

US EPA ARCHIVE DOCUMENT



STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
NASHVILLE, TENNESSEE 37243-0435

ROBERT J. MARTINEAU, JR.  
COMMISSIONER

BILL HASLAM  
GOVERNOR

April 5, 2012

Gwendolyn Keyes Fleming  
Regional Administrator  
USEPA, Region IV  
Sam Nunn Atlanta Federal Center, 12<sup>th</sup> Floor  
61 Forsyth Street, SW  
Atlanta, GA 30303

RE: TDEC Follow-up to February 27, 2012 Ozone Designations Recommendation Letter

Dear Administrator Fleming:

Thank you for the opportunity to discuss our revised ozone nonattainment area designation recommendations (for the 2008 standard) with your staff on March 16 and April 2. Based on these discussions, we would like you to consider the additional information discussed below and in the attachments included with this letter.

For the Knoxville area, we were informed by your staff that the Knox County data from March 1, 2011 to June 23, 2011 may not be acceptable because the local program failed to activate the temperature sensors at the monitoring stations. Working closely with EPA staff, an in-depth 40 CFR Part 50 Appendix P data analysis was performed to create alternative data for your consideration. Please consider the data analysis for the 2011 Knox County data included in the letter from Barry Stephens to you dated April 5, 2012. This letter, without attachments, is included with this letter.

We recommend that the 2009-2011 monitoring data, with the Appendix P derived alternative Knox County data, be used for this area in your designations. Using this data, only the monitor located at Look Rock in Blount County exceeds the standard of 0.075 parts per million with a calculated design value of 0.077 parts per million. This is a high elevation site located within the Great Smoky Mountains National Park which we believe is predominately influenced by long range transport. Our recommendation for the Knoxville area is as follows:

***Knoxville Area:***

That portion of Blount County that contains the Great Smoky  
Mountains National Park – nonattainment  
Rest of Blount County – attainment  
Anderson, Cocke, Knox, Loudon, and Sevier Counties - attainment



Gwendolyn Keyes Fleming

April 5, 2012

Page 2 of 3

Tennessee has carefully evaluated the current and past monitoring data of the Knoxville area, and it is our opinion that the recommendation above is both legally defensible and environmentally sound. We refer to the 9-factor analysis contained in our correspondence dated February 27, 2012, and ask that you give this recommendation strong consideration. If however, you still deem this unacceptable, we ask that you consider the following two options, in order of preference: the partial Counties of Blount, Cocke & Sevier that comprise the Great Smoky Mountains National Park nonattainment, with the rest of Blount, Cocke and Sevier Counties attainment and Anderson, Knox, and Loudon Counties attainment; or Knox County and the partial counties of Blount, Cocke and Sevier that comprise the Great Smoky Mountains National Park nonattainment, with the rest of Blount, Cocke & Sevier Counties attainment and Anderson and Loudon Counties attainment.

If the Knox County 2011 data is still deemed unacceptable after your review of the jointly prepared Appendix P analysis of Knox County's 2011 data and 2008-2010 monitoring data must be used, we request that only Knox County be designated nonattainment (along with those areas listed above in the Great Smoky Mountains National Park) because only the Knox County data is inadequate, Knox County is the most urbanized and most populated county in the Metropolitan Statistical Area, and EPA expects to propose a new ozone standard in 2013. Blount County has lost approximately 450 high-paying manufacturing jobs from the shutdown of Alcoa's primary aluminum smelter, and it is essential that they have the ability to attract new industries to the site of the former smelter to regain some of those lost jobs. This is a prime industrial development site with approximately 4,000 MWH per day of clean energy available, and we have initiated discussions with your staff to examine the feasibility of an Economic Development Zone under Section 173(a)(1)(B) of the Clean Air Act (CAA).

If none of the recommendations presented above are acceptable, please consider the recommendation in Attachment 2. Based on 2008-2010 monitoring data, our recommendation is all of Knox County – nonattainment, Blount County – partial nonattainment and partial attainment, Anderson County – partial nonattainment and partial attainment, Loudon, Sevier, and Cocke Counties – attainment. For Blount County, we recommend that the area north of US Highway 411 be designated nonattainment, with the exception of the census tracts identified in Attachment 2 that include the Alcoa South property and the property between Alcoa South and Highway 411, and the portion of the Great Smoky Mountains National Park located in Blount County. We recommend that the remaining portion of Blount County, including the identified census tracts, be designated attainment. For Anderson County, we recommend that only the census tracts containing the TVA Bull Run facility be designated nonattainment, with the remainder of Anderson County attainment. See Attachment 2 for supporting information about the proposed boundaries in Anderson and Blount Counties.

