



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 20 2006

THE ADMINISTRATOR

Paul E. Gutermann
David H. Quigley
Charles L. Franklin
Akin Gump Strauss Hauer & Feld LLP
1333 New Hampshire Avenue, N.W.
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Dear Messrs. Gutermann, Quigley, and Franklin:

Thank you for your June 13, 2005, Petition for Reconsideration, submitted on behalf of Dynegy Midwest Generation, Inc., concerning EPA's PM 2.5 nonattainment designation for Baldwin Township in Randolph County, Illinois. You raised a number of objections to the inclusion of Baldwin Township in the St. Louis PM 2.5 nonattainment area. We discuss below the specific arguments you raised in your petition. EPA has reviewed the arguments and information provided in your petition and, for the reasons discussed below, your petition for reconsideration for Baldwin Township is denied.

1. EPA should reconsider its designation for Baldwin County because that designation relied on the application of nine criteria adopted without notice and comment.

Your petition contends that EPA should not have made the PM 2.5 designations on the basis of guidance, but instead should have conducted notice and comment rulemaking in making the challenged designations. EPA disagrees with this view. Contrary to your suggestion, neither the CAA nor the APA require EPA to provide for a notice and comment process for designation determinations. Section 107(d)(2) of the CAA requires EPA to promulgate initial designations in the Federal Register, but also expressly provides that the promulgation of designations is not subject to the notice and comment provisions of APA sections 553 through 557.

In addition, EPA was not required to undertake notice and comment rulemaking when issuing the guidance identified in your petition. The documents were plainly guidance, both by their explicit terms and as applied by the Agency. Accordingly, there was no reason for EPA to undertake notice and comment rulemaking to provide guidance on the designation process.

Furthermore, in light of the statutory scheme discussed above, EPA believes it was appropriate and reasonable to issue guidance with the goal of ensuring a robust and well-considered designation process. To the extent that you believe that EPA did not consider the appropriate types of information in making its designation decision for Baldwin Township, or did not consider the information correctly, you have the opportunity to challenge the Agency's final designation decision.

Finally, you assert that EPA's application of the nine factors recommended in the guidance is a "black box" process and that the Agency's guidance did not provide a reliable indicator of how EPA would apply the various factors suggested. EPA respectfully disagrees. The designations process does not in any way resemble a "black box," as EPA has provided extensive documentation of how it reached the final PM 2.5 designations. Moreover, to the extent that your petition suggests that EPA's guidance did not provide a blueprint or instruction manual for making boundary determinations, the Agency agrees. As we explained in the January 2005 final designation notice:

our guidance does not establish bright lines or cut-points for how a particular factor is applied. For example, the guidance does not identify a set amount of a pollutant, or a specific level of commuting between counties, that would automatically require a county to be included in a nonattainment area as a contributing county.¹

By design, the guidance allowed for flexibility so that "the individual facts and circumstances of each area [could] be considered in determining whether to include a county as contributing to a particular nonattainment problem."² EPA believes that the guidance served the role that EPA intended, i.e., it provided the Agency's views on considerations relevant to determining the boundaries of PM 2.5 nonattainment areas for the purposes of designations under section 107(d) of the CAA. As non-binding guidance, it was not prescriptive or inflexible. In the end, far from making EPA's actions arbitrary and capricious, as your petition suggests, EPA believes that its guidance allowed the necessary flexibility and discretion to make case-specific designations that are both reasonable and consistent with the statute.

2. EPA should reclassify Baldwin Township on the basis of a subsequent Consent Decree.

You suggest that EPA should reverse the designation of Baldwin Township because Dynegy has recently entered into a Consent Decree which requires Dynegy, inter alia, to install certain specified new control measures at the Baldwin Township plant by December 31 of the years 2010, 2011, and 2012. EPA acknowledges that the controls required by the Consent Decree are significant and will ultimately provide important emission reductions in the St. Louis

¹ 70 FR at 947.

² Id.

area. EPA does not agree, however, that the finalization of the Consent Decree justifies reversal of the nonattainment designation for Baldwin Township.

