

### Appendix 3a: 2005-2007 Design Values

Table 3a-1 lists the 2005-2007 design values used in projecting 2020 design values. 2020 design values denoted by “\*” were monitors where a projected design value could not be calculated. See Section 3.3.2.1 of Chapter 3 for an explanation.

**Table 0a-1. NO<sub>2</sub> 2005-2007 and 2020 projected 98<sup>th</sup> and 99<sup>th</sup> percentile design values (ppb).**

State	County	Site	Concentrations (ppb)			
			2005-2007		2020	
			98 <sup>th</sup>	99 <sup>th</sup>	98 <sup>th</sup>	99 <sup>th</sup>
Arizona	Maricopa Co	19	68.0	76.0	34.2	38.3
Arizona	Maricopa Co	3002	70.3	74.6	33.8	35.9
Arizona	Maricopa Co	3003	60.3	64.0	25.4	26.9
Arizona	Maricopa Co	3010	83.3	92.6	41.9	46.6
Arizona	Maricopa Co	9997	64.0	66.6	30.8	32.0
Arizona	Pima Co	1011	47.0	49.6	23.2	24.5
Arizona	Pima Co	1028	46.6	49.0	21.1	22.2
Arkansas	Pulaski Co	7	50.0	54.6	24.0	26.2
California	Alameda Co	7	48.3	52.3	3.0	3.3
California	Alameda Co	1001	49.0	54.3	16.3	18.0
California	Contra Costa Co	2	38.6	43.6	0.4	0.5
California	Contra Costa Co	1002	33.0	37.0	3.1	3.5
California	Contra Costa Co	1004	43.6	47.3	12.6	13.6
California	Contra Costa Co	3001	43.6	48.0	13.3	14.7
California	Fresno Co	7	62.6	66.3	23.2	24.6
California	Fresno Co	8	62.3	65.6	20.4	21.5
California	Fresno Co	242	44.6	49.6	7.5	8.4
California	Fresno Co	4001	45.0	49.6	10.1	11.1
California	Fresno Co	5001	59.8	64.3	23.8	25.6
California	Imperial Co	5	75.0	85.0	8.0	9.1
California	Kern Co	7	42.6	47.0	15.2	16.8
California	Kern Co	10	65.3	69.3	29.5	31.3
California	Kern Co	14	63.3	66.3	28.6	30.0
California	Kern Co	5001	38.0	40.3	7.4	7.9
California	Kern Co	6001	64.3	73.0	38.7	43.9
California	Los Angeles Co	2	82.3	93.3	14.5	16.4
California	Los Angeles Co	16	77.3	84.3	13.6	14.8
California	Los Angeles Co	113	63.1	66.0	34.8	36.4
California	Los Angeles Co	1002	75.0	82.0	6.9	7.6
California	Los Angeles Co	1103	83.6	92.3	22.5	24.9
California	Los Angeles Co	1201	60.6	64.0	21.5	22.7
California	Los Angeles Co	1301	79.0	90.6	40.9	46.9
California	Los Angeles Co	1701	79.6	85.6	7.8	8.4

