

VII. Conformity Determination

PM_{2.5} Nonattainment Areas

Conformity determinations for transportation plans and programs under the PM_{2.5} air quality standards are based, as appropriate, on build/no-build analyses, comparisons to an emissions budget, and/or comparison to emissions levels from a base year.

As described in Section II, the appropriate test for this conformity analysis under the annual PM_{2.5} standard is a comparison of future year emissions to 2002 levels. That test is applicable to each of the three PM_{2.5} nonattainment areas described in Section II. The analysis for each nonattainment area should demonstrate reduced emissions for future “build” scenarios when compared to emissions from the 2002 base year.

The appropriate test for this conformity analysis under the daily PM_{2.5} standard for the Pittsburgh-Beaver Valley nonattainment area and the Indiana County portion of the Johnstown nonattainment area is a comparison of future year emissions to 2008 levels. The analysis for those two nonattainment areas should demonstrate reduced emissions for future “build” scenarios when compared to emissions from the 2008 base year.

The appropriate conformity test for the Liberty-Clairton nonattainment area under the daily PM_{2.5} standard is a comparison of future year emissions to emissions from both a 2002 base year and a 2008 base year. The analysis for the Liberty-Clairton area should demonstrate reduced emissions for future “build” scenarios when compared to emissions from both the 2002 and 2008 base years.

Pittsburgh-Beaver Valley PM_{2.5} Nonattainment Area

As noted in Section II, emission budgets have not been established for either the annual or daily PM_{2.5} standards for the Pittsburgh-Beaver Valley PM_{2.5} nonattainment area. The PM_{2.5} and NO_x emission factors from MOBILE6.2, in combination with the highway and transit assignment results from the seven scenarios described in Section III, were used to develop the emission levels for the nonattainment area.

The total annual VMT, and the PM_{2.5} and NO_x emission estimates for the nonattainment area are presented in Table 13 for each analysis year. The emissions are plotted on Figures 3 (PM_{2.5}) and 4 (NO_x). VMT and emissions by county and facility type for each scenario are presented in Appendix E.

Conformity for the Pittsburgh-Beaver Valley nonattainment area under the annual PM_{2.5} standard is demonstrated if future annual emissions are less than 2002 levels. In all analysis years, as Table 13 and Figures 3 and 4 demonstrate, future annual emissions are less than 2002

DRAFT Air Quality Conformity Determination

2040 Long Range Transportation Plan and 2011-2014 Transportation Improvement Program

For Public Review and Comment May 18, 2011—June 17, 2011

Southwestern Pennsylvania Commission – May 2011

levels. The analysis shows that the criteria for conformity under the annual PM_{2.5} standard have been satisfied.

The total daily VMT, and the PM_{2.5} and NO_x emission estimates for the nonattainment area are presented in Table 15 for each analysis year. The emissions are plotted on Figures 5 (PM_{2.5}) and 6 (NO_x). VMT and emissions by county and facility type for each scenario are presented in Appendix E.

Conformity for the Pittsburgh-Beaver Valley nonattainment area under the daily PM_{2.5} standard is demonstrated if future daily emissions are less than 2002 levels. In all analysis years, as Table 15 and Figures 5 and 6 demonstrate, future daily emissions are less than 2002 levels. The analysis shows that the criteria for conformity under the daily PM_{2.5} standard have been satisfied.

Indiana County Portion of the Johnstown PM_{2.5} Nonattainment Area

As noted in Section II, emission budgets have not been established for either the annual or daily PM_{2.5} standards for the Indiana County portion of the Johnstown PM_{2.5} nonattainment area. The PM_{2.5} and NO_x emission factors from MOBILE6.2, in combination with the highway and transit assignment results from the seven scenarios described in Section III, were used to develop the emission levels for the Indiana County portion of the nonattainment area.

The total annual VMT, and the PM_{2.5} and NO_x emission estimates for the Indiana County portion of the nonattainment area are presented in Table 14 for each analysis year. The emissions are plotted on Figures 7 (PM_{2.5}) and 8 (NO_x). VMT and emissions by county and facility type for each scenario are presented in Appendix E.

Conformity for the Indiana County portion of the nonattainment area under the annual PM_{2.5} standard is demonstrated if future annual emissions are less than 2002 levels. In all analysis years, as Table 14 and Figures 7 and 8 demonstrate, future annual emissions are less than 2002 levels. The analysis shows that the criteria for conformity under the annual PM_{2.5} standard have been satisfied.

The total daily VMT and the PM_{2.5} and NO_x emission estimates for the Indiana County portion of the nonattainment area are presented in Table 16 for each analysis year. The emissions are plotted on Figures 9 (PM_{2.5}) and 10 (NO_x). VMT and emissions by county and facility type for each scenario are presented in Appendix E.

Conformity for the Indiana County portion of the nonattainment area under the daily PM_{2.5} standard is demonstrated if future daily emissions are less than 2002 levels. In all analysis years, as Table 16 and Figures 9 and 10 demonstrate, future daily emissions are less than 2002 levels. The analysis shows that the criteria for conformity under the daily PM_{2.5} standard have been satisfied.

DRAFT Air Quality Conformity Determination

2040 Long Range Transportation Plan and 2011-2014 Transportation Improvement Program

For Public Review and Comment May 18, 2011—June 17, 2011

Southwestern Pennsylvania Commission – May 2011

Conformity analysis for the Cambria County portion of the Johnstown PM_{2.5} nonattainment area was completed for the required analysis years by the Johnstown Area Transportation Study (JATS), the MPO for Cambria County. VMT and emissions for Cambria County were combined with results from SPC's analysis in Tables 14 and 16 to present findings for the entire Johnstown PM_{2.5} nonattainment area. The combined results show that the conformity criteria are satisfied for the entire nonattainment area.

Liberty-Clairton PM_{2.5} Nonattainment Area

As noted in Section II, emission budgets have not been established for the annual PM_{2.5} standard or for the daily PM_{2.5} standard for the Liberty-Clairton PM_{2.5} nonattainment area. The daily and annual VMT and the PM_{2.5} and NO_x emission estimates for the entire nonattainment area were derived from SPC travel model results in combination with emission factors from MOBILE6.2 for the seven scenarios described in Section III.

Conformity for the Liberty-Clairton PM_{2.5} nonattainment area is demonstrated if future annual emissions are less than 2002 levels, and if future daily emissions are less than both 2002 **and** 2008 levels. The annual VMT and emissions are presented in Table 17 for each analysis year. The annual emissions are plotted on Figures 11 (PM_{2.5}) and 12 (NO_x). The daily VMT and emissions are presented in Table 18 for each analysis year. The daily emissions are plotted on Figures 13 (PM_{2.5}) and 14 (NO_x). VMT and emissions by county and facility type for each scenario are presented in Appendix E. In all analysis years, future annual emissions are less than 2002 levels. In addition, future daily emissions are less than both 2002 levels **and** 2008 levels. The analysis shows that the criteria for conformity have been satisfied.

8-Hour Ozone Nonattainment and Maintenance Areas

Conformity determinations for transportation plans and programs under the 8-hour standard are based, as appropriate, on build/no-build analyses, comparisons to an emissions budget, and/or comparison to 2002 emissions levels. As described in Section II, the appropriate test for this conformity analysis for the Greene County 8-hour ozone maintenance area, the Indiana County portion of the Clearfield-Indiana County 8-hour ozone maintenance area, and the Pittsburgh-Beaver Valley 8-hour ozone nonattainment area is a comparison of future year emissions to established emissions budgets. For these nonattainment and maintenance areas, the analysis should demonstrate reduced emissions in a future year under the build condition when compared with the appropriate emissions budget.

Pittsburgh-Beaver Valley – 8-Hour Ozone

As noted in Section II, both VOC and NO_x budgets are available to SPC for use in demonstrating transportation conformity for the Pittsburgh-Beaver Valley 8-Hour Ozone Nonattainment Area. The VOC and NO_x emission factors, in combination with the highway and transit assignment results from the scenarios described in Section III, were used to develop the emissions levels for the budget comparisons.

Daily VMT and emission estimates for each scenario, as well as the approved VOC and NO_x budgets, are presented in Table 19 and are plotted on Figures 15 (VOC) and 16 (NO_x). VMT and emissions by county and facility type for each scenario are presented in Appendix E.

Applying the budget test demonstrates that the conformity criteria are satisfied for both VOC and NO_x emissions. For each scenario, VOC and NO_x emissions are lower than the corresponding emission budget.

As discussed in Section II, proposed emission budgets are also shown on Table 19 and Figures 15 and 16 for information. VOC and NO_x emissions are also lower than the proposed budgets. Had they been approved, a conformity finding could have been made using the proposed budgets.

No goals, directives, recommendations or projects identified in the 2011-2014 TIP or the 2040 Plan contradict in a negative manner any specific requirements or commitments of the applicable state implementation plan. There are no transportation control measures in the applicable state implementation plan (*Pittsburgh-Beaver Valley Ozone Maintenance Plan and Request for Redesignation as Attainment for Ozone*). This is the Maintenance Plan and Attainment SIP approved for this area by EPA under the 1-hour ozone standard. It will remain in effect until the state submits, and EPA approves, an attainment demonstration and maintenance plan for the 8-hour ozone standard.

Greene County – 8-Hour Ozone

As noted in Section II, both VOC and NO_x budgets are available to SPC for use in demonstrating transportation conformity for the Greene County 8-Hour Ozone Maintenance Area. The VOC and NO_x emission factors, in combination with the highway and transit assignment results from the scenarios described in Section III, were used to develop the emissions levels for the budget comparisons.

Daily VMT and emission estimates for each scenario, as well as the approved VOC and NO_x budgets, are presented in Table 20 and are plotted on Figures 17 (VOC) and 18 (NO_x). VMT and emissions by county and facility type for each scenario are presented in Appendix E. Applying the budget test demonstrates that the conformity criteria are satisfied for both VOC and NO_x emissions. For each scenario, VOC and NO_x emissions are lower than the corresponding emission budget.

DRAFT Air Quality Conformity Determination

2040 Long Range Transportation Plan and 2011-2014 Transportation Improvement Program

For Public Review and Comment May 18, 2011—June 17, 2011

Southwestern Pennsylvania Commission – May 2011

No goals, directives, recommendations or projects identified in the 2011-2014 TIP or the 2040 Plan contradict in a negative manner any specific requirements or commitments of the applicable state implementation plan. There are no transportation control measures in the applicable state implementation plan (*Final State Implementation Plan Revision: Maintenance Plan – Greene County Eight-Hour Ozone Nonattainment Area – PaDEP, May 2008*).

