0.000001	0.000001
2270005045	Agricultural Equipment	Swathers	Diesel	VOC	0.000647	0.000643	0.000600	0.000434
2270005055	Agricultural Equipment	Other Agricultural Equipment	Diesel	VOC	0.002201	0.002021	0.001535	0.000921
2270005060	Agricultural Equipment	Irrigation Sets	Diesel	VOC	0.001355	0.001230	0.000918	0.000504
2270006005	Commercial Equipment	Generator Sets	Diesel	VOC	0.003166	0.003096	0.002736	0.001851
2270006010	Commercial Equipment	Pumps	Diesel	VOC	0.000696	0.000685	0.000613	0.000437
2270006015	Commercial Equipment	Air Compressors	Diesel	VOC	0.001570	0.001487	0.001181	0.000677
2270006020	Commercial Equipment	Gas Compressors	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
2270006025	Commercial Equipment	Welders	Diesel	VOC	0.002389	0.002330	0.002006	0.001112
2270006030	Commercial Equipment	Pressure Washers	Diesel	VOC	0.000100	0.000098	0.000090	0.000067
2270006035	Commercial Equipment	Hydro Power Units	Diesel	VOC	0.000073	0.000068	0.000052	0.000031
2270007010	Logging Equipment	Shredders > 6 HP	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
2270007015	Logging Equipment	Forest Eqp - Feller/Bunch/Skidder	Diesel	VOC	0.001351	0.001176	0.000837	0.000401
2270008005	Airport Equipment	Airport Ground Support Equipment	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
2270009010	Construction and Mining Equipment	Other Underground Mining Equipment	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
2270010010	Industrial Equipment	Other Oil Field Equipment	Diesel	VOC	0.001697	0.001450	0.000947	0.000545
2275000000	Aircraft	All Aircraft Types and Operations	Other	VOC	0.010107	0.006367	0.006266	0.005660
2275070000	Aircraft	Auxiliary Power Units	Other	VOC	0.000000	0.000000	0.000000	0.000000
2280000000	Marine Vessels	Commercial	All Fuels	VOC	0.000000	0.000000	0.000000	0.000000
2280001000	Marine Vessels	Commercial	Coal	VOC	0.000000	0.000000	0.000000	0.000000
2280002000	Marine Vessels	Commercial	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
2280003000	Marine Vessels	Commercial	Residual Fuel	VOC	0.000000	0.000000	0.000000	0.000000
2280004000	Marine Vessels	Commercial	Gasoline	VOC	0.000000	0.000000	0.000000	0.000000
2282005010	Pleasure Craft	Outboard	2 Stroke	VOC	2.291924	2.154100	1.771369	1.055348
2282005015	Pleasure Craft	Personal Water Craft	2 Stroke	VOC	0.734443	0.657897	0.443992	0.286324
2282010005	Pleasure Craft	Inboard/Sterndrive	4 Stroke	VOC	0.209699	0.210452	0.211027	0.129997
2282020005	Pleasure Craft	Inboard/Sterndrive	Diesel	VOC	0.003559	0.003745	0.003887	0.003844
2282020010	Pleasure Craft	Outboards	Diesel	VOC	0.000089	0.000085	0.000071	0.000042
2285002005	Railroad Equipment	Line Haul Locomotives	Diesel	VOC	0.019975	0.020620	0.019609	0.019735
2285002010	Railroad Equipment	Yard Locomotive	Diesel	VOC	0.000000	0.000000	0.000000	0.000000
2285002015	Railroad Equipment	Railway Maintenance	Diesel	VOC	0.000031	0.000031	0.000028	0.000018
2285004015	Railroad Equipment	Railway Maintenance	4 Stroke	VOC	0.000011	0.000010	0.000007	0.000007
2285006015	Railroad Equipment	Railway Maintenance	LPG	VOC	0.000000	0.000000	0.000000	0.000000
Crawford County Total Summer Day VOC Emissions					5.865689	5.620305	4.625983	3.120465

**Appendix D-2: Crawford County Daily Nonroad Emission by SCC
Tons per Day**

SCC	Classification	Equipment Type	Engine Type	Pollutant Code	2002 Emissions	2004 Emissions	2009 Emissions	2018 Emissions