State	County	Site	Concentrations (ppb)			
			2005-2007		2020	
			98 <sup>th</sup>	99 <sup>th</sup>	98 <sup>th</sup>	99 <sup>th</sup>
California	Los Angeles Co	2005	73.0	78.3	6.2	6.6
California	Los Angeles Co	4002	74.0	81.6	47.6	52.5
California	Los Angeles Co	6012	61.3	66.3	0.9	1.0
California	Los Angeles Co	9033	57.0	61.0	6.8	7.3
California	Madera Co	4	41.3	45.0	*	*
California	Marin Co	1	45.0	48.6	23.5	25.4
California	Mendocino Co	8	31.6	34.0	*	*
California	Mendocino Co	9	27.3	29.6	0.1	0.2
California	Merced Co	3	43.0	48.3	4.0	4.5
California	Monterey Co	1003	37.0	41.0	*	*
California	Napa Co	3	41.3	46.6	10.6	12.0
California	Orange Co	5001	73.3	78.0	30.9	32.9
California	Placer Co	6	57.0	60.3	*	*
California	Riverside Co	5001	50.0	54.0	*	*
California	Riverside Co	8001	64.3	67.6	19.7	20.7
California	Riverside Co	9001	53.0	57.3	8.1	8.8
California	Sacramento Co	6	47.0	50.0	5.2	5.5
California	Sacramento Co	10	54.3	58.0	18.4	19.7
California	Sacramento Co	12	35.0	38.6	2.7	3.0
California	Sacramento Co	13	55.6	58.6	19.9	21.0
California	San Bernardino Co	1	72.0	76.3	*	*
California	San Bernardino Co	306	65.6	68.6	*	*
California	San Bernardino Co	2002	80.0	85.0	0.3	0.3
California	San Bernardino Co	9004	70.6	76.6	2.7	3.0
California	San Diego Co	1	60.6	65.6	11.5	12.4
California	San Diego Co	6	61.1	66.6	11.5	12.5
California	San Diego Co	1002	59.6	64.0	5.8	6.2
California	San Diego Co	1006	42.6	46.0	*	*
California	San Diego Co	1008	62.3	68.3	8.7	9.5
California	San Francisco Co	5	54.6	59.3	27.2	29.5
California	San Joaquin Co	1002	58.0	64.3	18.5	20.5
California	San Luis Obispo Co	3001	35.3	40.0	6.4	7.3
California	San Luis Obispo Co	4002	30.3	32.3	2.9	3.1
California	San Luis Obispo Co	8001	44.3	48.0	6.4	6.9
California	San Mateo Co	1001	50.0	54.0	26.2	28.3
California	Santa Barbara Co	8	31.6	34.3	5.9	6.4
California	Santa Barbara Co	1013	8.0	10.6	*	*
California	Santa Barbara Co	1014	6.6	8.3	*	*
California	Santa Barbara Co	1018	26.0	27.6	2.7	2.8
California	Santa Barbara Co	1021	19.6	26.3	*	*
California	Santa Barbara Co	1025	14.6	20.0	2.7	3.7
California	Santa Barbara Co	2004	30.0	32.6	*	*
California	Santa Barbara Co	2011	37.0	39.3	17.1	18.1
California	Santa Barbara Co	4003	8.3	11.6	*	*

State	County	Site	Concentrations (ppb)			
			2005-2007		2020	
			98 <sup>th</sup>	99 <sup>th</sup>	98 <sup>th</sup>	99 <sup>th</sup>
California	Santa Clara Co	5	57.3	63.6	31.3	34.7
California	Santa Cruz Co	3	24.3	26.6	*	*
California	Solano Co	4	43.0	48.3	16.9	19.0
California	Sonoma Co	3	39.3	41.3	6.3	6.7
California	Sutter Co	3	50.1	54.0	*	*
California	Tulare Co	2002	58.6	63.0	10.3	11.1
California	Ventura Co	2002	47.6	50.6	0.9	1.0
California	Ventura Co	3001	40.6	42.6	1.3	1.3
California	Yolo Co	4	37.6	41.3	6.5	7.2
Colorado	Adams Co	3001	74.3	82.6	59.7	66.4
Connecticut	Fairfield Co	9003	56.6	59.6	3.2	3.4
Connecticut	Hartford Co	1003	51.8	57.6	12.6	14.1
Connecticut	New Haven Co	27	68.3	78.3	22.3	25.5
District of Columbia	Washington	25	56.0	58.6	24.5	25.6
District of Columbia	Washington	41	63.0	74.0	25.0	29.3
District of Columbia	Washington	43	60.6	63.0	24.0	25.0
Florida	Broward Co	8002	54.0	57.0	31.9	33.7
Florida	Escambia Co	4	33.6	36.6	18.8	20.5
Florida	Hillsborough Co	81	33.0	38.6	22.0	25.7
Florida	Hillsborough Co	1065	38.6	42.3	28.8	31.6
Florida	Hillsborough Co	3002	32.0	34.0	17.7	18.9
Florida	Manatee Co	4012	31.3	36.0	11.4	13.1
Florida	Miami-Dade Co	27	48.0	51.6	20.6	22.2
Florida	Orange Co	2002	44.3	47.3	15.8	16.9
Florida	Palm Beach Co	1004	46.0	52.3	20.5	23.4
Florida	Pinellas Co	18	39.6	41.6	19.5	20.5
Florida	Sarasota Co	1006	27.6	30.6	11.1	12.3
Georgia	Fulton Co	48	73.0	75.6	32.1	33.3
Georgia	Paulding Co	3	25.0	28.6	12.3	14.0
Georgia	Rockdale Co	1	29.6	33.0	15.4	17.2
Illinois	Cook Co	63	100.0	106.3	17.8	18.9
Illinois	Cook Co	76	63.6	67.6	11.5	12.2
Illinois	Cook Co	3103	74.6	82.3	37.9	41.8
Illinois	Cook Co	4002	68.3	74.6	16.0	17.4
Illinois	St Clair Co	10	50.3	52.6	30.6	32.0
Indiana	Hendricks Co	2	41.0	44.0	7.4	7.9
Indiana	Marion Co	73	47.6	49.6	24.2	25.2
Kansas	Sedgwick Co	10	46.5	48.3	27.4	28.5
Kansas	Sumner Co	2	27.0	30.0	14.9	16.6
Kansas	Wyandotte Co	21	57.0	59.6	27.2	28.5
Kentucky	Daviess Co	5	34.6	39.0	15.2	17.2
Kentucky	Fayette Co	12	53.0	56.0	30.4	32.1
Kentucky	Jefferson Co	1021	51.5	52.6	14.9	15.3
Kentucky	Mc Cracken Co	1024	43.5	46.0	14.7	15.6