Indiana County – 8-Hour Ozone

As noted in Section II, both VOC and NO_x budgets are available to SPC for use in demonstrating transportation conformity for the Indiana County portion of the Clearfield-Indiana 8-Hour Ozone Maintenance Area. The VOC and NO_x emission factors, in combination with the highway and transit assignment results from the scenarios described in Section III, were used to develop the emissions levels for the budget comparisons.

Daily VMT and emission estimates for each scenario, as well as the approved VOC and NO_x budgets, are presented in Table 21 and are plotted on Figures 19 (VOC) and 20 (NO_x). VMT and emissions by county and facility type for each scenario are presented in Appendix E. Applying the budget test demonstrates that the conformity criteria are satisfied for both VOC and NO_x emissions. For each scenario, VOC and NO_x emissions are lower than the corresponding emission budget.

No goals, directives, recommendations or projects identified in the 2011-2014 TIP or the 2040 Plan contradict in a negative manner any specific requirements or commitments of the applicable state implementation plan. There are no transportation control measures in the applicable state implementation plan (*Final State Implementation Plan Revision: Maintenance Plan – Clearfield-Indiana Eight-Hour Ozone Nonattainment Area – PaDEP, May 2008*).

Allegheny County Carbon Monoxide Maintenance Area

As noted in Section II, EPA approved a limited carbon monoxide maintenance plan for this area. Under limited maintenance plans, EPA policy does not require a carbon monoxide emission budget test for conformity determinations. Emission budgets in limited carbon monoxide maintenance plan areas are considered to be not constraining during the maintenance period. The applicable conformity criteria for carbon monoxide have, therefore, been satisfied.

Qualitative Analysis of Non-Codable Regionally Significant Projects

Due to their nature, a number of regionally significant projects in the 2040 Plan and the 2011-2014 TIP could not be coded on TP+-based transportation networks and were therefore not included in the quantitative assessment which was used to develop the information in Tables 13 through 21. Those excluded projects fall into two general categories: 1) highway/bridge

DRAFT Air Quality Conformity Determination

2040 Long Range Transportation Plan and 2011-2014 Transportation Improvement Program

For Public Review and Comment May 18, 2011—June 17, 2011

Southwestern Pennsylvania Commission – May 2011

relocations with no increase in capacity; and 2) projects like small, isolated park-and-ride lots, Intermodal Transportation Centers, and traffic signal coordination projects. To include the non-codable, regionally significant projects in the conformity assessment required a separate, qualitative, assessment of their impacts on regional air quality.

Some of the regionally significant projects identified in the 2040 Plan and the 2011-2014 TIP involve new highway facilities on new right-of-way. For most of the projects of that type there was enough of a difference between the build and no-build conditions that the difference (change in capacity, miles of highway, etc.) could be reflected, and coded, onto the TP+-based highway networks. A few of the highway projects that involve new right-of-way would simply replace a deficient or unsafe facility with a comparable facility (no change in length or capacity) constructed to current design standards in a new location. The design of those new facilities would include features such as easier grades and curves, wider lanes, better sight distance and wider shoulders. Those design improvements cannot be reflected in the quantitative analysis. Those design elements would, nevertheless, tend to result in fewer accidents, reduce delay and promote a more uniform travel speed on the facility. Those kinds of improvements in traffic operations generally have a positive effect on emissions. Implementation of the “non-codable” highway and bridge relocation projects should not worsen the region's air quality.

A number of small, isolated park-and-ride lots, Intermodal Transportation Centers, and traffic signal coordination projects are identified in the 2011-2014 TIP. The 2040 Plan includes strategies to implement projects of these types. The identified TIP projects were assessed by SPC for their emissions reduction potential. An approved evaluation methodology, developed by PennDOT for determining eligibility for CMAQ (Congestion Mitigation and Air Quality Program) funding, was used by SPC in those project-level assessments. Regionally significant projects assessed with the CMAQ model which could not be coded on TP+-based transportation networks are listed below. The CMAQ model assessments were conducted with project information provided by the project sponsors. Each of the projects tested with the CMAQ model demonstrated a potential to reduce ozone and PM_{2.5} precursor emissions. The effect on regional emissions from implementation of these projects was not included in the quantitative analysis detailed on Tables 13 through 21 and Figures 3 through 20. Nevertheless, implementation of the regionally significant, non-codable projects identified in the 2011-2014 TIP and the 2040 Plan will not worsen the region's air quality.

Non-Codable Regionally Significant Projects

A. Programmed on 2011-2014 TIP for Completion by 2014

SR 19 Intersections – (Pine Creek to Wallace) – MPMS#28082 [Wexford – Allegheny Co.]
SR 2031 Lincoln Way Widening – (SR 48 to Auld St.) – MPMS#61345 [Allegheny Co.]
McKeesport / Duquesne Flyover Bridges – MPMS#79951 [Allegheny Co.]
SR 286 Improvements Ph-1 Widening (SR 22 to Sagamore Hill Road) – MPMS#27505 [Allegheny Co.]
Summit Park Drive / Robinson Town Centre Blvd. Improvements – MPMS#51376 [Allegheny Co.]
CBD Signals Upgrade – MPMS#63378 [City of Pittsburgh – Allegheny Co.]
Browns Hill Rd. / Beechwood Blvd. Ph-2 – MPMS#76399 [City of Pittsburgh - Allegheny Co.]
City of Pittsburgh Signals Upgrade – MPMS#83133 [City of Pittsburgh - Allegheny Co.]
CBD Signalization Ph-1 – MPMS#88708 [City of Pittsburgh - Allegheny Co.]

DRAFT Air Quality Conformity Determination

2040 Long Range Transportation Plan and 2011-2014 Transportation Improvement Program

For Public Review and Comment May 18, 2011—June 17, 2011

Southwestern Pennsylvania Commission – May 2011

SR 68 Signals-Vanport – MPMS#47883 [Beaver Co.]
Veteran’s Memorial Bridge Replacement – MPMS#28898 [Beaver Co.]
McConnell’s Mills Park-N-Ride – MPMS#89353 [Butler Co.]
Freedom Road Transportation Improvement – MPMS#86734 [Butler Co.]
Fayette St. Signal Improvements – MPMS#83954 [Fayette Co.]
Waynesburg Signals Upgrade – MPMS#83956 [Greene Co.]
Indiana Borough / White Twp. Intersections – MPMS#88992 [Indiana Co.]
PA 18 Signal Upgrades – MPMS#88829 [Washington Co.]
Washington & Jefferson College Area Phase 1 – MPMS#30891 [City of Washington-Washington Co.]
Washington & Jefferson College Area Phase 2 – MPMS#90461 [City of Washington-Washington Co.]
SR 1009 Signal Upgrades – MPMS#83446 [Washington Co.]
Intermodal Transit Center / Park & Ride – MPMS#90069 [City of Washington-Washington Co.]
US 30 Signal Upgrades – MPMS#83955 [Westmoreland Co.]
SPC- Regional Traffic Signal Program – MPMS#84028 [10-County Region]

B. Listed on 2040 Plan for Completion after 2014

SR 286 Improvements Ph-3 Widening (Sandune Dr. to SR 380) – MPMS#80508 [Allegheny Co.]
City of Pittsburgh Traffic Signal Updates – [City of Pittsburgh - Allegheny Co.]
SR 21 Masontown to Thompson’s Crossroads - Intersection Improvements & Safety Upgrades – MPMS#72214 [Fayette Co.]

Conclusion

In conclusion, the region's 2011-2014 TIP and the 2040 Plan are in conformance with the federal Clean Air Act, as amended. This finding of conformity is based upon both quantitative and qualitative analyses designed to address the conformity criteria outlined in EPA's Transportation Conformity Rule for the nonattainment and maintenance areas within SPC's planning region designated under the 8-hour ozone standard, the PM_{2.5} air quality standards, the PM₁₀ standard, and the carbon monoxide standards. This report has documented the process used by SPC in the spring of 2011 to make its finding of conformity for the 2011-2014 Transportation Improvement Program and the 2040 Transportation and Development Plan for Southwestern Pennsylvania.

SPC's conformity process demonstrates that the 2011-2014 Transportation Improvement Program for Southwestern Pennsylvania and the 2040 Transportation and Development Plan for Southwestern Pennsylvania (as amended) satisfy the applicable conformity criteria under the 8-hour ozone standard, the PM_{2.5} air quality standards, the PM₁₀ standard, and the carbon monoxide standards.

**Conformity Assessment
Pittsburgh-Beaver Valley PM2.5 Nonattainment Area
Annual Emissions (tons/year)**

Entire Nonattainment Area									
	2002	2008	2011	2014	2015	2018	2025	2035	2040
VMT	18,346,085,905	18,244,617,446	18,466,323,112	18,948,046,157	19,098,260,118	19,556,778,659	20,667,928,648	22,148,652,208	22,920,417,986
PM 2.5	851.260	496.428	405.709	344.435	330.571	304.205	298.060	310.324	321.164
NOx	51,607.860	26,931.630	19,375.622	13,355.414	11,867.929	8,441.489	5,065.106	4,254.216	4,406.883

TABLE 13

SPC May 2011

**Conformity Assessment
Johnstown PM2.5 Nonattainment Area
Annual Emissions (tons/year)**

Nonattainment Area by County and Total									
	2002	2008	2011	2014	2015	2018	2025	2035	2040
VMT									
Indiana	95,454,000	124,710,394	130,220,037	132,770,784	133,557,541	136,287,388	143,152,784	149,115,443	153,608,743
Cambria	1,134,587,000	-----	-----	-----	1,081,080,000	-----	997,170,000	896,410,000	849,600,000
Total	1,230,041,000	124,710,394	-----	-----	1,214,637,541	136,287,388	1,140,322,784	1,045,525,443	1,003,208,743
PM 2.5									
Indiana	5.100	3.816	3.123	2.573	2.445	2.214	2.134	2.145	2.210
Cambria	49.340	-----	-----	-----	17.530	-----	13.610	11.900	11.090
Total	54.440	3.816	-----	-----	19.975	2.214	15.744	14.045	13.300
NOx									
Indiana	311.200	203.271	162.272	119.752	108.767	84.245	59.909	52.893	54.446
Cambria	3187.800	-----	-----	-----	840.780	-----	415.340	325.970	309.210
Total	3499.000	203.271	-----	-----	949.547	84.245	475.249	378.863	363.656

TABLE 14

SPC May 2011

Conformity Assessment
Pittsburgh-Beaver Valley PM2.5 Nonattainment Area
Daily Emissions (tons/day)