2260001010	Recreational Equipment	Motorcycles: Off-Road	2 Stroke	CO	0.244429	0.283819	0.358146	0.382043
2260001020	Recreational Equipment	Snowmobiles	2 Stroke	CO	0.000000	0.000000	0.000000	0.000000
2260001030	Recreational Equipment	ATVs	2 Stroke	CO	0.240998	0.332790	0.507279	0.581844
2260001060	Recreational Equipment	Specialty Vehicles/Carts	2 Stroke	CO	0.155598	0.159860	0.173622	0.186202
2260002006	Construction and Mining Equipment	Tampers/Rammers	2 Stroke	CO	0.013270	0.013133	0.010982	0.011192
2260002009	Construction and Mining Equipment	Plate Compactors	2 Stroke	CO	0.000640	0.000517	0.000410	0.000420
2260002021	Construction and Mining Equipment	Paving Equipment	2 Stroke	CO	0.000768	0.000615	0.000494	0.000506
2260002027	Construction and Mining Equipment	Signal Boards/Light Plants	2 Stroke	CO	0.000006	0.000004	0.000004	0.000004
2260002039	Construction and Mining Equipment	Concrete/Industrial Saws	2 Stroke	CO	0.035065	0.033052	0.028450	0.029150
2260002054	Construction and Mining Equipment	Crushing/Proc. Equipment	2 Stroke	CO	0.000150	0.000118	0.000101	0.000103
2260003030	Industrial Equipment	Sweepers/Scrubbers	2 Stroke	CO	0.001107	0.000773	0.000471	0.000167
2260003040	Industrial Equipment	Other General Industrial Eqp	2 Stroke	CO	0.000088	0.000062	0.000038	0.000013
2260004015	Lawn and Garden Equipment (Res)	Rotary Tillers < 6 HP	2 Stroke	CO	0.004702	0.004281	0.003199	0.003405
2260004016	Lawn and Garden Equipment (Com)	Rotary Tillers < 6 HP	2 Stroke	CO	0.044036	0.040057	0.029830	0.033633
2260004020	Lawn and Garden Equipment (Res)	Chain Saws < 6 HP	2 Stroke	CO	0.038394	0.035103	0.026727	0.030281
2260004021	Lawn and Garden Equipment (Com)	Chain Saws < 6 HP	2 Stroke	CO	0.405442	0.395808	0.365428	0.425763
2260004025	Lawn and Garden Equipment (Res)	Trimmers/Edgers/Brush Cutter	2 Stroke	CO	0.088488	0.079393	0.055219	0.062025
2260004026	Lawn and Garden Equipment (Com)	Trimmers/Edgers/Brush Cutter	2 Stroke	CO	0.437678	0.385707	0.319318	0.371756
2260004030	Lawn and Garden Equipment (Res)	Leafblowers/Vacuums	2 Stroke	CO	0.055224	0.050281	0.037429	0.042342
2260004031	Lawn and Garden Equipment (Com)	Leafblowers/Vacuums	2 Stroke	CO	0.441376	0.414388	0.356514	0.414261
2260004035	Lawn and Garden Equipment (Res)	Snowblowers	2 Stroke	CO	0.000000	0.000000	0.000000	0.000000
2260004036	Lawn and Garden Equipment (Com)	Snowblowers	2 Stroke	CO	0.000000	0.000000	0.000000	0.000000
2260004071	Lawn and Garden Equipment (Com)	Commercial Turf Equipment	2 Stroke	CO	0.000180	0.000157	0.000127	0.000148
2260005035	Agricultural Equipment	Sprayers	2 Stroke	CO	0.003835	0.003239	0.002246	0.002534
2260006005	Commercial Equipment	Generator Sets	2 Stroke	CO	0.004745	0.004092	0.003607	0.004473
2260006010	Commercial Equipment	Pumps	2 Stroke	CO	0.033415	0.026522	0.023702	0.029001
2260006015	Commercial Equipment	Air Compressors	2 Stroke	CO	0.000012	0.000010	0.000010	0.000013
2260006035	Commercial Equipment	Hydro Power Units	2 Stroke	CO	0.000192	0.000160	0.000157	0.000195
2260007005	Logging Equipment	Chain Saws > 6 HP	2 Stroke	CO	0.022244	0.022989	0.022666	0.028706
2265001010	Recreational Equipment	Motorcycles: Off-Road	4 Stroke	CO	0.108661	0.126329	0.151427	0.138740
2265001030	Recreational Equipment	ATVs	4 Stroke	CO	0.979536	1.185225	1.607972	1.821103