First, EPA notes that the issue of the impending Consent Decree is one that the Agency considered carefully at the time of the designation. At that time, there were concerns about whether the recent emissions reductions at the Dynegy plant in Baldwin Township were permanent and enforceable, and whether further projected reductions were possible. Naturally, EPA did not specify the particulars of the ongoing litigation settlement discussions because they were still underway. What controls the Consent Decree would ultimately require, and the schedule for those controls, had not yet been finally and officially established. While the potential for a Consent Decree making emissions reductions permanent and enforceable was thus a relevant consideration for the Agency, it was not “dispositive” as you suggest. EPA examined the full facts and circumstances in reaching its final designation decision.

Second, EPA believes that the terms of the now final Consent Decree do not provide a basis for reversing the designation of Baldwin Township, because of the timing of the controls. EPA generally looked at emissions data and other information for the years 2001-2003, or for the years 2002-2004 if requested by the state. Thus, it is emissions from sources during those periods that EPA believes are most indicative of what areas contribute to current violations of the NAAQS. While the Consent Decree will result in significant future emissions reductions, EPA notes that the deadline for installation for the significant new controls is the very end of 2010, 2011, and 2012, and that the concomitant reductions in emissions will therefore not begin to occur until 2011, 2012, and 2013. This is well beyond the years that EPA generally considered appropriate for evaluation. More importantly, these dates are even beyond the initial presumptive attainment date for the PM 2.5 NAAQS. Section 172(a)(2) contemplates that areas should attain the NAAQS as expeditiously as practicable, but no later than five years from the date of designation. Because the presumptive attainment date under the statute would be April 2010 (as demonstrated by ambient conditions in 2007, 2008, and 2009), EPA believes that installation of new controls that will begin to achieve emissions reductions in 2011, 2012, and 2013 should not be a controlling factor in the decision whether or not EPA should designate Baldwin Township a part of the St. Louis nonattainment area. That decision should be based upon whether sources in Baldwin Township currently contribute to nonattainment in the St. Louis area, and will continue to do so in the near future.

Third, if EPA were to consider the future emissions reductions mandated by the Consent Decree that will begin in 2011, 2012, and 2013, as a sufficient justification for considering the future emissions at the plant, we believe that it would likewise be appropriate to consider any countervailing future emissions increases at the same location. It is EPA’s understanding that Dynegy has in fact already applied for the permits to build new units at the same location, and we anticipate that these new units will add to emissions in Baldwin Township that will both increase emissions in the near term and offset much of the future emissions reductions that will result from the new controls mandated by the Consent Decree. We expect that the new units will be efficient and well controlled, but the addition of new units would mean that the Dynegy plant will nevertheless continue to constitute a relatively large source of emissions at a location that we have already determined to affect nonattainment in St. Louis.

Finally, EPA believes that the designation of nonattainment for Baldwin Township is consistent with the ultimate recommendation by the State of Illinois. The initial recommendation from the state was that EPA should designate Baldwin Township unclassifiable, and the remainder of the county attainment. EPA disagreed with this initial recommendation, based upon its independent evaluation of the facts and circumstances concerning the contribution of Baldwin Township to nonattainment in the St. Louis area. Because EPA had sufficient information to make a judgment, a designation of unclassifiable was inappropriate and a designation of nonattainment was necessary. After consultation with EPA, the state then recommended that Baldwin Township be designated nonattainment, and that the remainder of Randolph County be designated attainment. EPA concurred with this latter recommendation. Section 107(d) indicates that EPA should modify state recommendations only when necessary. EPA thinks that it would be inappropriate to override the state's final recommendation for Baldwin Township because it is justified by the pertinent facts and circumstances.

3. EPA only applied, and improperly applied, three of the nine factors in the Agency's guidance.

In your petition for reconsideration, you question EPA's application of factor 1 which concerns the emissions of PM 2.5 and PM 2.5 precursors in a given area and the use of the weighted emissions score as a means of evaluating this emissions information. You suggest that EPA applied this factor in such a way that other counties with scores similar to that of Randolph County were excluded from their respective nonattainment areas.