For the Memphis area, we reiterate that the monitors in Shelby County demonstrate attainment with the 2008 standard based on 2009-2011 monitoring data and refer to our letter dated February 27, 2012. The Arkansas monitoring data for 2011 demonstrating



nonattainment of the standard has not yet been certified but has been quality assured and will be certified before official designations must be made. For this reason and the reasons outlined in our February 27, 2012 letter, we recommend that Shelby County be designated attainment with the 2008 ozone standard based on 2009-2011 monitoring data. As part of the NO<sub>x</sub> SIP Call, major NO<sub>x</sub> sources in Shelby County have already made significant NO<sub>x</sub> reductions. Two large power plants in the Arkansas counties to the west of Shelby County are not subject to the NO<sub>x</sub> SIP Call and have done little to help the area attain. If you still find that a full county designation of Shelby County as attainment is unacceptable, we request that you limit the nonattainment designation to the Memphis city limits; the city limits of Bartlett, Germantown, and Collierville; and the census tracts containing the Dupont and Atofina Chemicals facilities. (See Attachment 3) We also recommend that Fayette and Tipton County be designated attainment.

We appreciate the opportunity to provide input during this consultation process, and request you revise your initial determinations in accordance with this letter. We welcome the opportunity to discuss these issues in further detail with you at your earliest convenience before final designations are made. Your favorable review of these recommendations will be appreciated. If you should have further questions, please have your staff contact our air pollution control program director, Barry R. Stephens, P. E., at (615) 532-0525 or [Barry.Stephens@tn.gov](mailto:Barry.Stephens@tn.gov).

Sincerely,



Robert J. Martineau, Jr.  
Commissioner

RJM:cm

Enclosures:

40 CFR Part 50 Appendix P Data Analysis transmittal letter dated April 5, 2012  
Recommended Knoxville Nonattainment Area Boundaries  
Recommended Shelby County Nonattainment Area Boundaries

Copy (w/enclosures):

Stan Meiburg, EPA Region IV  
Beverly Banister, EPA Region IV  
Carol Kemker, EPA Region IV  
Scott R. Davis, EPA Region IV  
Lynorae Benjamin, EPA Region IV  
Lynne Liddington, Knox County Local Air Program  
Bob Rogers, Shelby County Local Air Program

**Attachment 1**  
**40 CFR Part 50 Appendix P Data**  
**Analysis Submittal Letter for Knox**  
**County**



STATE OF TENNESSEE  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
DIVISION OF AIR POLLUTION CONTROL  
9<sup>TH</sup> FLOOR L & C ANNEX  
401 CHURCH STREET  
NASHVILLE, TENNESSEE 37243-1531

April 4, 2012

Ms. Gwendolyn Keyes Fleming  
Regional Administrator  
US EPA Region IV  
Atlanta Federal Center, 12<sup>th</sup> Floor  
61 Forsyth Street SW  
Atlanta, GA 30303

Certified Mail 7006 3450 0003 9091 3381  
Return Receipt Requested

Re: 40 CFR Part 50 Appendix P Data Analysis For Missing 2011 Knoxville Ozone Data

Dear Ms. Fleming:

Ambient ozone monitoring sites identified in the Air Quality Subsystem (AQS) under numbers 470930021 and 470931020 recorded incomplete data during calendar year 2011. The majority of missed data for both sites was due to the lack of recording shelter temperature for the period March 1 through June 22. Since the missed data occurred during the early part of the ozone monitoring season when ambient conditions were not conducive to concentrations above the level of the standard, the state of Tennessee requests a portion of this data (as referred to in the attachment) be considered as missed data less than the standard under 40 CFR Part 50 Appendix P Section 2.3(b). Attached is an analysis of the data in accordance with this rule.

Inclusion of the data for the time period requested allows both monitoring sites to meet minimum data completeness requirements for the period 2009 through 2011.

Your favorable consideration of this request would be greatly appreciated.