Entire Nonattainment Area								
	2008	2011	2014	2015	2018	2025	2035	2040
VMT	54,481,179	55,469,164	56,823,780	57,243,025	58,531,655	61,637,587	65,824,958	67,988,524
PM 2.5	1.501	1.227	1.041	0.994	0.912	0.890	0.923	0.954
NOx	76.432	54.885	37.758	33.542	23.885	14.330	11.869	12.278

TABLE 15

SPC May 2011

Conformity Assessment
Johnstown PM2.5 Nonattainment Area
Daily Emissions (tons/day)

Nonattainment Area by County and Total								
	2008	2011	2014	2015	2018	2025	2035	2040
VMT								
Indiana	371,677	386,652	393,667	395,826	403,338	422,169	438,507	450,847
Cambria	3,377,566	-----	-----	3,259,090	-----	3,007,252	2,705,364	2,564,449
Total	3,749,243	-----	-----	3,654,916	-----	3,429,421	3,143,871	3,015,296
PM 2.5								
Indiana	0.011	0.009	0.008	0.007	0.007	0.006	0.006	0.006
Cambria	0.083	-----	-----	0.050	-----	0.040	0.040	0.030
Total	0.094	-----	-----	0.057	-----	0.046	0.046	0.036
NOx								
Indiana	0.564	0.448	0.330	0.299	0.231	0.163	0.143	0.147
Cambria	5.211	-----	-----	2.520	-----	1.260	0.990	0.940
Total	5.775	-----	-----	2.819	-----	1.423	1.133	1.087

TABLE 16

SPC May 2011

Conformity Assessment
Liberty-Clairton PM2.5 Nonattainment Area
Annual Emissions (tons/year)

Portion of Allegheny County									
	2002	2008	2011	2014	2015	2018	2025	2035	2040
VMT	74,321,573	78,978,809	125,429,876	127,444,210	127,713,455	129,610,983	134,330,831	139,599,770	144,568,755
PM 2.5	2.470	1.605	2.196	1.970	1.916	1.824	1.811	1.848	1.910
NOx	152.900	79.617	89.239	60.990	53.842	38.101	23.739	20.809	21.635

TABLE 17

SPC May 2011

56

Conformity Assessment
Liberty-Clairton PM2.5 Nonattainment Area
Daily Emissions (tons/day)

Portion of Allegheny County									
	2002	2008	2011	2014	2015	2018	2025	2035	2040
VMT	200,438	219,853	167,724	173,305	174,025	179,265	192,232	206,744	220,444
PM 2.5	0.007	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003
NOx	0.373	0.202	0.109	0.077	0.068	0.049	0.032	0.029	0.031