Simply put, EPA believes that you are making an inappropriate comparison. EPA evaluated the question of nonattainment area boundaries on a case by case, area by area basis. The particular facts and circumstance of each area are what informed the Agency's designation decision in that specific area. Thus, EPA believes that comparing the Randolph County emissions score to that of counties in other geographic areas of the country is an inappropriate approach. The composite emission scores are designed for comparisons within and nearby to the specific individual urban area, to determine what areas are contributing to nonattainment in that specific area. Thus, for example, the emission score for Randolph County (8.9) may properly be compared to the lower score for Monroe County, Illinois (1.6) and to the comparable score for Franklin County, Missouri (9.1). EPA designated both Monroe and Franklin as nonattainment, in part, because of their emissions and thus their contribution to nonattainment in St. Louis. EPA also notes that the emissions score for Randolph County is the highest of the counties bordering the St. Louis metropolitan area, further justifying the inclusion of at least a portion of Randolph County in the nonattainment area.

A large portion of Randolph County emissions come from the Dynegy power plant. In its September 1, 2004 letter, Illinois stated that 26,267 tons of the county's 27,061 tons of sulfur dioxide and 22,367 tons of the county's 26,729 tons of nitrogen oxides come from the power plant. In the context of the emissions in the St. Louis area, these amounts of emissions are significant. Consideration of the emissions within Baldwin Township, and their relative amount within the larger nonattainment area, confirms that it is appropriate to include the area within the nonattainment area.

You also express concern with EPA's use of meteorological data. In particular, you argue that EPA's analysis of wind direction in the area contradicts the conclusion that Baldwin Township contributes to nonattainment in St. Louis because, in essence, the wind does not blow at all times from the direction of the Baldwin Township to St. Louis. You also suggest that EPA treated Porter County Indiana (in the Chicago area) differently, and that this justifies a change to the designation for Baldwin Township.

Again, EPA conducted the analysis on a case by case basis, based on the specific facts and circumstances in each area. As such, comparison of counties from one nonattainment area to another is not appropriate. The Agency's based its designation determinations on a consideration of a wide range of information and upon the specific facts and circumstances in each location. Within the St. Louis area, which is the proper focus in this designation, EPA determined that the available wind information supported inclusion of Baldwin Township within the nonattainment area. The windrose information considered by EPA indicated that winds blow in different directions and with different strengths at different times, but do blow from Baldwin Township towards St. Louis a significant portion of the time. Baldwin Township's location means that winds from the wide range of directions, from East through Southwest, will carry pollutants from Baldwin Township into St. Clair and Monroe Counties and beyond. EPA thus concluded that wind in this specific geographic area will carry emissions from Baldwin Township into the rest of the nonattainment area frequently enough to contribute to violations of the PM 2.5 NAAQS in the St. Louis area.

You also argue that EPA inappropriately applied factor 9, concerning the level of emissions control in an area as part of the designation determination for Baldwin Township. In particular, you asserted that Dynegy had already made significant emissions reductions at its plant and would be making additional reductions in the future. As discussed in more detail above, EPA did consider both the amount of emissions and the degree of control as part of this process. Based upon information available to EPA, the emissions from Baldwin Township were significant, both in general and in the specific context of other sources throughout the St. Louis area. EPA was aware of, and took into consideration the possibility of, additional controls at the Dynegy plant.

We agree that future upgrades to particulate matter, nitrogen oxide, and sulfur dioxide control systems at the Dynegy plant will help in reducing the area's ambient PM 2.5 level, in conjunction with emissions reductions from other regional and local emissions. EPA believes, however, that it is up to the State of Illinois to determine the appropriate level and timing of controls for sources in the Illinois portion of the St. Louis nonattainment area, as part of the SIP planning process. The state may ultimately conclude that the Dynegy plant is sufficiently controlled, consistent with the requirements of the CAA and applicable regulations, but it would be premature and inappropriate for EPA to make such a judgment at this point.