Sincerely,

*Barry R. Stephens III*

for Barry R. Stephens, P.E.  
Director  
Division of Air Pollution Control

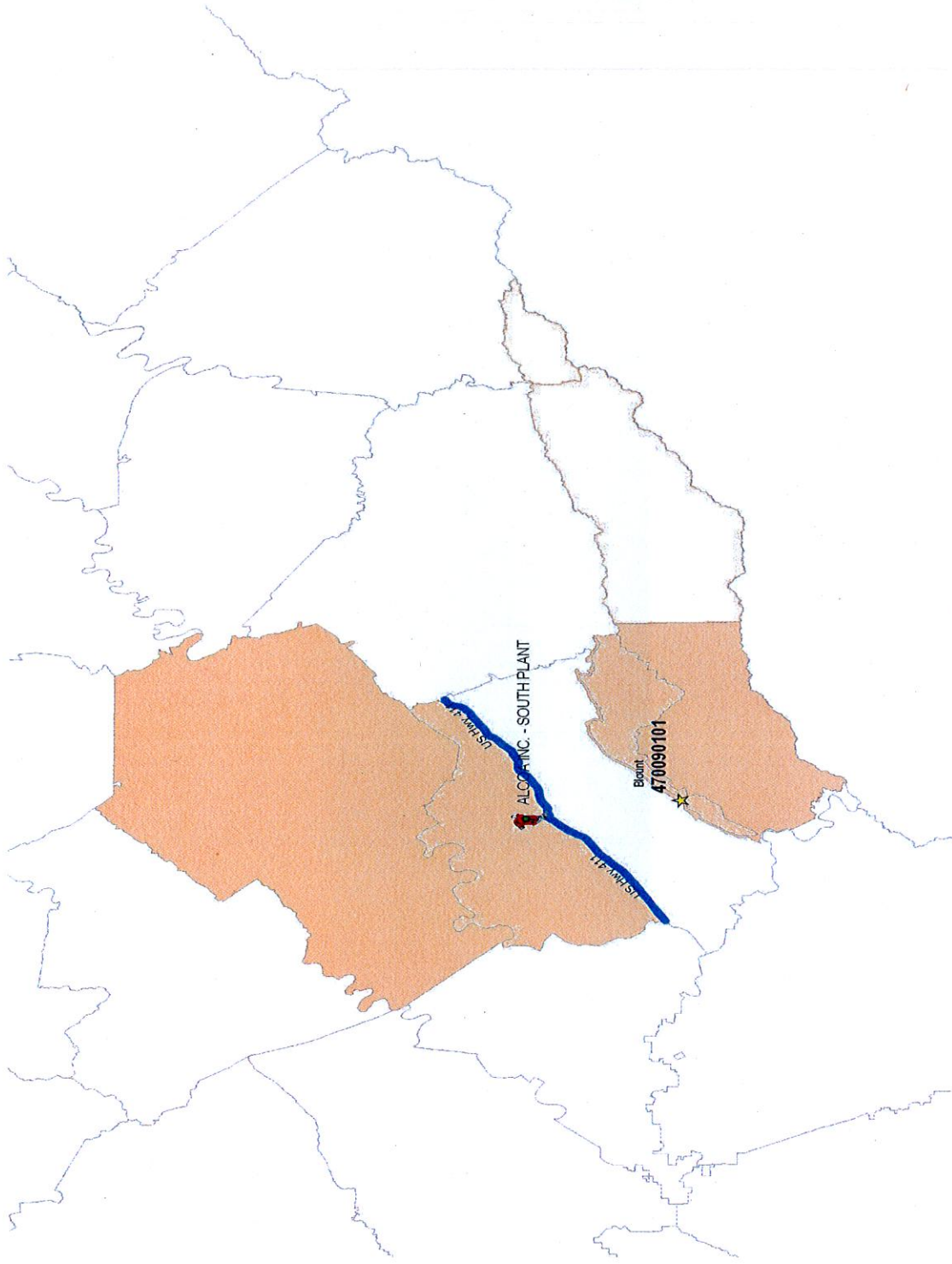
Attachment

CC Stacey Harder  
Lynne Liddington

**Attachment 2**  
**Proposed Blount County and Anderson County**  
**Boundaries**



# Proposed Partial Blount County Nonattainment Area





Blount County Alcoa Census Tract Information

Additional Census Tracts Connecting Hwy 411 to the Alcoa South Site

TRACTCE10	BLOCKCE	BLOCKID10	HOUSING10	POP10	TRACTCE10	BLOCKCE	BLOCKID10	HOUSING	POP10
10100	1003	470090101001003	0	0	10100	2088	470090101002088	4	9
10100	1008	470090101001008	15	43	10100	2091	470090101002091	2	16
10100	2000	470090101002000	0	0	10100	2134	470090101002134	5	17
10100	2001	470090101002001	0	0	10700	4042	470090107004042	0	0
10100	2002	470090101002002	5	16	10500	1009	470090105001009	12	21
10100	2007	470090101002007	0	0	10100	2136	470090101002136	0	0
10100	2008	470090101002008	0	0	10100	2140	470090101002140	3	12
10100	2009	470090101002009	0	0	10800	2051	470090108002051	10	21
10100	2010	470090101002010	0	0	10800	2062	470090108002062	4	11
10100	2011	470090101002011	0	0	10800	2063	470090108002063	0	0
10100	2012	470090101002012	0	0	10700	4035	470090107004035	12	17
10100	2013	470090101002013	0	0	10800	2059	470090108002059	0	0
10100	2014	470090101002014	0	0	10500	1015	470090105001015	0	0
10100	2015	470090101002015	0	0	10100	2096	470090101002096	1	0
10100	2016	470090101002016	0	0	10700	4031	470090107004031	9	22
10100	2017	470090101002017	0	0	10100	2082	470090101002082	6	10
10100	2018	470090101002018	0	0	10100	2090	470090101002090	14	26
10100	2019	470090101002019	0	0	10700	4033	470090107004033	25	47
10100	2020	470090101002020	0	0	10800	2061	470090108002061	1	2
10100	2021	470090101002021	0	0	10800	2050	470090108002050	0	0
10100	2022	470090101002022	0	0	10100	2126	470090101002126	0	0
10100	2023	470090101002023	0	0	10100	2135	470090101002135	4	3
10100	2024	470090101002024	0	0	10700	4039	470090107004039	5	9