TABLE 18

SPC May 2011

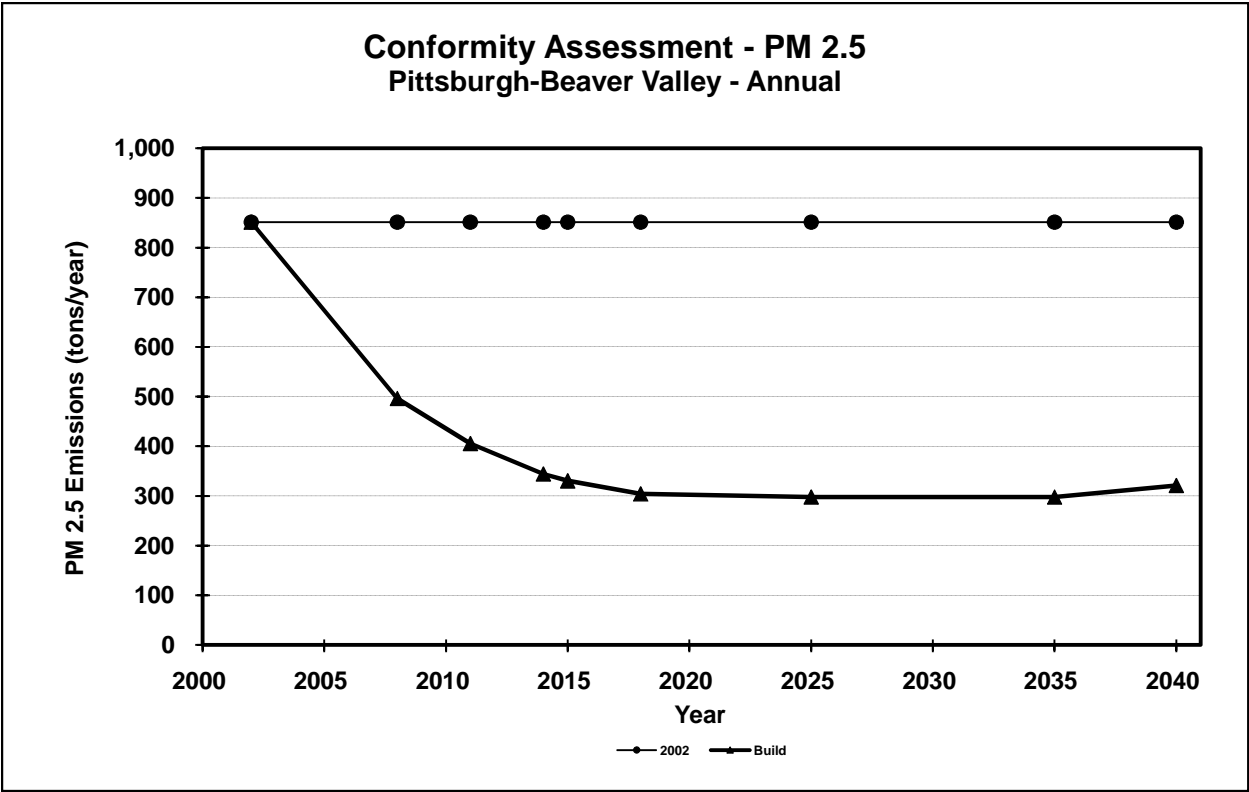


Figure 3

SPC May 2011

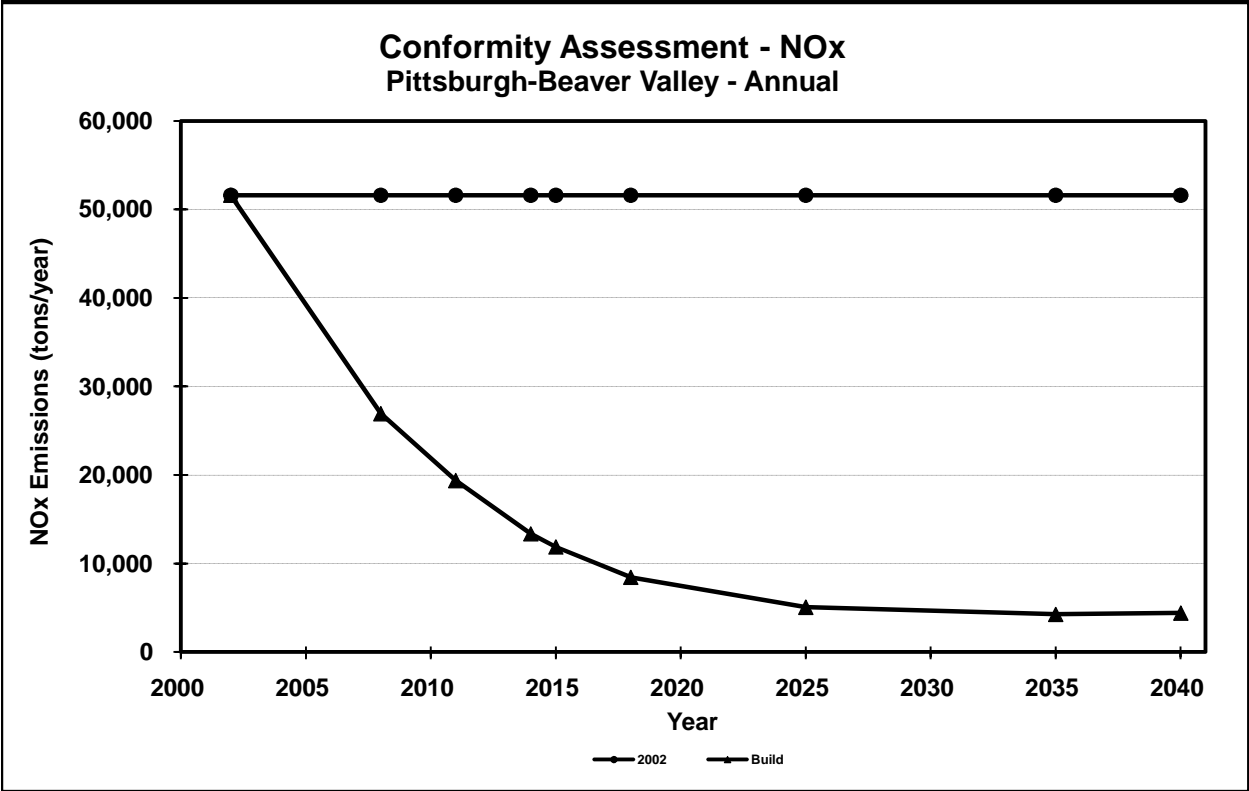


Figure 4

SPC May 2011

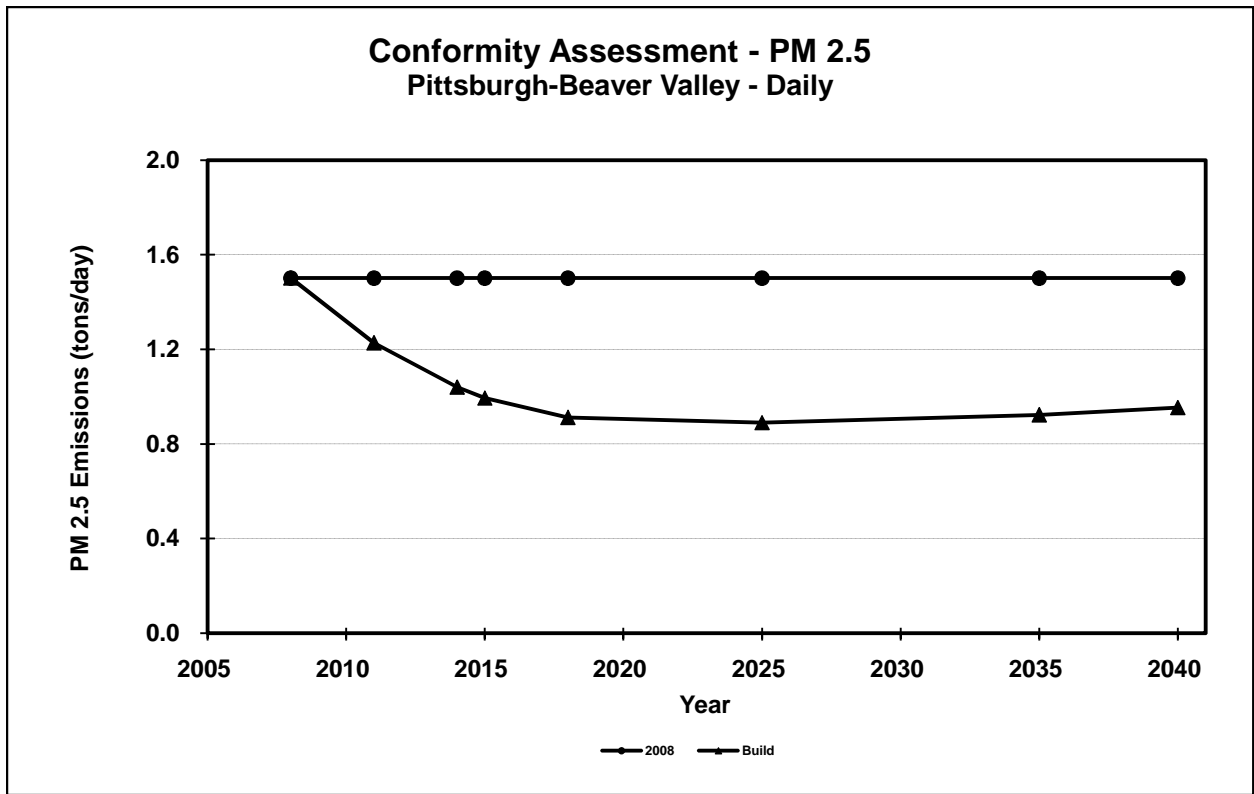


Figure 5

SPC May 2011

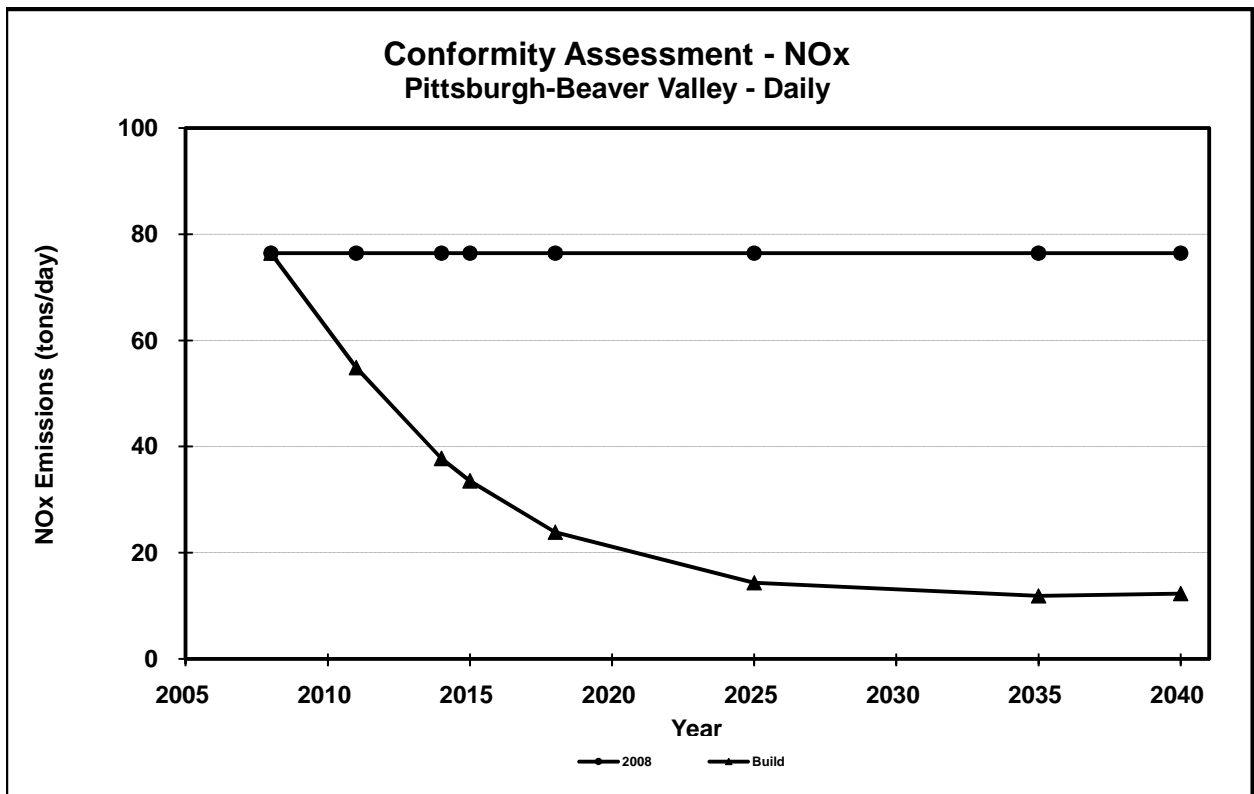


Figure 6

SPC May 2011

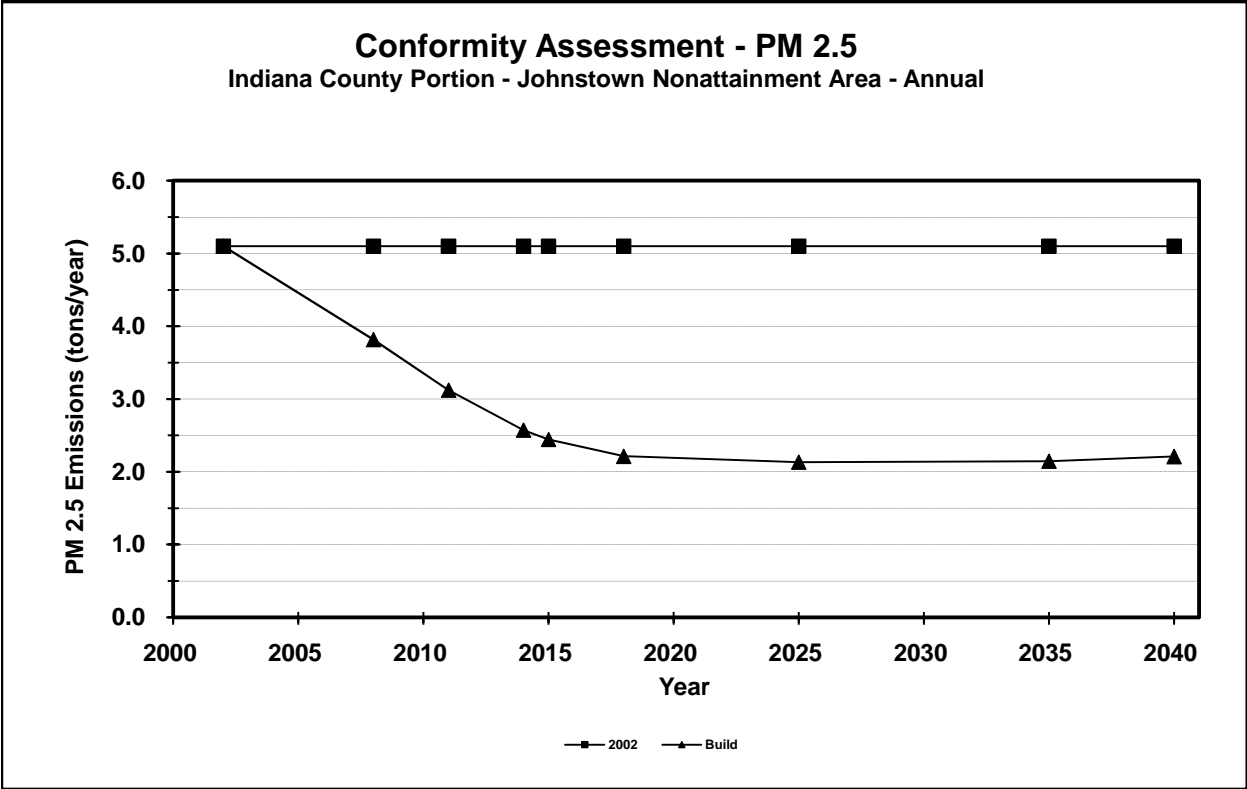


Figure 7

SPC May 2011

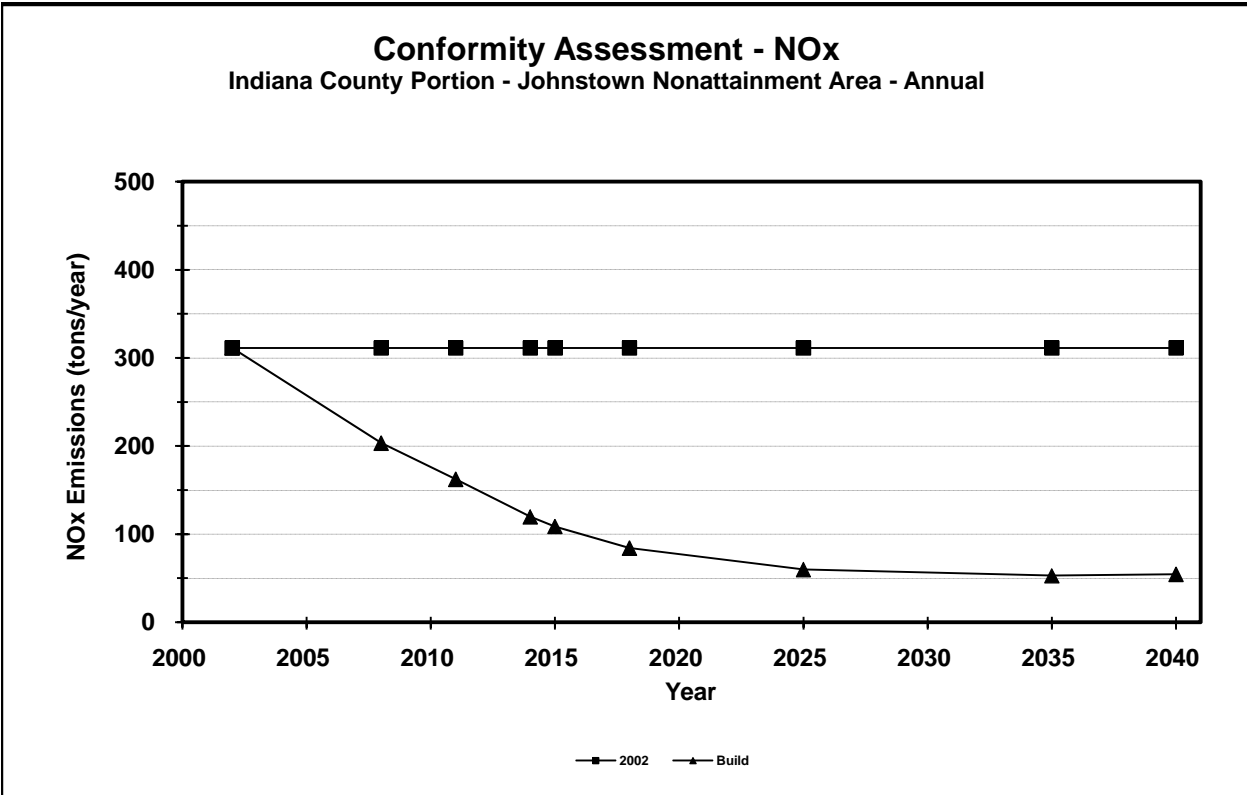


Figure 8

SPC May 2011

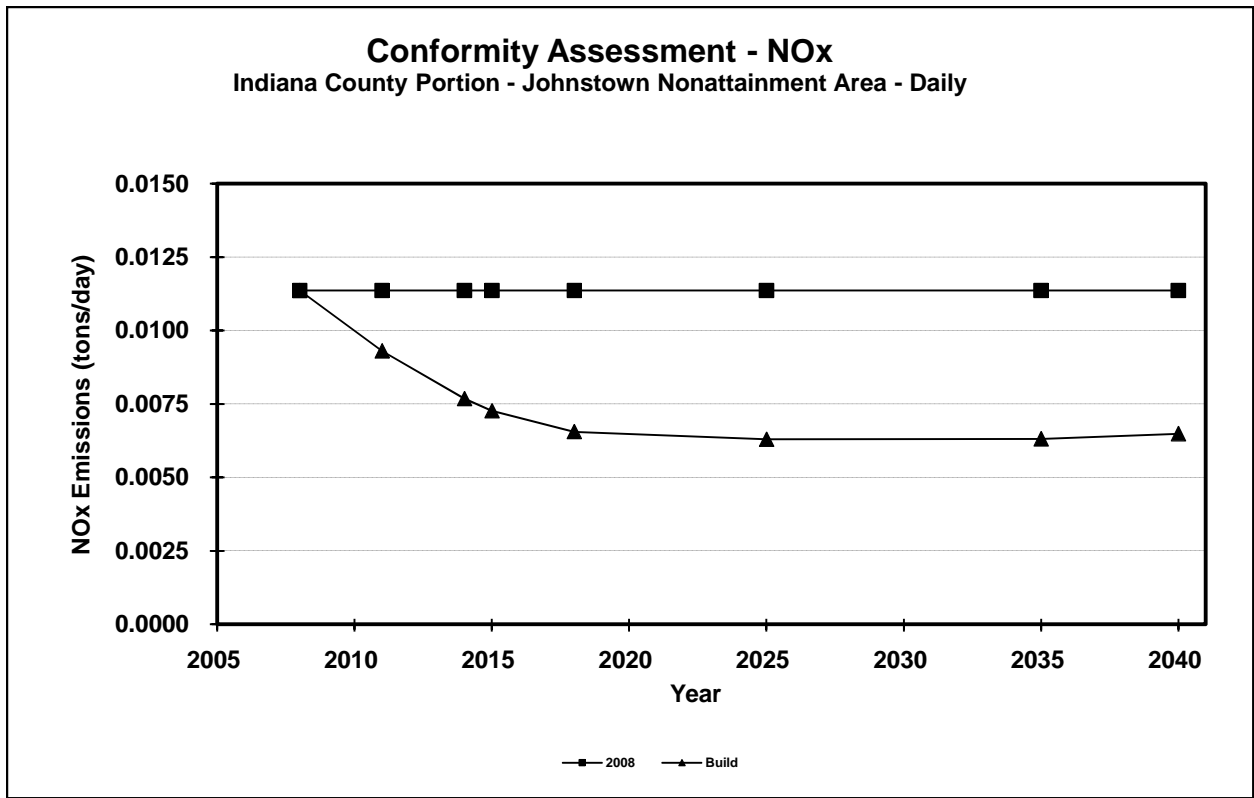


Figure 9

SPC May 2011