4. Proper application of the remaining factors justifies changing the designation.

You argue that monitored air quality in Randolph County is below the level of the NAAQS, and that this fact alone requires a designation of attainment for Baldwin Township. EPA disagrees, of course, because the statute explicitly requires that the Agency designate as nonattainment both those areas that are violating the NAAQS, and those areas that are contributing to the violation of the NAAQS in another nearby area. As explained in detail in EPA's prior actions, EPA has determined that Baldwin Township contributes to nonattainment in St. Louis, notwithstanding the fact that ambient air in Randolph County itself meets the NAAQS.

EPA notes that there is ample evidence that single large sources like the Dynegy plant in Baldwin Township can contribute to nonattainment. In making the designation determinations generally, EPA conducted a variety of assessments to evaluate whether power plants have significant impacts on PM_{2.5} nonattainment in the Eastern United States. Many of these assessments evaluated the long range impacts of power plants, thereby demonstrating the importance of regional scale approaches like the Clean Air Interstate Rule (CAIR). However, EPA has also evaluated the impact of power plants at intermediate distances as well.

In one assessment in particular, EPA conducted a set of modeling runs to evaluate the impacts of power plants on relatively nearby violating monitors. EPA conducted this modeling using the CMAQ air quality model and 2001 emissions data, thus using the same modeling platform as was used in the development of the CAIR. Further information on the CAIR analyses is available at www.epa.gov/cair. Three model runs were conducted: one "base case" simulating current air quality levels (1999-2003 average); one case in which eight power plants in the eastern U.S. were "zeroed out" (pollutant emissions were assumed to be zero); and one case in which 29 power plants in the eastern U.S. (those identified in EPA's June 2004 letters to states) were "zeroed out." In the eight-source run, the sources were selected so that they were a significant distance, roughly 100 or more miles, from each other and about 20-80 miles from a nearby violating monitor. Both emission reduction runs evaluated the range of annual average air quality impacts associated with zeroing out power plants of various sizes and located a range of distances from a violating monitor.

This modeling indicated that power plants emissions have significant impacts on PM_{2.5} concentrations at relatively nearby locations as well as the significant impacts at longer distances found in other assessments. The 8-source run zeroed out plants with sulfur dioxide emissions between about 40,000 and 160,000 tons per year and nitrogen oxide emissions between about 8,000 and 40,000 tons per year. Zeroing out these emissions caused reductions in modeled PM_{2.5} concentrations ranging from 0.35 to 0.71 $\mu\text{g}/\text{m}^3$. The 29-source run zeroed out a broader range of plants including a number of smaller plants. Nevertheless, the impacts at nearby monitors were comparable to the impacts found in the 8-source run. A memorandum entitled "Air Quality Modeling to Assess Power Plant Impacts" was included in the public docket for the PM_{2.5} designations process (docket EPA-HQ-2003-0061) in December 2004. It provides further information regarding the zero-out modeling runs described above. EPA has included an updated version of this memorandum in the designations docket to include additional information on the results of the 8-source and 29-source runs.

EPA emphasizes that modeling is neither required by the statute, nor necessary in light of other tools and information available to the Agency, in order to make designation decisions. EPA's assessment of a range of air quality, demographic, transportation, and emissions information provided a sufficient and robust technical foundation for the designations process. EPA conducted the modeling described here to address a policy question, namely to assess whether relatively large sources such as power plants should generally be considered to contribute to nearby nonattainment problems. The particular modeling runs conducted may offer insight into the potential contributions of particular power plants to particular nonattainment areas. However, the primary purpose of this modeling was to inform the judgments that EPA ultimately made regarding the potential contributions of numerous large sources across the Eastern United States. The purpose was not to assess where to draw boundaries of any particular nonattainment area. The general finding about the impact of moderate to large power plants on nearby violating monitors supplemented additional information from the relevant considerations recommended in EPA's guidance, and serves to confirm EPA's judgment that emissions from an individual source, such as the Dynegy plant in the Baldwin Township, can contribute to a violation of the PM_{2.5} standards in a given area, such as the St. Louis area.