10100	2025	470090101002025	0	0	10100	2084	470090101002084	0	0
10100	2026	470090101002026	0	0	10700	4040	470090107004040	0	0
10100	2027	470090101002027	0	0	10500	1032	470090105001032	0	0
10100	2028	470090101002028	0	0	10700	4044	470090107004044	6	11
10100	2029	470090101002029	0	0	10100	2124	470090101002124	0	0
10100	2030	470090101002030	0	0	10100	2097	470090101002097	0	0
10100	2031	470090101002031	0	0	10700	4037	470090107004037	14	15
10100	2032	470090101002032	0	0	10500	1013	470090105001013	42	51
10100	2033	470090101002033	0	0	10100	2083	470090101002083	11	24
10100	2034	470090101002034	0	0	10800	2052	470090108002052	19	30
10100	2035	470090101002035	0	0	10700	4036	470090107004036	46	72
10100	2036	470090101002036	0	0	10700	4041	470090107004041	0	0
10100	2037	470090101002037	0	0	10100	2122	470090101002122	0	0
10100	2038	470090101002038	0	0	10700	4022	470090107004022	24	55
10100	2039	470090101002039	0	0	10500	1026	470090105001026	0	0
10100	2040	470090101002040	0	0	10100	2086	470090101002086	14	29
10100	2041	470090101002041	0	0	10700	4034	470090107004034	4	12
10100	2042	470090101002042	0	0	10800	2064	470090108002064	0	0
10100	2043	470090101002043	0	0	10500	1025	470090105001025	0	0
10100	2044	470090101002044	0	0	10800	2058	470090108002058	0	0
10100	2045	470090101002045	0	0	10500	1001	470090105001001	0	0
10100	2046	470090101002046	0	0	10100	2092	470090101002092	0	0
10100	2047	470090101002047	0	0	10100	2089	470090101002089	8	14
10100	2048	470090101002048	0	0	10100	2087	470090101002087	11	26
10100	2049	470090101002049	0	0	10700	4043	470090107004043	0	0
10100	2050	470090101002050	0	0	10800	2048	470090108002048	51	147
10100	2051	470090101002051	0	0	10500	1014	470090105001014	1	1
10100	2052	470090101002052	0	0	10700	4032	470090107004032	17	38
10100	2053	470090101002053	0	0	10100	2088	470090101002088	4	9
10100	2054	470090101002054	0	0	10100	2085	470090101002085	4	4
10100	2055	470090101002055	0	0	10500	1024	470090105001024	0	0
10100	2056	470090101002056	0	0	10800	2060	470090108002060	0	0