2265001050	Recreational Equipment	Golf Carts	4 Stroke	CO	2.430204	2.532755	2.666900	2.754908
2265001060	Recreational Equipment	Specialty Vehicles/Carts	4 Stroke	CO	0.136918	0.137492	0.139880	0.143378
2265002003	Construction and Mining Equipment	Pavers	4 Stroke	CO	0.011870	0.012198	0.012236	0.011741
2265002006	Construction and Mining Equipment	Tampers/Rammers	4 Stroke	CO	0.000094	0.000096	0.000102	0.000102
2265002009	Construction and Mining Equipment	Plate Compactors	4 Stroke	CO	0.021921	0.022236	0.022710	0.022486
2265002015	Construction and Mining Equipment	Rollers	4 Stroke	CO	0.022248	0.022806	0.022686	0.022009
2265002021	Construction and Mining Equipment	Paving Equipment	4 Stroke	CO	0.042920	0.043715	0.045372	0.045122
2265002024	Construction and Mining Equipment	Surfacing Equipment	4 Stroke	CO	0.019454	0.020021	0.020499	0.020287
2265002027	Construction and Mining Equipment	Signal Boards/Light Plants	4 Stroke	CO	0.000990	0.001014	0.001032	0.001024
2265002030	Construction and Mining Equipment	Trenchers	4 Stroke	CO	0.036383	0.037213	0.037063	0.035486
2265002033	Construction and Mining Equipment	Bore/Drill Rigs	4 Stroke	CO	0.010719	0.010764	0.010672	0.010258
2265002039	Construction and Mining Equipment	Concrete/Industrial Saws	4 Stroke	CO	0.089847	0.092305	0.093212	0.091988
2265002042	Construction and Mining Equipment	Cement & Mortar Mixers	4 Stroke	CO	0.037580	0.037430	0.038602	0.038789
2265002045	Construction and Mining Equipment	Cranes	4 Stroke	CO	0.001504	0.001488	0.001278	0.000792
2265002054	Construction and Mining Equipment	Crushing/Proc. Equipment	4 Stroke	CO	0.005276	0.005433	0.005544	0.005421
2265002057	Construction and Mining Equipment	Rough Terrain Forklifts	4 Stroke	CO	0.001963	0.001879	0.001296	0.000371
2265002060	Construction and Mining Equipment	Rubber Tire Loaders	4 Stroke	CO	0.004707	0.004414	0.002475	0.000433
2265002066	Construction and Mining Equipment	Tractors/Loaders/Backhoes	4 Stroke	CO	0.028294	0.029230	0.030005	0.029611
2265002072	Construction and Mining Equipment	Skid Steer Loaders	4 Stroke	CO	0.012517	0.012623	0.012128	0.010395
2265002078	Construction and Mining Equipment	Dumpers/Tenders	4 Stroke	CO	0.005852	0.005827	0.006004	0.006046
2265002081	Construction and Mining Equipment	Other Construction Equipment	4 Stroke	CO	0.001650	0.001603	0.001275	0.000575
2265003010	Industrial Equipment	Aerial Lifts	4 Stroke	CO	0.107011	0.096236	0.067067	0.021863
2265003020	Industrial Equipment	Forklifts	4 Stroke	CO	0.241903	0.206892	0.096113	0.006422
2265003030	Industrial Equipment	Sweepers/Scrubbers	4 Stroke	CO	0.103987	0.092299	0.054712	0.016296
2265003040	Industrial Equipment	Other General Industrial Eqp	4 Stroke	CO	0.265283	0.240413	0.166964	0.056338
2265003050	Industrial Equipment	Other Material Handling Eqp	4 Stroke	CO	0.008181	0.007423	0.005190	0.001584
2265003060	Industrial Equipment	AC/Refrigeration	4 Stroke	CO	0.002930	0.002721	0.001992	0.000691
2265003070	Industrial Equipment	Terminal Tractors	4 Stroke	CO	0.025121	0.020311	0.004472	0.000427
2265004010	Lawn and Garden Equipment (Res)	Lawn mowers	4 Stroke	CO	0.924438	0.957774	1.042709	1.154905
2265004011	Lawn and Garden Equipment (Com)	Lawn mowers	4 Stroke	CO	1.564836	1.630916	1.753366	1.969641
2265004015	Lawn and Garden Equipment (Res)	Rotary Tillers < 6 HP	4 Stroke	CO	0.077869	0.080582	0.087583	0.096831