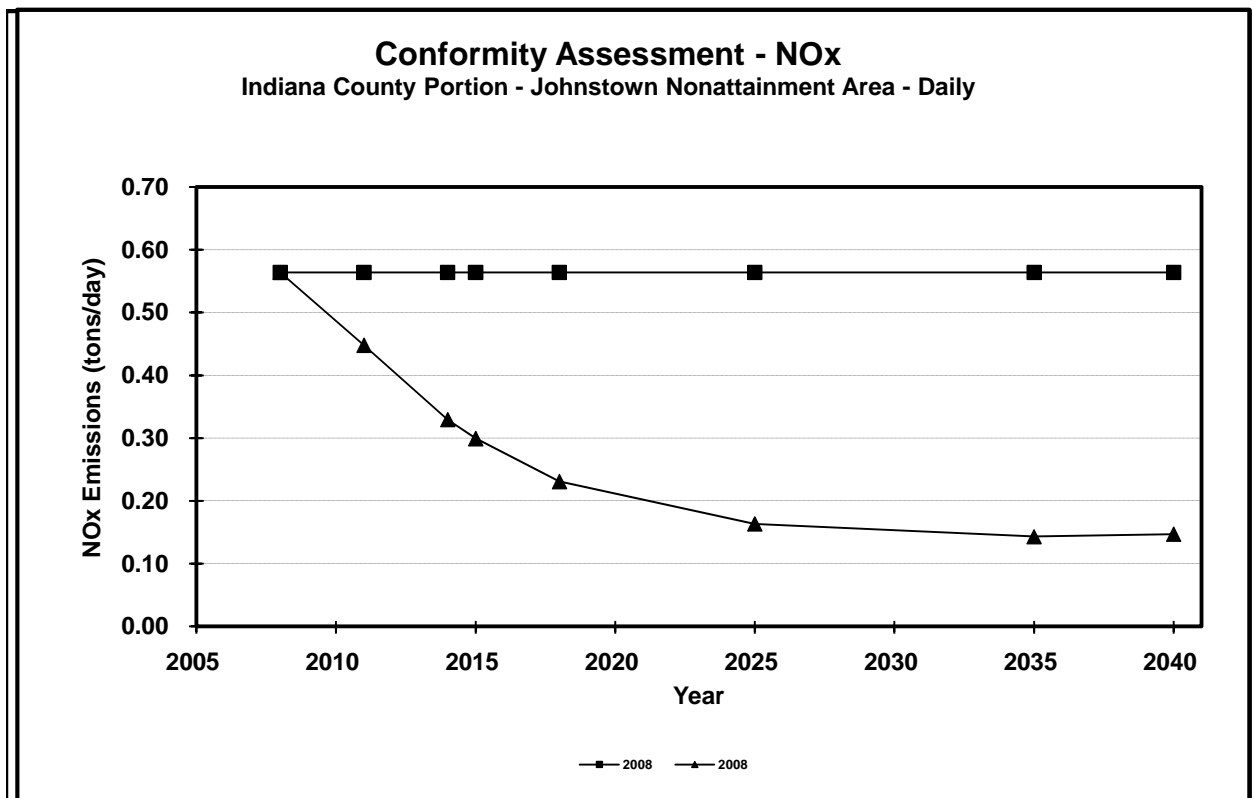


Figure 10

SPC May 2011

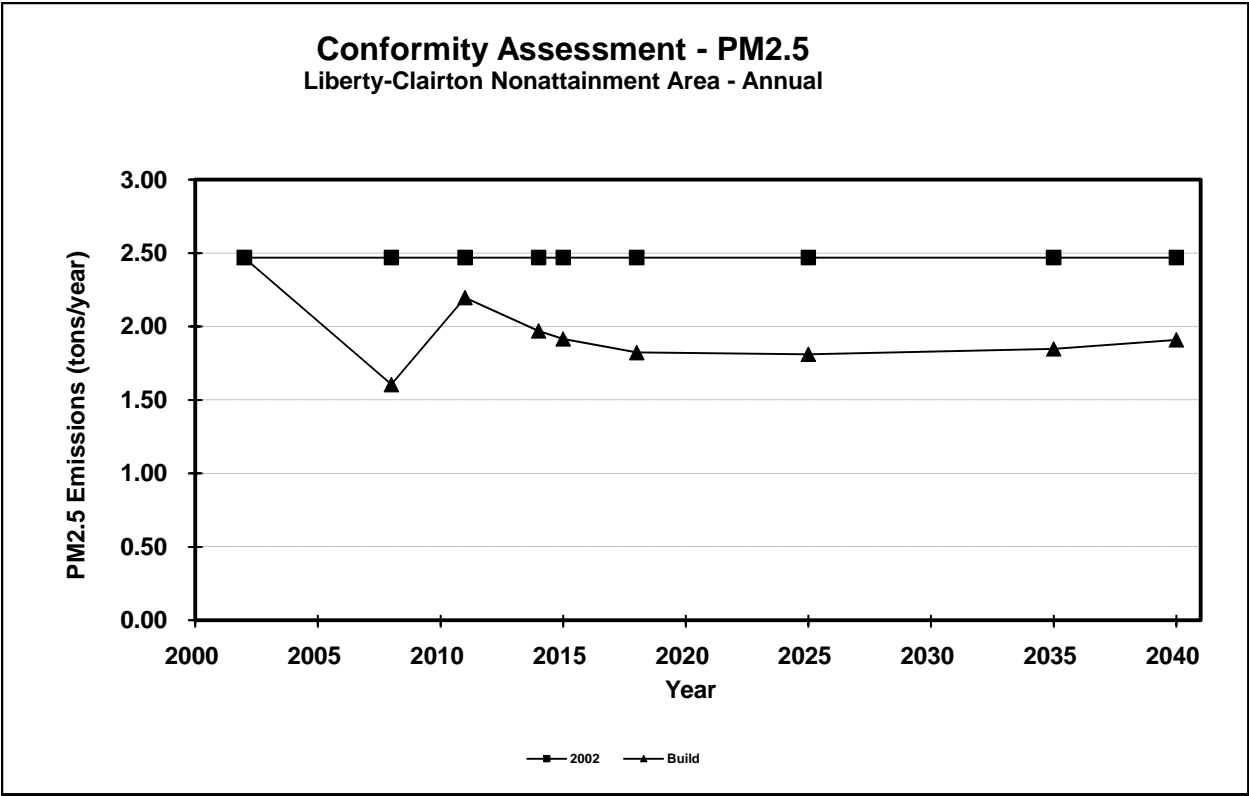


Figure 11

SPC May 2011

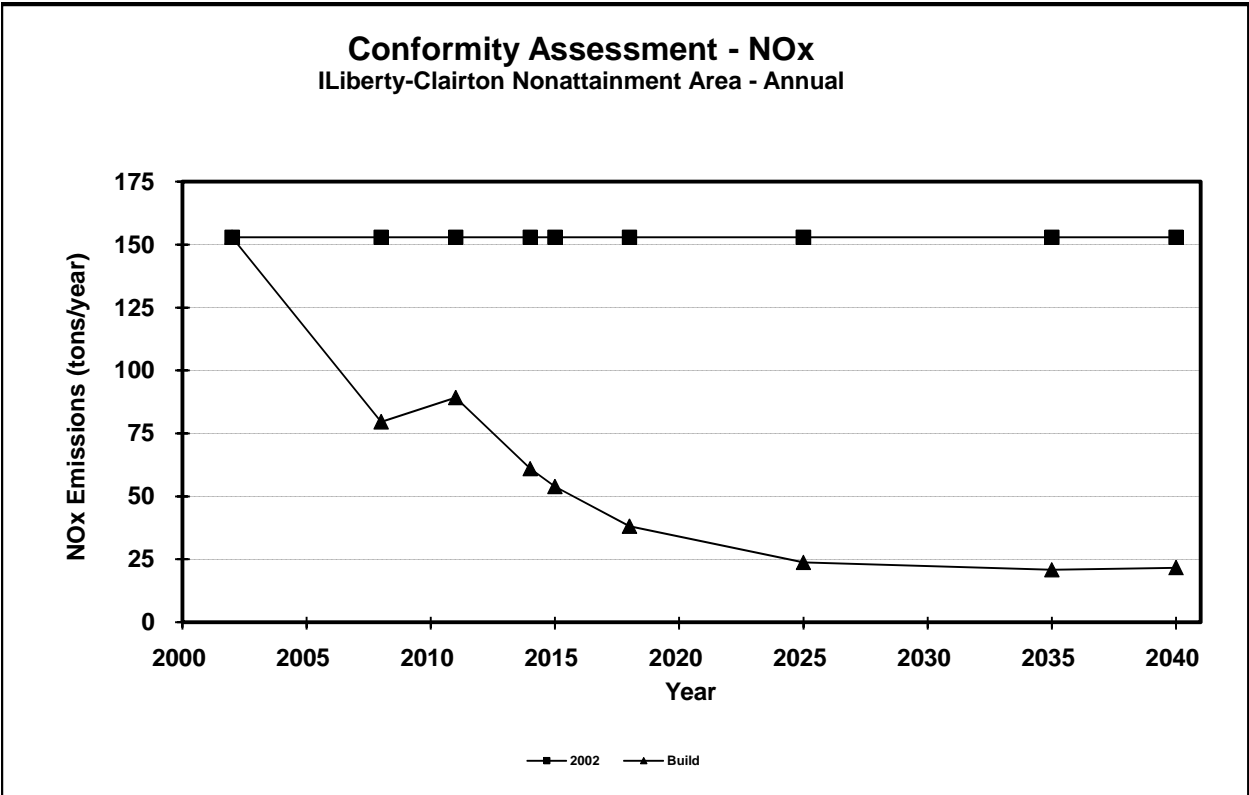


Figure 12

SPC May 2011

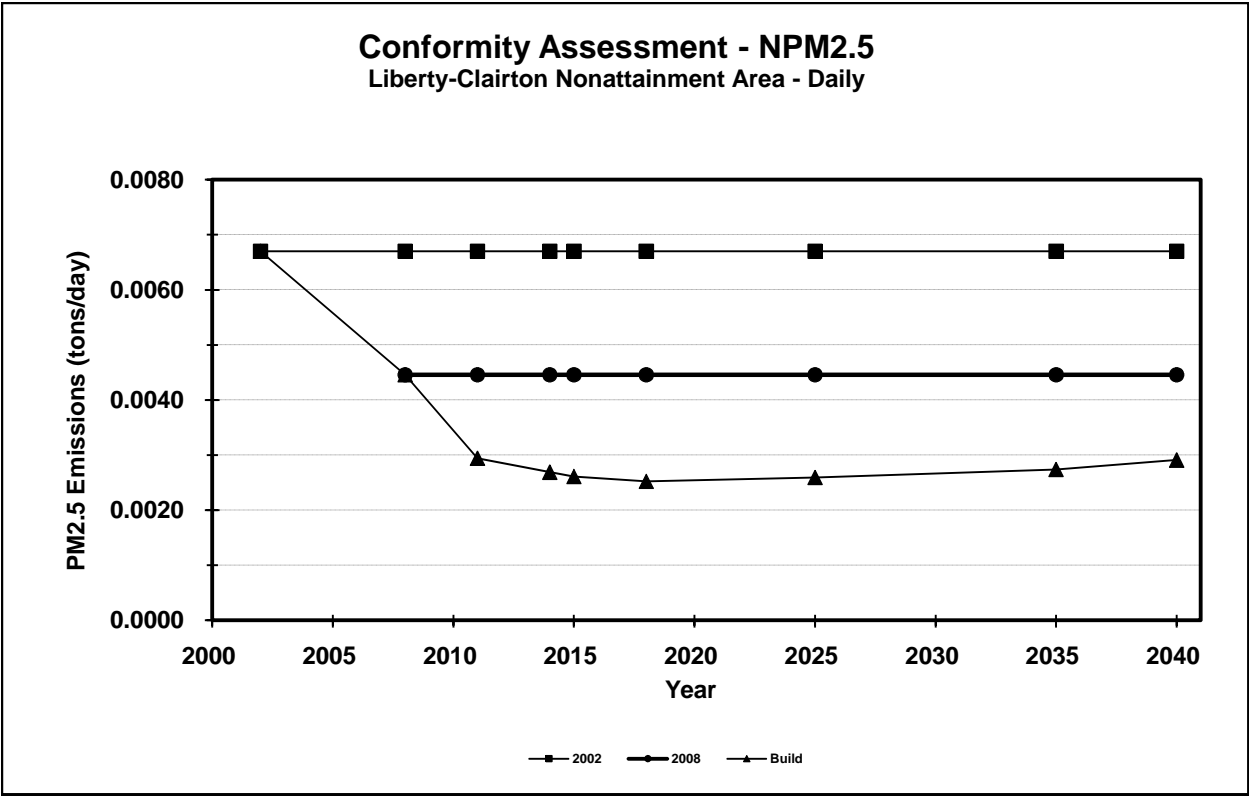


Figure 13

SPC May 2011

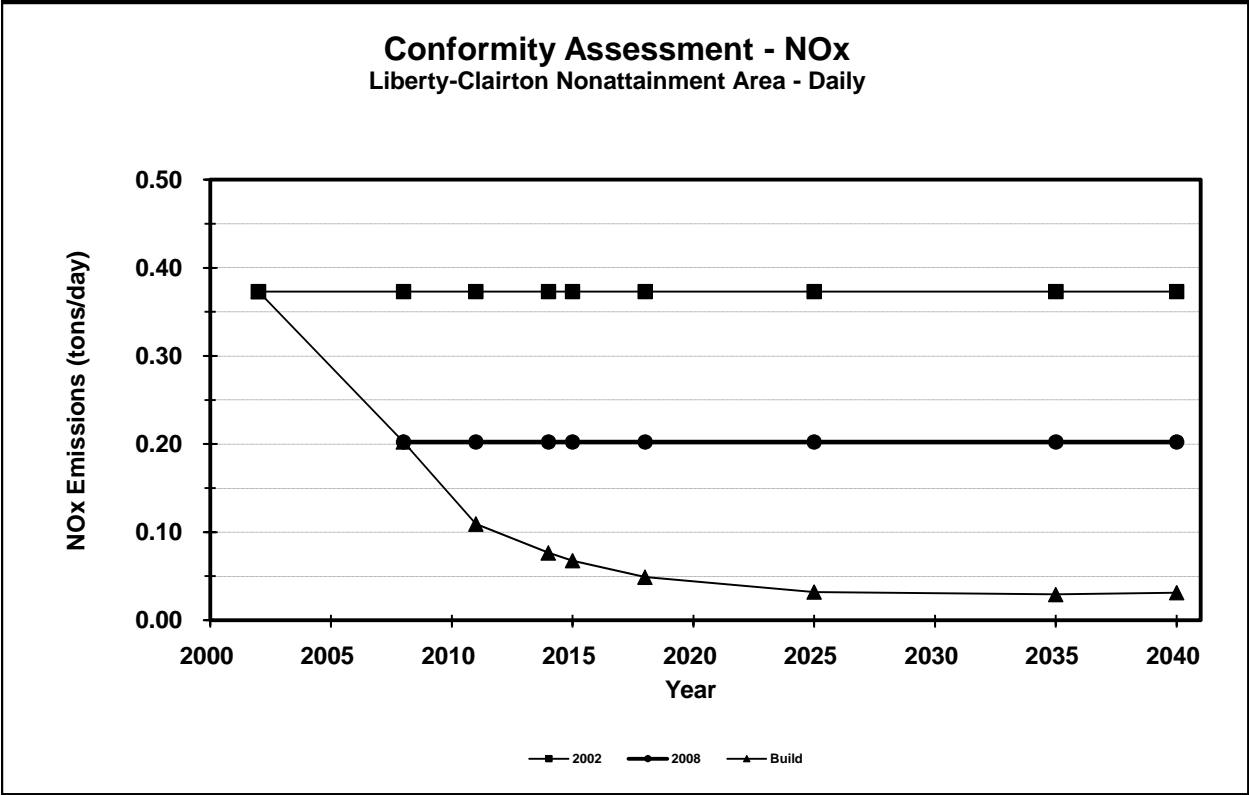


Figure 14

SPC May 2011

**8-Hour Ozone Conformity Assessment
Pittsburgh-Beaver Valley
Emissions (Kg/Day)**

	2011	2014	2015	2018	2025	2035	2040
VMT	60,742,574	62,244,406	62,705,813	64,109,982	67,514,112	72,129,465	74,500,234
VOC Budget Approved	41,444.0	41,444.0	41,444.0	41,444.0	41,444.0	41,444.0	41,444.0
VOC Budget Pending	49,475.0	49,475.0	49,475.0	29,859.0	29,859.0	29,859.0	29,859.0
VOC	31,601.1	24,573.6	22,781.9	19,142.7	15,543.8	16,446.1	17,103.1
NOx Budget Approved	69,932.0	69,932.0	69,932.0	69,932.0	69,932.0	69,932.0	69,932.0
NOx Budget Pending	92,103.0	92,103.0	92,103.0	37,327.0	37,327.0	37,327.0	37,327.0
NOx	51,862.5	35,796.3	31,844.6	22,757.0	13,778.9	11,506.4	11,905.3