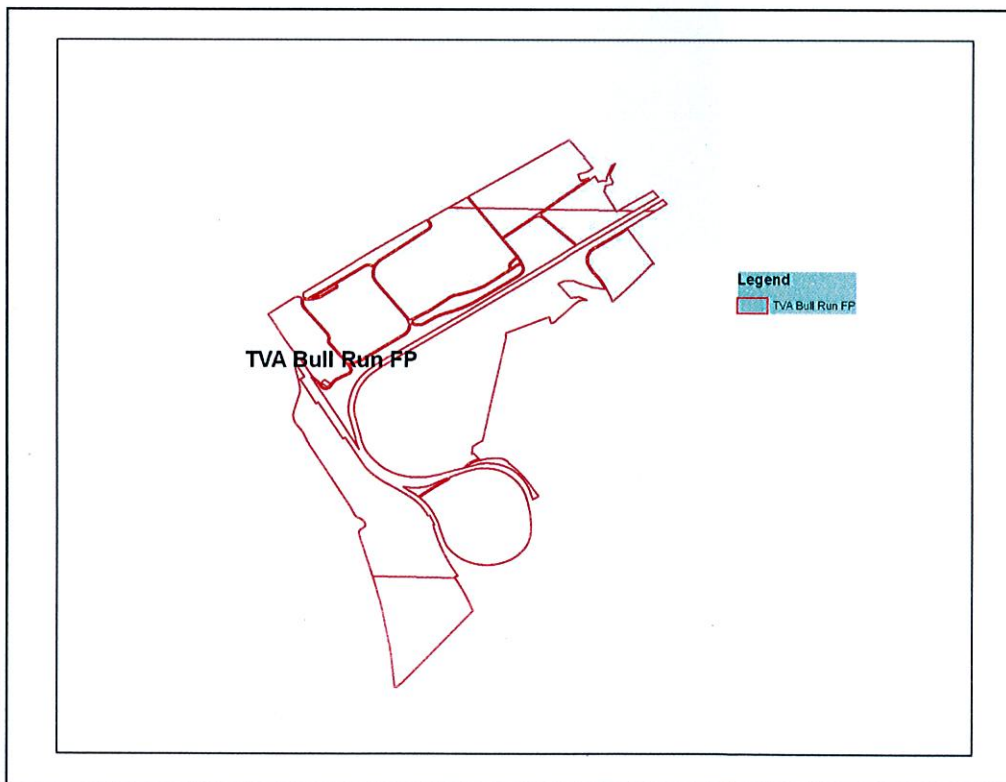
2010 Census Blocks Intersecting Alcoa South Parcels

TRACTCE10	BLOCKCE	BLOCKID10	HOUSING10	POP10
10100	1003	470090101001003	0	0
10100	1008	470090101001008	15	43
10100	2000	470090101002000	0	0
10100	2001	470090101002001	0	0
10100	2002	470090101002002	5	16
10100	2007	470090101002007	0	0
10100	2008	470090101002008	0	0
10100	2009	470090101002009	0	0
10100	2010	470090101002010	0	0
10100	2011	470090101002011	0	0
10100	2012	470090101002012	0	0
10100	2013	470090101002013	0	0
10100	2014	470090101002014	0	0
10100	2015	470090101002015	0	0
10100	2070	470090101002070	0	0
10100	2071	470090101002071	0	0
10100	2072	470090101002072	0	0
10100	2074	470090101002074	0	0
10100	2076	470090101002076	0	0
10100	2077	470090101002077	0	0
10100	2078	470090101002078	0	0
10100	2079	470090101002079	0	0
10100	2080	470090101002080	0	0
10100	2081	470090101002081	0	0
10100	2092	470090101002092	0	0
10100	2137	470090101002137	0	0
10100	2143	470090101002143	0	0
10200	3024	470090102003024	0	0
10200	3027	470090102003027	0	0