2265004016	Lawn and Garden Equipment (Com)	Rotary Tillers < 6 HP	4 Stroke	CO	0.762358	0.793497	0.864496	0.960687
2265004025	Lawn and Garden Equipment (Res)	Trimmers/Edgers/Brush Cutter	4 Stroke	CO	0.005192	0.005395	0.005867	0.006511
2265004026	Lawn and Garden Equipment (Com)	Trimmers/Edgers/Brush Cutter	4 Stroke	CO	0.038861	0.041194	0.045387	0.051057
2265004030	Lawn and Garden Equipment (Res)	Leafblowers/Vacuums	4 Stroke	CO	0.009924	0.010312	0.011205	0.012425
2265004031	Lawn and Garden Equipment (Com)	Leafblowers/Vacuums	4 Stroke	CO	1.555339	1.665360	1.827062	1.984258
2265004035	Lawn and Garden Equipment (Res)	Snowblowers	4 Stroke	CO	0.000000	0.000000	0.000000	0.000000
2265004036	Lawn and Garden Equipment (Com)	Snowblowers	4 Stroke	CO	0.000000	0.000000	0.000000	0.000000
2265004040	Lawn and Garden Equipment (Res)	Rear Engine Riding Mowers	4 Stroke	CO	0.217406	0.228319	0.260843	0.296789
2265004041	Lawn and Garden Equipment (Com)	Rear Engine Riding Mowers	4 Stroke	CO	0.201380	0.216043	0.243981	0.275561
2265004046	Lawn and Garden Equipment (Com)	Front Mowers	4 Stroke	CO	0.217472	0.224921	0.253014	0.291343
2265004051	Lawn and Garden Equipment (Com)	Shredders < 6 HP	4 Stroke	CO	0.087358	0.090861	0.099089	0.109986
2265004055	Lawn and Garden Equipment (Res)	Lawn & Garden Tractors	4 Stroke	CO	2.890645	3.038305	3.495643	3.983202
2265004056	Lawn and Garden Equipment (Com)	Lawn & Garden Tractors	4 Stroke	CO	2.708581	2.922397	3.316929	3.746387
2265004066	Lawn and Garden Equipment (Com)	Chippers/Stump Grinders	4 Stroke	CO	0.359712	0.377051	0.380138	0.392764

**Appendix D-2: Crawford County Daily Nonroad Emission by SCC
Tons per Day**

SCC	Classification	Equipment Type	Engine Type	Pollutant Code	2002 Emissions	2004 Emissions	2009 Emissions	2018 Emissions
2265004071	Lawn and Garden Equipment (Com)	Commercial Turf Equipment	4 Stroke	CO	8.378139	8.831636	9.595908	10.783548
2265004075	Lawn and Garden Equipment (Res)	Other Lawn & Garden Eqp.	4 Stroke	CO	0.094355	0.097638	0.106915	0.121445
2265004076	Lawn and Garden Equipment (Com)	Other Lawn & Garden Eqp.	4 Stroke	CO	0.236866	0.245099	0.268309	0.304609
2265005010	Agricultural Equipment	2-Wheel Tractors	4 Stroke	CO	0.013714	0.014673	0.016266	0.017848
2265005015	Agricultural Equipment	Agricultural Tractors	4 Stroke	CO	0.027739	0.027866	0.022654	0.016218
2265005020	Agricultural Equipment	Combines	4 Stroke	CO	0.000133	0.000134	0.000121	0.000082
2265005025	Agricultural Equipment	Balers	4 Stroke	CO	0.012609	0.012672	0.011394	0.007791
2265005030	Agricultural Equipment	Agricultural Mowers	4 Stroke	CO	0.010665	0.011090	0.012422	0.013781
2265005035	Agricultural Equipment	Sprayers	4 Stroke	CO	0.091282	0.093430	0.099122	0.105339
2265005040	Agricultural Equipment	Tillers > 6 HP	4 Stroke	CO	0.226983	0.232798	0.248211	0.269912
2265005045	Agricultural Equipment	Swathers	4 Stroke	CO	0.019971	0.020072	0.018047	0.012340
2265005055	Agricultural Equipment	Other Agricultural Equipment	4 Stroke	CO	0.041436	0.042217	0.042287	0.038742
2265005060	Agricultural Equipment	Irrigation Sets	4 Stroke	CO	0.038869	0.037177	0.020380	0.007887
2265006005	Commercial Equipment	Generator Sets	4 Stroke	CO	1.377320	1.474576	1.752205	2.128673
2265006010	Commercial Equipment	Pumps	4 Stroke	CO	0.318263	0.344045	0.394273	0.467818
2265006015	Commercial Equipment	Air Compressors	4 Stroke	CO	0.158098	0.170625	0.192381	0.222759