TABLE 19

SPC May 2011

**8-Hour Ozone Conformity Assessment
Greene County
Emissions (Kg/Day)**

	2011	2014	2015	2018	2025	2035	2040
VMT	1,308,408	1,326,467	1,337,161	1,369,461	1,438,683	1,551,830	1,607,127
VOC Budget Approved	1,451.5	1,451.5	1,451.5	907.2	907.2	907.2	907.2
VOC	1,016.3	795.2	740.1	628.2	526.2	553.0	572.3
NOx Budget Approved	2,358.7	2,358.7	2,358.7	1,179.3	1,179.3	1,179.3	1,179.3
NOx	1,373.2	1,011.6	927.0	717.7	505.6	466.8	483.4

TABLE 20

SPC May 2011

**8-Hour Ozone Conformity Assessment
Indiana County
Emissions (Kg/Day)**

	2011	2014	2015	2018	2025	2035	2040
VMT	2,546,245	2,591,620	2,608,207	2,655,354	2,768,641	2,947,898	3,034,515
VOC Budget Approved	2,776.0	2,776.0	2,776.0	1,741.8	1,741.8	1,741.8	1,741.8
VOC	2,095.9	1,664.7	1,555.5	1,327.8	1,097.8	1,144.9	1,179.2
NOx Budget Approved	4,399.8	4,399.8	4,399.8	2,177.2	2,177.2	2,177.2	2,177.2
NOx	2,680.9	1,973.0	1,797.4	1,383.1	976.2	884.6	910.5