State	County	Site	Concentrations (ppb)			
			2005-2007		2020	
			98 <sup>th</sup>	99 <sup>th</sup>	98 <sup>th</sup>	99 <sup>th</sup>
Louisiana	Ascension Par	4	43.0	46.0	38.0	40.6
Louisiana	Calcasieu Par	8	39.3	44.3	35.8	40.4
Louisiana	East Baton Rouge	3	56.3	61.3	45.3	49.3
Louisiana	East Baton Rouge	9	58.0	65.3	48.5	54.6
Louisiana	East Baton Rouge	13	22.3	26.3	16.4	19.4
Louisiana	East Baton Rouge	1001	42.0	46.3	34.9	38.5
Louisiana	Iberville Par	7	27.6	31.3	23.0	26.1
Louisiana	Iberville Par	9	30.6	34.6	25.8	29.2
Louisiana	Iberville Par	12	40.3	42.3	34.8	36.5
Louisiana	Jefferson Par	1001	52.0	55.0	37.5	39.7
Louisiana	West Baton Rouge Par	1	53.0	58.6	45.5	50.3
Massachusetts	Essex Co	2006	43.3	47.6	26.8	29.4
Massachusetts	Essex Co	5005	40.6	44.3	22.4	24.5
Massachusetts	Hampden Co	8	43.3	44.6	26.3	27.1
Massachusetts	Hampden Co	16	46.6	51.6	26.5	29.4
Massachusetts	Hampshire Co	4002	32.6	36.0	17.9	19.7
Massachusetts	Suffolk Co	2	57.0	62.6	31.8	34.9
Massachusetts	Suffolk Co	42	50.3	56.3	28.1	31.4
Massachusetts	Worcester Co	23	45.0	49.6	26.1	28.8
Minnesota	Anoka Co	1002	44.0	47.6	31.4	34.0
Missouri	Clay Co	5	39.0	42.0	23.7	25.5
Missouri	Greene Co	36	52.0	54.3	29.4	30.7
Missouri	Jackson Co	34	59.6	65.0	33.9	37.0
Missouri	St Charles Co	1002	37.0	43.0	17.4	20.3
Missouri	Ste Genevieve Co	5	19.6	22.6	13.0	15.0
Missouri	St Louis Co	4	45.0	49.0	22.7	24.7
Missouri	St Louis Co	3001	49.3	52.6	24.4	26.1
Missouri	St Louis	86	62.0	63.0	40.6	41.3
New Hampshire	Hillsborough Co	20	44.3	46.0	26.2	27.2
New Hampshire	Rockingham Co	14	39.0	41.3	20.5	21.7
New Jersey	Essex Co	1003	74.0	81.6	22.5	24.8
New Jersey	Hudson Co	6	69.3	77.6	30.4	34.1
New Jersey	Mercer Co	5	48.6	52.6	15.8	17.1
New Jersey	Middlesex Co	11	55.6	62.6	21.9	24.7
New Jersey	Morris Co	3001	41.6	45.3	16.5	18.0
New Jersey	Union Co	4	80.6	90.6	37.3	42.0
New Mexico	Bernalillo Co	23	56.0	59.3	37.5	39.7
New Mexico	Bernalillo Co	24	48.0	56.3	32.1	37.7
New Mexico	Dona Ana Co	21	49.6	56.0	30.5	34.4
New Mexico	Dona Ana Co	22	44.0	48.3	25.2	27.7
New Mexico	Eddy Co	1004	30.3	33.0	28.6	31.1
New Mexico	Eddy Co	1005	22.6	25.0	20.3	22.5
New Mexico	Lea Co	8	45.3	49.0	43.9	47.5