2265006025	Commercial Equipment	Welders	4 Stroke	CO	0.397185	0.433119	0.500240	0.585889
2265006030	Commercial Equipment	Pressure Washers	4 Stroke	CO	0.603217	0.652203	0.768034	0.923172
2265006035	Commercial Equipment	Hydro Power Units	4 Stroke	CO	0.030525	0.033365	0.039085	0.046881
2265007010	Logging Equipment	Shredders > 6 HP	4 Stroke	CO	0.049411	0.052604	0.062508	0.078971
2265007015	Logging Equipment	Forest Eqp - Feller/Bunch/Skidder	4 Stroke	CO	0.000589	0.000640	0.000745	0.000915
2265008005	Airport Equipment	Airport Ground Support Equipment	4 Stroke	CO	0.000000	0.000000	0.000000	0.000000
2265010010	Industrial Equipment	Other Oil Field Equipment	4 Stroke	CO	0.326306	0.333923	0.337966	0.331303
2267001060	Recreational Equipment	Specialty Vehicle Carts	LPG	CO	0.001285	0.001298	0.001195	0.000849
2267002003	Construction and Mining Equipment	Pavers	LPG	CO	0.000276	0.000284	0.000218	0.000061
2267002015	Construction and Mining Equipment	Rollers	LPG	CO	0.000470	0.000480	0.000305	0.000069
2267002021	Construction and Mining Equipment	Paving Equipment	LPG	CO	0.000072	0.000074	0.000067	0.000034
2267002024	Construction and Mining Equipment	Surfacing Equipment	LPG	CO	0.000048	0.000049	0.000036	0.000010
2267002030	Construction and Mining Equipment	Trenchers	LPG	CO	0.000846	0.000870	0.000682	0.000190
2267002033	Construction and Mining Equipment	Bore/Drill Rigs	LPG	CO	0.000273	0.000283	0.000271	0.000198
2267002039	Construction and Mining Equipment	Concrete/Industrial Saws	LPG	CO	0.000824	0.000837	0.000421	0.000107
2267002045	Construction and Mining Equipment	Cranes	LPG	CO	0.000295	0.000305	0.000273	0.000137
2267002054	Construction and Mining Equipment	Crushing/Proc. Equipment	LPG	CO	0.000049	0.000051	0.000045	0.000021
2267002057	Construction and Mining Equipment	Rough Terrain Forklifts	LPG	CO	0.000536	0.000552	0.000457	0.000136
2267002060	Construction and Mining Equipment	Rubber Tire Loaders	LPG	CO	0.001343	0.001379	0.001034	0.000221
2267002066	Construction and Mining Equipment	Tractors/Loaders/Backhoes	LPG	CO	0.000143	0.000147	0.000100	0.000020
2267002072	Construction and Mining Equipment	Skid Steer Loaders	LPG	CO	0.001097	0.001132	0.000978	0.000456
2267002081	Construction and Mining Equipment	Other Construction Equipment	LPG	CO	0.000439	0.000454	0.000414	0.000231
2267003010	Industrial Equipment	Aerial Lifts	LPG	CO	0.017508	0.018414	0.016959	0.009419
2267003020	Industrial Equipment	Forklifts	LPG	CO	1.677195	1.753042	1.655623	0.305878
2267003030	Industrial Equipment	Sweepers/Scrubbers	LPG	CO	0.012957	0.013452	0.008389	0.002063
2267003040	Industrial Equipment	Other General Industrial Equipm	LPG	CO	0.003929	0.004093	0.002873	0.000651
2267003050	Industrial Equipment	Other Material Handling Equipment	LPG	CO	0.000947	0.000996	0.000910	0.000438
2267003070	Industrial Equipment	Terminal Tractors	LPG	CO	0.007938	0.008210	0.004397	0.001126
2267004066	Lawn and Garden Equipment (Com)	Chippers/Stump Grinders	LPG	CO	0.020534	0.021068	0.014920	0.003188
2267005055	Agricultural Equipment	Other Agricultural Equipment	LPG	CO	0.000081	0.000081	0.000073	0.000050
2267005060	Agricultural Equipment	Irrigation Sets	LPG	CO	0.000070	0.000068	0.000044	0.000007
2267006005	Commercial Equipment	Generator Sets	LPG	CO	0.012770	0.014199	0.015154	0.012762
2267006010	Commercial Equipment	Pumps	LPG	CO	0.003025	0.003351	0.003293	0.001966