# Proposed Partial Anderson County Nonattainment Area

Parcel Information	
COUNTY_ID	1
CALC_ACRE	674.4899902
SHAPE_AREA	4853719.298
PARCELID	A001101 00900 000101 CA
ID	101 009.00
ST_NUM	
STREET	BULL RUN
ADDRESS	BULL RUN
OWNER	TVA
PROPTYPE	4
PT	04 FEDERAL
UPDSORT	20050412
UPDATED	4/12/2005

Table 1 TVA Bull Run Parcel Details





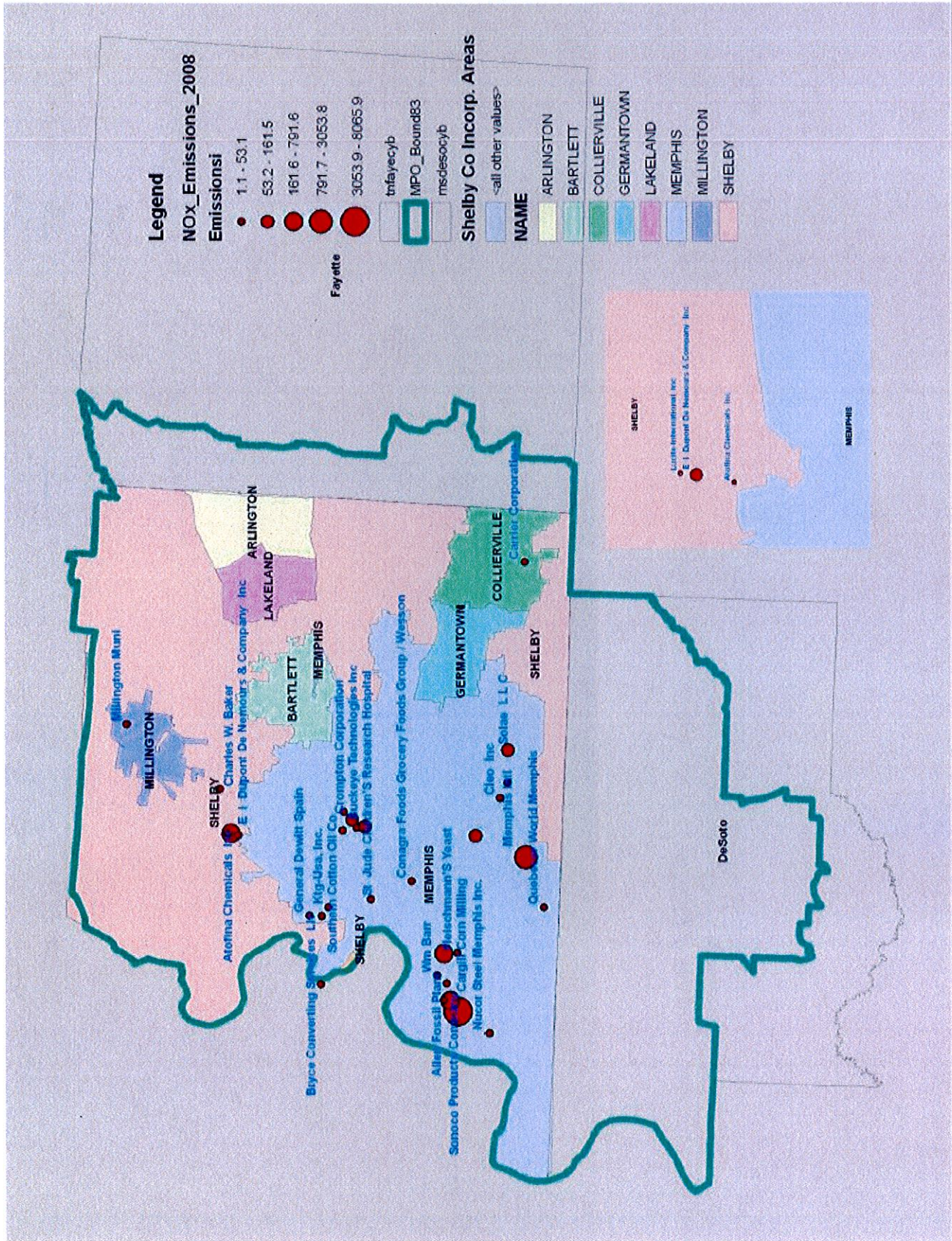
BLOCKID	TOTAL POP	STATE	COUNTY	TRACT	NAME	AREA LAND
470010202011002	0	47	1	20201	Block 1002	12647
470010202011003	0	47	1	20201	Block 1003	584278
470010202011004	0	47	1	20201	Block 1004	0
470010202011005	0	47	1	20201	Block 1005	0
470010202011006	0	47	1	20201	Block 1006	12857
470010202011008	167	47	1	20201	Block 1008	251436
470010202011009	0	47	1	20201	Block 1009	515
470010202011026	0	47	1	20201	Block 1026	261
470010202011027	131	47	1	20201	Block 1027	133627
470010202011029	15	47	1	20201	Block 1029	22879
470010202011030	2	47	1	20201	Block 1030	992
470010202011033	39	47	1	20201	Block 1033	34924
470010202011066	21	47	1	20201	Block 1066	20879
470010213011004	6	47	1	21301	Block 1004	15974
470010213011005	0	47	1	21301	Block 1005	302
470010213021002	50	47	1	21302	Block 1002	174876
470010213021006	56	47	1	21302	Block 1006	253174
470010213021007	21	47	1	21302	Block 1007	39472
470010213021010	5	47	1	21302	Block 1010	47836
470010213021017	0	47	1	21302	Block 1017	5721
470010213021018	74	47	1	21302	Block 1018	241849
470010213021019	42	47	1	21302	Block 1019	202221
470010213021020	0	47	1	21302	Block 1020	461
470010213021021	0	47	1	21302	Block 1021	0
470010213021022	0	47	1	21302	Block 1022	13564
470010213021023	29	47	1	21302	Block 1023	205739
470010213021024	36	47	1	21302	Block 1024	34760
470010213021025	0	47	1	21302	Block 1025	2037
470010213023025	0	47	1	21302	Block 3025	0
470010213023041	21	47	1	21302	Block 3041	57078