TABLE 21

SPC May 2011

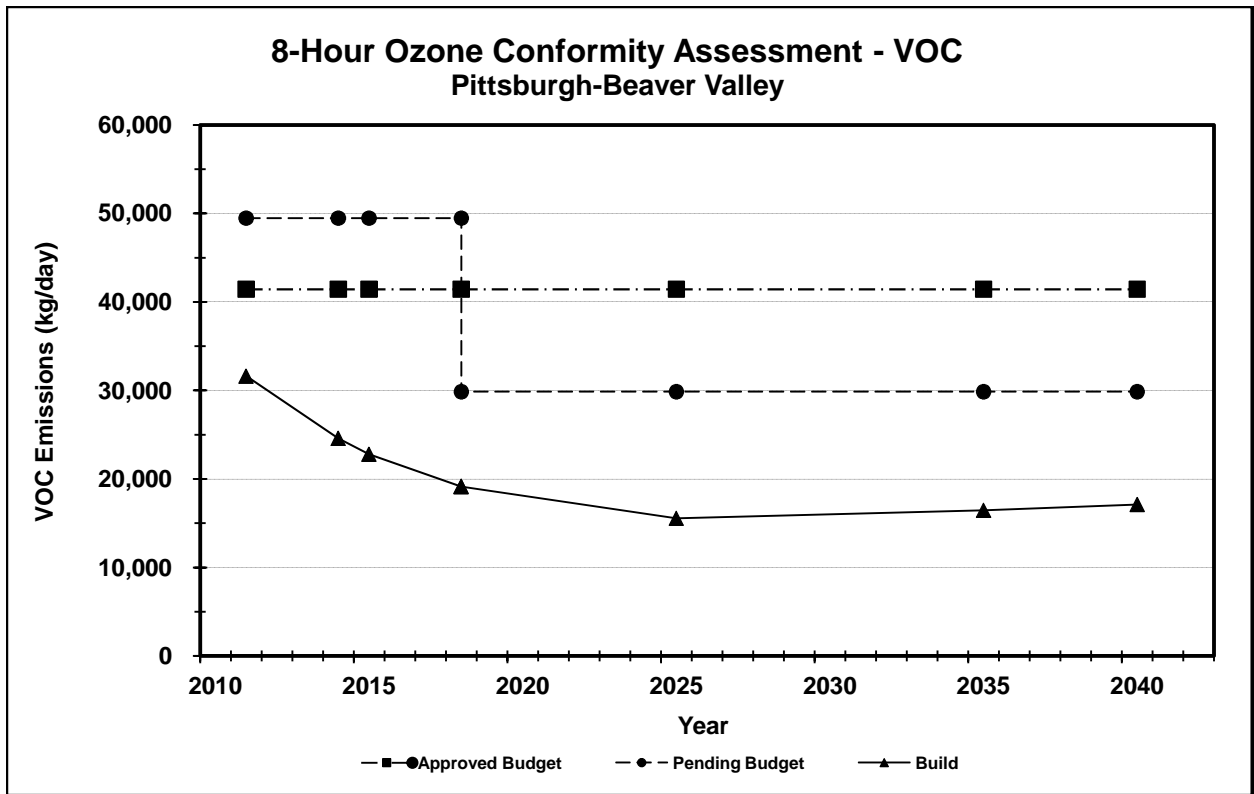


Figure 15

SPC May 2011

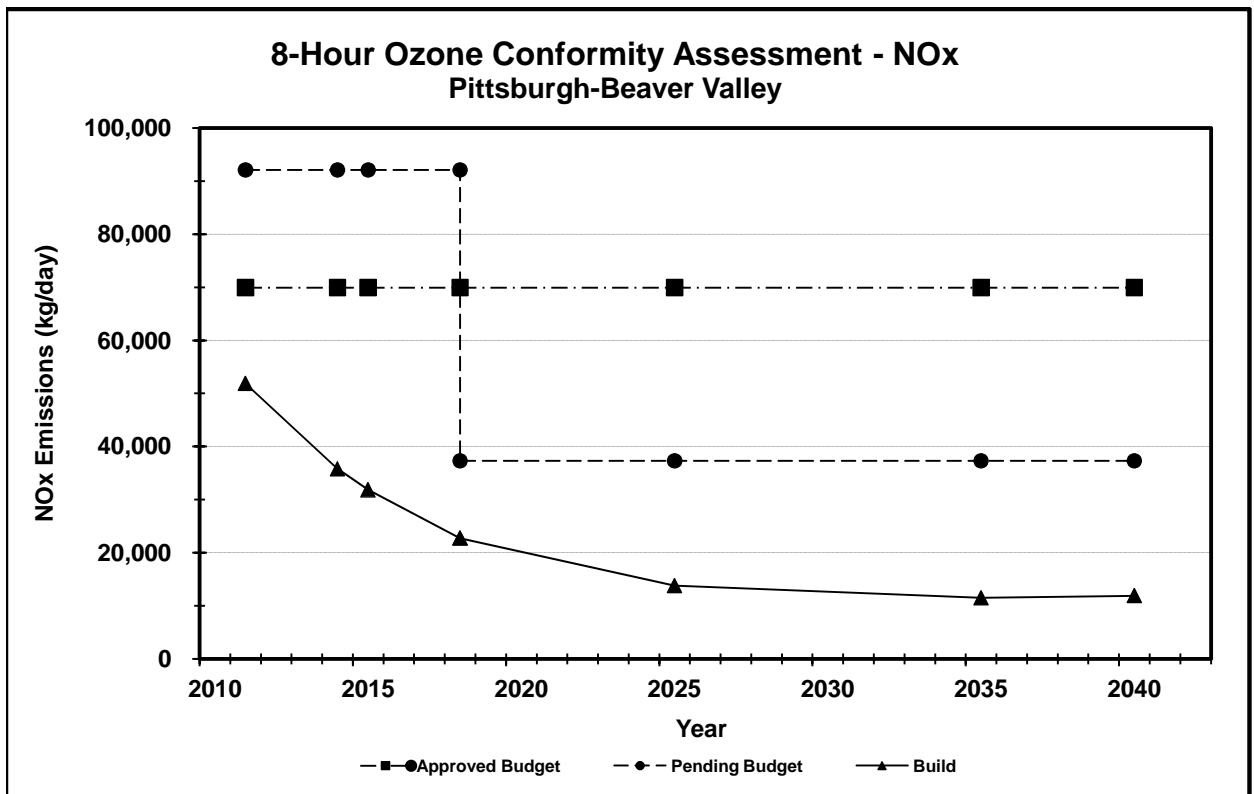


Figure 16

SPC May 2011

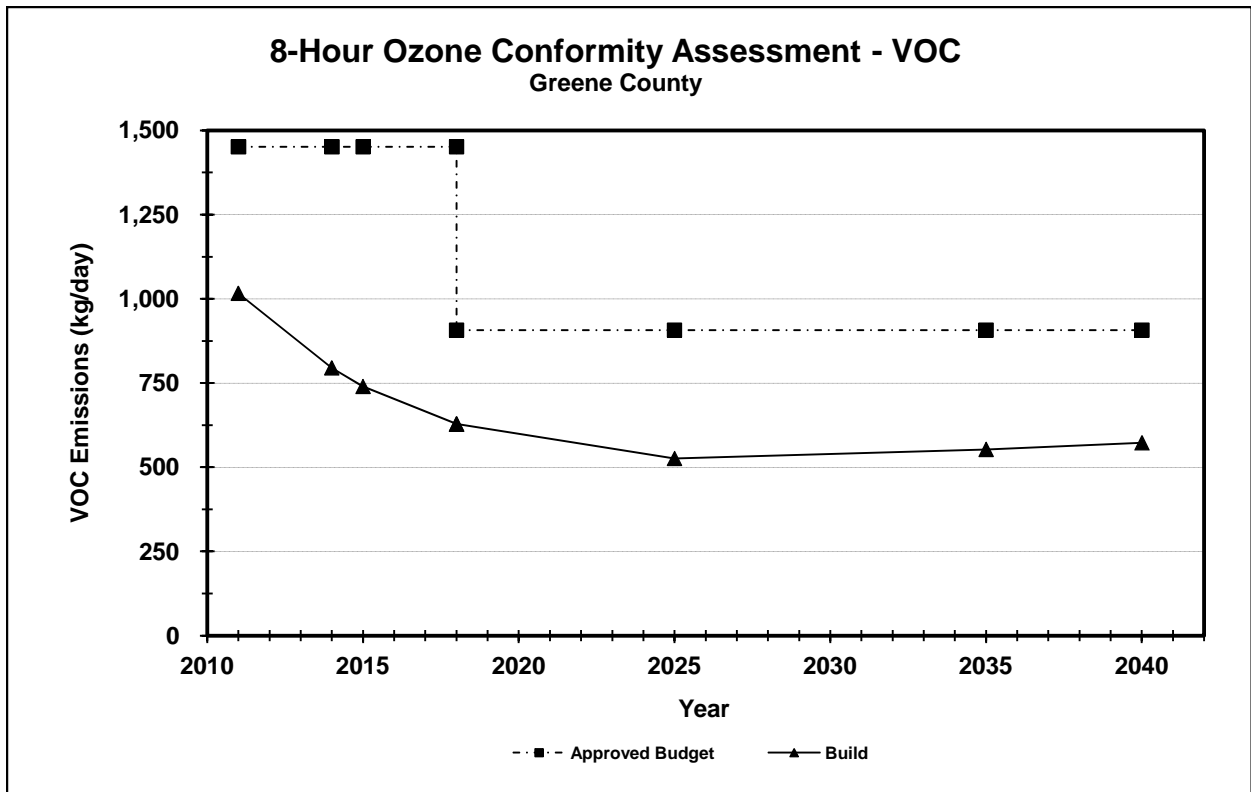


Figure 17

SPC May 2011

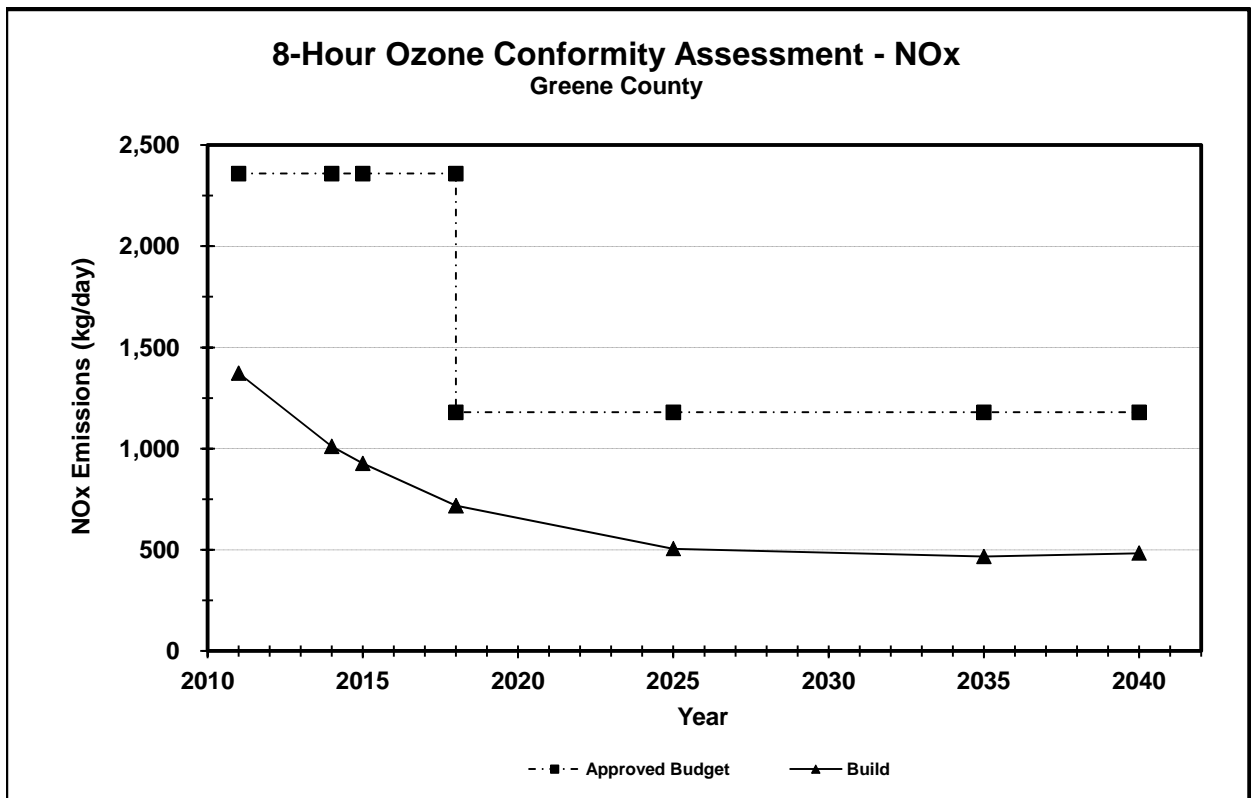


Figure 18

SPC May 2011

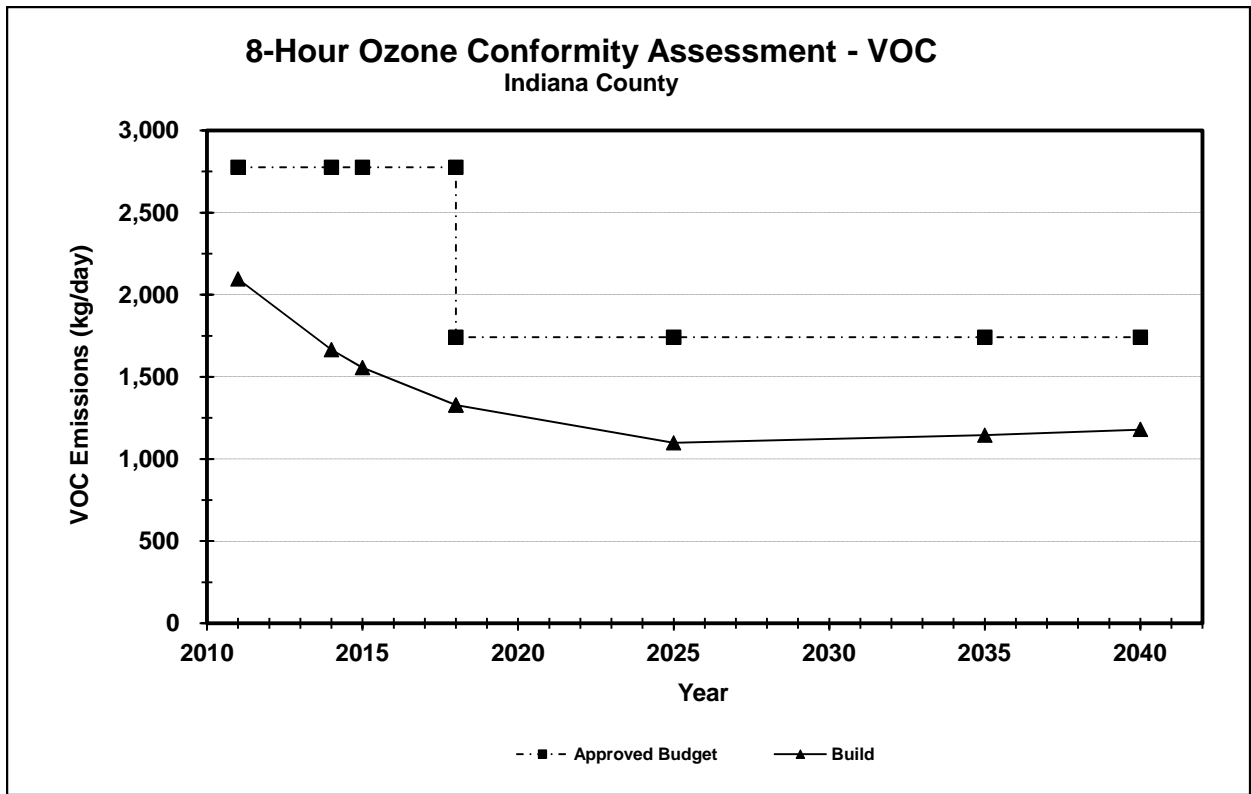


Figure 19

SPC May 2011

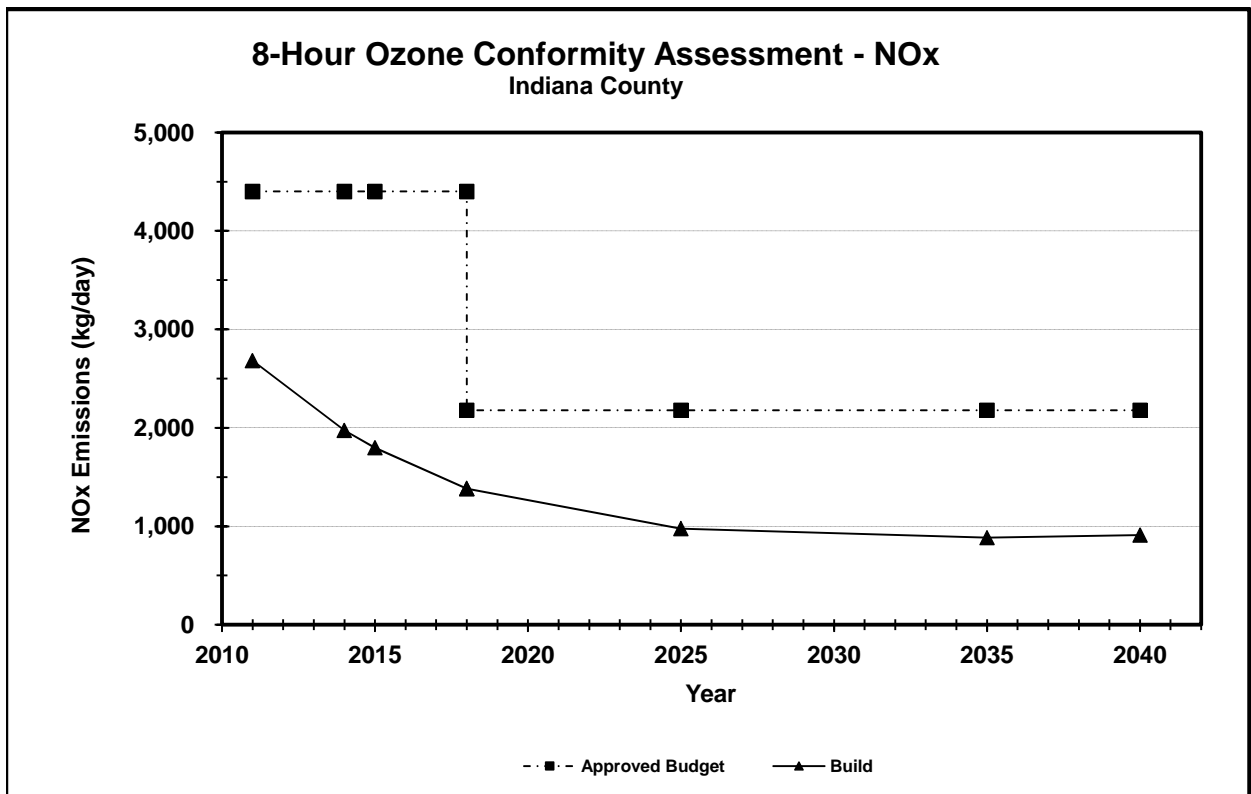


Figure 20

SPC May 2011