2267006015	Commercial Equipment	Air Compressors	LPG	CO	0.003688	0.004077	0.003781	0.001493
2267006025	Commercial Equipment	Welders	LPG	CO	0.006656	0.007360	0.006757	0.002172
2267006030	Commercial Equipment	Pressure Washers	LPG	CO	0.000086	0.000096	0.000096	0.000058
2267006035	Commercial Equipment	Hydro Power Units	LPG	CO	0.000058	0.000063	0.000054	0.000021
2267008005	Airport Equipment	Airport Ground Support Equipment	LPG	CO	0.000000	0.000000	0.000000	0.000000
2268002081	Construction and Mining Equipment	Other Construction Equipment	CNG	CO	0.000017	0.000018	0.000016	0.000009
2268003020	Industrial Equipment	Forklifts	CNG	CO	0.122313	0.126425	0.096490	0.021147
2268003030	Industrial Equipment	Sweepers/Scrubbers	CNG	CO	0.000146	0.000151	0.000115	0.000025
2268003040	Industrial Equipment	Other General Industrial Equipment	CNG	CO	0.000096	0.000099	0.000073	0.000015
2268003060	Industrial Equipment	AC\Refrigeration	CNG	CO	0.000124	0.000128	0.000087	0.000021
2268003070	Industrial Equipment	Terminal Tractors	CNG	CO	0.000559	0.000572	0.000302	0.000075
2268005055	Agricultural Equipment	Other Agricultural Equipment	CNG	CO	0.000107	0.000088	0.000050	0.000014
2268005060	Agricultural Equipment	Irrigation Sets	CNG	CO	0.008218	0.004836	0.000558	0.000000
2268006005	Commercial Equipment	Generator Sets	CNG	CO	0.004240	0.004509	0.004548	0.003683
2268006010	Commercial Equipment	Pumps	CNG	CO	0.000215	0.000228	0.000217	0.000140
2268006015	Commercial Equipment	Air Compressors	CNG	CO	0.000311	0.000329	0.000289	0.000105
2268006020	Commercial Equipment	Gas Compressors	CNG	CO	0.018613	0.017517	0.002229	0.002786
2268006035	Commercial Equipment	Hydro Power Units	CNG	CO	0.000000	0.000000	0.000000	0.000000
2268010010	Industrial Equipment	Other Oil Field Equipment	CNG	CO	0.032518	0.030882	0.005979	0.003156
2270001060	Recreational Equipment	Specialty Vehicle Carts	Diesel	CO	0.003953	0.003853	0.003460	0.002287
2270002003	Construction and Mining Equipment	Pavers	Diesel	CO	0.002806	0.002464	0.002076	0.000899
2270002006	Construction and Mining Equipment	Tampers/Rammers	Diesel	CO	0.000007	0.000007	0.000008	0.000009
2270002009	Construction and Mining Equipment	Plate Compactors	Diesel	CO	0.000113	0.000114	0.000111	0.000119
2270002015	Construction and Mining Equipment	Rollers	Diesel	CO	0.008075	0.007299	0.006148	0.002973
2270002018	Construction and Mining Equipment	Scrapers	Diesel	CO	0.007297	0.006654	0.005584	0.002602
2270002021	Construction and Mining Equipment	Paving Equipment	Diesel	CO	0.000524	0.000481	0.000384	0.000213
2270002024	Construction and Mining Equipment	Surfacing Equipment	Diesel	CO	0.000395	0.000369	0.000305	0.000172

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SCC	Classification	Equipment Type	Engine Type	Pollutant Code	2002 Emissions	2004 Emissions	2009 Emissions	2018 Emissions
2270002027	Construction and Mining Equipment	Signal Boards/Light Plants	Diesel	CO	0.001032	0.000972	0.000780	0.000641
2270002030	Construction and Mining Equipment	Trenchers	Diesel	CO	0.004848	0.004539	0.003818	0.002028
2270002033	Construction and Mining Equipment	Bore/Drill Rigs	Diesel	CO	0.002912	0.002791	0.002436	0.001491
2270002036	Construction and Mining Equipment	Excavators	Diesel	CO	0.022401	0.018982	0.017190	0.005332
2270002039	Construction and Mining Equipment	Concrete/Industrial Saws	Diesel	CO	0.000375	0.000348	0.000288	0.000154