State	County	Site	Concentrations (ppb)			
			2005-2007		2020	
			98 <sup>th</sup>	99 <sup>th</sup>	98 <sup>th</sup>	99 <sup>th</sup>
New Mexico	Sandoval Co	1003	46.6	50.3	30.3	32.7
New Mexico	San Juan Co	9	42.3	44.3	40.8	42.7
New Mexico	San Juan Co	1005	47.3	50.0	42.4	44.8
New York	Erie Co	5	79.0	88.3	44.7	50.0
New York	New York Co	56	78.3	85.3	22.9	24.9
New York	Queens Co	124	68.6	74.0	23.3	25.1
New York	Suffolk Co	9	44.6	47.3	8.8	9.3
North Dakota	Burke Co	4	13.0	15.3	10.7	12.6
North Dakota	Cass Co	1004	37.3	41.3	19.1	21.1
North Dakota	Mc Kenzie Co	2	7.0	9.3	4.8	6.4
North Dakota	Mercer Co	4	21.6	24.6	16.9	19.2
North Dakota	Mercer Co	102	21.0	26.0	16.4	20.3
North Dakota	Mercer Co	124	23.0	25.6	17.8	19.8
North Dakota	Oliver Co	2	21.0	24.6	16.3	19.2
Ohio	Cuyahoga Co	60	62.0	69.0	36.3	40.4
Ohio	Cuyahoga Co	70	59.0	66.0	34.5	38.6
Ohio	Hamilton Co	40	60.3	64.3	28.5	30.3
Oklahoma	Cherokee Co	9002	38.3	40.6	22.4	23.8
Oklahoma	Oklahoma Co	33	53.3	56.6	29.4	31.3
Oklahoma	Oklahoma Co	1037	43.0	45.6	22.1	23.5
Pennsylvania	Allegheny Co	8	49.6	53.0	34.4	36.7
Pennsylvania	Allegheny Co	10	63.6	67.6	44.1	46.8
Pennsylvania	Allegheny Co	1005	46.3	53.3	30.0	34.5
Pennsylvania	Beaver Co	14	48.3	55.0	25.6	29.2
Pennsylvania	Blair Co	801	50.6	55.3	23.4	25.6
Pennsylvania	Bucks Co	12	53.6	58.6	8.3	9.1
Pennsylvania	Cambria Co	11	43.6	45.6	23.1	24.2
Pennsylvania	Centre Co	100	38.0	39.6	17.5	18.2
Pennsylvania	Dauphin Co	401	51.0	56.0	4.5	5.0
Pennsylvania	Erie Co	3	54.0	57.3	26.6	28.2
Pennsylvania	Indiana Co	4	33.0	36.3	12.1	13.3
Pennsylvania	Lackawanna Co	2006	47.3	51.3	4.4	4.8
Pennsylvania	Lancaster Co	7	46.0	49.0	8.5	9.1
Pennsylvania	Lawrence Co	15	49.0	53.0	33.5	36.2
Pennsylvania	Lehigh Co	4	47.3	51.6	9.2	10.0
Pennsylvania	Luzerne Co	1101	44.3	47.3	3.6	3.8
Pennsylvania	Montgomery Co	13	54.0	57.3	11.0	11.7
Pennsylvania	Northampton Co	25	47.3	54.6	7.1	8.2
Pennsylvania	Perry Co	301	24.0	26.6	*	*
Pennsylvania	Washington Co	5	43.0	47.3	25.0	27.5
Pennsylvania	Washington Co	5001	29.6	34.0	16.4	18.9
Pennsylvania	Westmoreland Co	8	43.0	47.6	26.3	29.1
Pennsylvania	York Co	8	57.3	61.0	4.1	4.3
South Carolina	Aiken Co	3	23.3	25.6	8.8	9.6