470010213024011	14	47	1	21302	Block 4011	163632
470010213024015	114	47	1	21302	Block 4015	894796
470010213024016	0	47	1	21302	Block 4016	183888
470010213024017	0	47	1	21302	Block 4017	5116
470010213024018	0	47	1	21302	Block 4018	42948
470010213024019	47	47	1	21302	Block 4019	553145
470010213024020	142	47	1	21302	Block 4020	67820
470010213024021	67	47	1	21302	Block 4021	16060
470010213024022	16	47	1	21302	Block 4022	10327
470010213024023	135	47	1	21302	Block 4023	47703
470010213024024	0	47	1	21302	Block 4024	355
470010213024025	142	47	1	21302	Block 4025	751634
470010213024026	0	47	1	21302	Block 4026	0
470010213024027	36	47	1	21302	Block 4027	41112
470010213024028	9	47	1	21302	Block 4028	9241
470010213024029	2	47	1	21302	Block 4029	491285
470010213024030	0	47	1	21302	Block 4030	330483
470010213024031	0	47	1	21302	Block 4031	65120
470010213024032	0	47	1	21302	Block 4032	3721
470010213024033	0	47	1	21302	Block 4033	1268
470010213024034	0	47	1	21302	Block 4034	59715
470010213024035	0	47	1	21302	Block 4035	284982
470010213024037	0	47	1	21302	Block 4037	0
470010213024038	0	47	1	21302	Block 4038	67105
470010213024039	0	47	1	21302	Block 4039	92461
470010213024040	0	47	1	21302	Block 4040	0
470010213024042	0	47	1	21302	Block 4042	5758
470010213024044	0	47	1	21302	Block 4044	2044
470010213024047	0	47	1	21302	Block 4047	312283

Table 2 Census Block Population and Area



**Attachment 3**  
**Shelby County Maps**







DuPont and Atofina Census Tracts

**E I Dupont De Nemours & Company Inc**

**2571 Fite Road**

<b>STFID</b>	<b>STATE</b>	<b>COUNTY</b>	<b>TRACT</b>	<b>BLKGRP</b>	<b>BLOCK</b>
471570202212031	47	157	20221	2	2031
471570202212034	47	157	20221	2	2034
471570202212035	47	157	20221	2	2035



# Draft 03192012 Memphis 8 Hour (0.075 PPM) Ozone Non-attainment Area