2270002042	Construction and Mining Equipment	Cement & Mortar Mixers	Diesel	CO	0.000129	0.000128	0.000124	0.000101
2270002045	Construction and Mining Equipment	Cranes	Diesel	CO	0.004090	0.003757	0.003081	0.001489
2270002048	Construction and Mining Equipment	Graders	Diesel	CO	0.005277	0.004323	0.003823	0.001338
2270002051	Construction and Mining Equipment	Off-highway Trucks	Diesel	CO	0.022889	0.019173	0.014149	0.002991
2270002054	Construction and Mining Equipment	Crushing/Proc. Equipment	Diesel	CO	0.000958	0.000882	0.000742	0.000396
2270002057	Construction and Mining Equipment	Rough Terrain Forklifts	Diesel	CO	0.012057	0.011330	0.009856	0.005340
2270002060	Construction and Mining Equipment	Rubber Tire Loaders	Diesel	CO	0.031015	0.028431	0.023351	0.001958
2270002066	Construction and Mining Equipment	Tractors/Loaders/Backhoes	Diesel	CO	0.037885	0.037503	0.035977	0.023354
2270002069	Construction and Mining Equipment	Crawler Tractor/Dozers	Diesel	CO	0.026542	0.023569	0.019933	0.008261
2270002072	Construction and Mining Equipment	Skid Steer Loaders	Diesel	CO	0.033131	0.032926	0.030943	0.021142
2270002075	Construction and Mining Equipment	Off-Highway Tractors	Diesel	CO	0.004022	0.003606	0.002765	0.001228
2270002078	Construction and Mining Equipment	Dumpers/Tenders	Diesel	CO	0.000095	0.000096	0.000094	0.000068
2270002081	Construction and Mining Equipment	Other Construction Equipment	Diesel	CO	0.003853	0.003558	0.002879	0.001523
2270003010	Industrial Equipment	Aerial Lifts	Diesel	CO	0.004649	0.004754	0.004789	0.003623
2270003020	Industrial Equipment	Forklifts	Diesel	CO	0.028235	0.028139	0.030017	0.005205
2270003030	Industrial Equipment	Sweepers/Scrubbers	Diesel	CO	0.008688	0.007692	0.007119	0.003053
2270003040	Industrial Equipment	Other General Industrial Eqp	Diesel	CO	0.009423	0.008859	0.007533	0.004242
2270003050	Industrial Equipment	Other Material Handling Eqp	Diesel	CO	0.000863	0.000858	0.000825	0.000568
2270003060	Industrial Equipment	AC\Refrigeration	Diesel	CO	0.017873	0.016602	0.016508	0.008563
2270003070	Industrial Equipment	Terminal Tractors	Diesel	CO	0.011940	0.010859	0.011269	0.002519
2270004031	Lawn and Garden Equipment (Com)	Leafblowers/Vacuums	Diesel	CO	0.000002	0.000002	0.000003	0.000003
2270004036	Lawn and Garden Equipment (Com)	Snowblowers	Diesel	CO	0.000000	0.000000	0.000000	0.000000
2270004046	Lawn and Garden Equipment (Com)	Front Mowers	Diesel	CO	0.014505	0.014385	0.013185	0.010674
2270004056	Lawn and Garden Equipment (Com)	Lawn & Garden Tractors	Diesel	CO	0.003170	0.003109	0.002750	0.002818
2270004066	Lawn and Garden Equipment (Com)	Chippers/Stump Grinders	Diesel	CO	0.015462	0.015580	0.015433	0.011121
2270004071	Lawn and Garden Equipment (Com)	Commercial Turf Equipment	Diesel	CO	0.001631	0.001455	0.001354	0.000748
2270004076	Lawn and Garden Equipment (Com)	Other Lawn & Garden Eqp.	Diesel	CO	0.000052	0.000053	0.000055	0.000048
2270005010	Agricultural Equipment	2-Wheel Tractors	Diesel	CO	0.000018	0.000018	0.000017	0.000014
2270005015	Agricultural Equipment	Agricultural Tractors	Diesel	CO	0.481864	0.444922	0.365397	0.199185
2270005020	Agricultural Equipment	Combines	Diesel	CO	0.030013	0.029560	0.028118	0.018438
2270005025	Agricultural Equipment	Balers	Diesel	CO	0.000250	0.000250	0.000243	0.000178