State	County	Site	Concentrations (ppb)			
			2005-2007		2020	
			98 <sup>th</sup>	99 <sup>th</sup>	98 <sup>th</sup>	99 <sup>th</sup>
South Carolina	Greenville Co	9	43.6	46.6	20.5	21.9
South Carolina	Richland Co	7	49.6	52.6	14.2	15.1
South Dakota	Jackson Co	1	7.6	9.0	4.8	5.7
South Dakota	Minnehaha Co	7	33.0	35.6	17.8	19.2
Tennessee	Bradley Co	102	37.3	40.6	16.8	18.3
Tennessee	Davidson Co	11	55.6	58.3	19.6	20.6
Texas	Bexar Co	46	54.6	59.0	32.2	34.8
Texas	Bexar Co	52	25.0	28.0	12.3	13.7
Texas	Bexar Co	59	33.6	36.0	16.5	17.7
Texas	Brazoria Co	1016	26.3	30.0	3.9	4.4
Texas	Dallas Co	69	58.0	60.6	31.6	33.0
Texas	Dallas Co	75	45.0	47.6	23.4	24.8
Texas	Denton Co	34	38.6	41.6	19.4	20.9
Texas	El Paso Co	37	64.0	72.6	53.9	61.1
Texas	El Paso Co	44	66.6	76.0	56.1	64.0
Texas	El Paso Co	55	68.3	72.3	57.5	60.9
Texas	El Paso Co	57	58.0	67.3	38.5	44.7
Texas	El Paso Co	58	50.6	55.6	39.2	43.0
Texas	Gregg Co	1	29.3	32.0	18.9	20.7
Texas	Harris Co	26	52.0	66.0	34.5	43.8
Texas	Harris Co	29	35.6	39.6	15.2	16.9
Texas	Harris Co	47	60.3	66.0	26.7	29.3
Texas	Harris Co	75	61.8	66.6	40.1	43.2
Texas	Harris Co	1034	56.3	63.0	39.1	43.7
Texas	Harris Co	1035	58.3	62.0	40.5	43.0
Texas	Harris Co	1039	46.6	53.0	25.2	28.7
Texas	Harris Co	1050	34.0	38.0	22.1	24.7
Texas	Harrison Co	2	23.0	25.0	15.9	17.3
Texas	Hunt Co	1006	34.3	37.3	14.5	15.8
Texas	Jefferson Co	22	29.6	31.0	13.9	14.5
Texas	Kaufman Co	5	31.3	34.3	16.4	18.0
Texas	Montgomery Co	78	37.3	41.3	19.9	22.0
Texas	Smith Co	7	25.3	28.6	14.9	16.8
Texas	Tarrant Co	1002	59.6	63.0	28.6	30.3
Texas	Tarrant Co	3009	43.6	47.0	26.3	28.4
Texas	Tarrant Co	3011	46.3	49.3	23.3	24.9
Texas	Travis Co	20	28.3	34.0	12.3	14.8
Utah	Davis Co	4	65.0	71.0	36.0	39.4
Utah	Salt Lake Co	3006	63.6	70.3	53.4	59.0
Vermont	Chittenden Co	14	44.4	47.7	27.0	29.0
Vermont	Rutland Co	2	44.5	48.8	19.6	21.5
Virginia	Charles City Co	2	61.0	70.0	45.4	52.1
Virginia	Fairfax Co	1005	51.6	56.3	23.4	25.5
Virginia	Fairfax Co	5001	53.6	59.0	22.2	24.4

State	County	Site	Concentrations (ppb)			
			2005-2007		2020	
			98 <sup>th</sup>	99 <sup>th</sup>	98 <sup>th</sup>	99 <sup>th</sup>
Virginia	Richmond	24	59.5	62.6	35.1	36.9
Wisconsin	Milwaukee Co	26	51.0	54.3	5.0	5.3
Wyoming	Campbell Co	123	11.6	14.3	9.3	11.5