2270005030	Agricultural Equipment	Agricultural Mowers	Diesel	CO	0.000058	0.000057	0.000056	0.000041
2270005035	Agricultural Equipment	Sprayers	Diesel	CO	0.003380	0.003256	0.002906	0.001820
2270005040	Agricultural Equipment	Tillers > 6 HP	Diesel	CO	0.000007	0.000006	0.000005	0.000003
2270005045	Agricultural Equipment	Swathers	Diesel	CO	0.002887	0.002987	0.003213	0.002572
2270005055	Agricultural Equipment	Other Agricultural Equipment	Diesel	CO	0.009572	0.009018	0.007555	0.004267
2270005060	Agricultural Equipment	Irrigation Sets	Diesel	CO	0.004289	0.004090	0.003610	0.002110
2270006005	Commercial Equipment	Generator Sets	Diesel	CO	0.011176	0.011104	0.010619	0.007782
2270006010	Commercial Equipment	Pumps	Diesel	CO	0.002599	0.002593	0.002518	0.001928
2270006015	Commercial Equipment	Air Compressors	Diesel	CO	0.005929	0.005784	0.005476	0.003405
2270006020	Commercial Equipment	Gas Compressors	Diesel	CO	0.000000	0.000000	0.000000	0.000000
2270006025	Commercial Equipment	Welders	Diesel	CO	0.008798	0.008803	0.008245	0.005306
2270006030	Commercial Equipment	Pressure Washers	Diesel	CO	0.000337	0.000333	0.000317	0.000240
2270006035	Commercial Equipment	Hydro Power Units	Diesel	CO	0.000268	0.000259	0.000240	0.000155
2270007010	Logging Equipment	Shredders > 6 HP	Diesel	CO	0.000000	0.000000	0.000000	0.000000
2270007015	Logging Equipment	Forest Eqp - Feller/Bunch/Skidder	Diesel	CO	0.006391	0.005222	0.004297	0.000820
2270008005	Airport Equipment	Airport Ground Support Equipment	Diesel	CO	0.000000	0.000000	0.000000	0.000000
2270009010	Construction and Mining Equipment	Other Underground Mining Equipment	Diesel	CO	0.000000	0.000000	0.000000	0.000000
2270010010	Industrial Equipment	Other Oil Field Equipment	Diesel	CO	0.007007	0.005968	0.004118	0.001545
2275000000	Aircraft	All Aircraft Types and Operations	Other	CO	0.465458	0.293234	0.288584	0.260656
2275070000	Aircraft	Auxiliary Power Units	Other	CO	0.000000	0.000000	0.000000	0.000000
2280000000	Marine Vessels	Commercial	All Fuels	CO	0.000000	0.000000	0.000000	0.000000
2280001000	Marine Vessels	Commercial	Coal	CO	0.000000	0.000000	0.000000	0.000000
2280002000	Marine Vessels	Commercial	Diesel	CO	0.000000	0.000000	0.000000	0.000000
2280003000	Marine Vessels	Commercial	Residual Fuel	CO	0.000000	0.000000	0.000000	0.000000
2280004000	Marine Vessels	Commercial	Gasoline	CO	0.000000	0.000000	0.000000	0.000000
2282005010	Pleasure Craft	Outboard	2 Stroke	CO	3.976848	3.819632	3.363519	2.915985
2282005015	Pleasure Craft	Personal Water Craft	2 Stroke	CO	1.439158	1.398822	1.311787	1.302069
2282010005	Pleasure Craft	Inboard/Sterndrive	4 Stroke	CO	2.032674	1.986174	1.831327	1.506414
2282020005	Pleasure Craft	Inboard/Sterndrive	Diesel	CO	0.015049	0.015876	0.017937	0.021612
2282020010	Pleasure Craft	Outboards	Diesel	CO	0.000258	0.000252	0.000228	0.000172
2285002005	Railroad Equipment	Line Haul Locomotives	Diesel	CO	0.050896	0.052538	0.056878	0.065613
2285002010	Railroad Equipment	Yard Locomotive	Diesel	CO	0.000000	0.000000	0.000000	0.000000
2285002015	Railroad Equipment	Railway Maintenance	Diesel	CO	0.000134	0.000130	0.000119	0.000075
2285004015	Railroad Equipment	Railway Maintenance	4 Stroke	CO	0.000384	0.000402	0.000435	0.000459
2285006015	Railroad Equipment	Railway Maintenance	LPG	CO	0.000002	0.000002	0.000001	0.000001
Crawford County Total Summer Day CO Emissions					41.984439	43.216192	45.019527	46.621511