You also argue that because Randolph County has relatively low population and urban density, EPA incorrectly concluded that Baldwin Township contributes to nonattainment in St. Louis. EPA agrees that Randolph County is not an urban area. As EPA explained in its guidance, however, an area's population and urban density are but one relevant consideration in the designation process. In this instance, other considerations outweighed the fact that Randolph County is not itself an urban area. EPA determined that facts concerning emissions from the Dynegy plant, meteorological evidence, and the level of control were more significant considerations.

Similarly, you argued that traffic and commuter patterns in the St. Louis area indicate that Randolph County plays a less significant role than other counties in the area. EPA acknowledges that this may be correct, but it is not outcome determinative. Other considerations justify inclusion of Baldwin Township in the nonattainment area, overriding the fact that Randolph County itself has relatively fewer commuters and less overall VMT. Moreover, even though not crucial here, EPA notes that even a relatively small impact from mobile source emissions in a given area, in conjunction with other types of emissions, may be part of the contribution that requires inclusion of that area in a nonattainment area.

You also suggest that the lack of significant topography in the St. Louis means that Baldwin Township should be designated attainment, rather than nonattainment. While EPA agrees that there are no topographical features such as mountain ranges that play a significant role in the creation and concentration of PM_{2.5} and its precursors in this geographic region, that is not a sufficient basis to ignore other relevant considerations. EPA believes that, in this instance, the absence of an intervening geographic or topographical barrier merely confirms that the emissions from Baldwin Township are contributing to nonattainment in St. Louis, given other facts such as the general wind patterns in this area.

5. Randolph County is located outside the St. Louis MSA and the St. Louis Ozone Nonattainment area.

You suggest that EPA erred by inclusion of Baldwin Township in the St. Louis nonattainment area, merely because Randolph County is outside both the 1999 and 2003 versions of OMB's St. Louis Metropolitan Statistical Area. EPA notes that its guidance recommended the OMB MSA boundaries as a rebuttable presumption, and clearly indicated that states might vary from the presumption as they thought appropriate based on recommended factors. This determination was a case by case determination, and states and EPA varied from the presumption as they determined necessary to identify areas that violate and contribute to violations of the PM 2.5 NAAQS. Given the ultimate recommendation of the state, and EPA's final designation determination, it is evident that the facts and circumstances in the St. Louis area justified a different nonattainment area boundary. While EPA recognizes that you may disagree with the decision, it does not follow that Baldwin Township should be excluded from the St. Louis area merely based on its location adjacent to, rather than within the St. Louis MSA.

Similarly, the fact that Baldwin Township is not within the boundaries of the St. Louis ozone nonattainment area is relevant, but not outcome determinative. EPA expressed its view that co-extensive nonattainment boundaries for PM 2.5 and ozone might be appropriate, and that while consideration of ozone nonattainment area boundaries is a relevant consideration, EPA did not suggest that the location of ozone nonattainment area boundaries alone should override all other considerations. Ozone and PM 2.5 are different pollutants that behave differently in the atmosphere. They will likely require different attainment strategies. PM 2.5 has precursors in addition to those of ozone which will require different controls. Thus, it is not inappropriate that the boundaries for the ozone and PM 2.5 nonattainment areas vary. As previously discussed, EPA has already determined that Baldwin Township properly belongs within the PM 2.5 nonattainment area, based upon a careful evaluation of the relevant information.

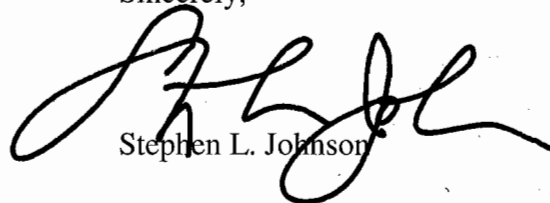
6. EPA should designate Baldwin Township as unclassifiable.

You suggest that instead of nonattainment, EPA should designate Baldwin Township as unclassifiable "out of an abundance of caution pending development of a factual record to support the nonattainment designation." As you correctly note, the statute provides for a designation of "unclassifiable" in the event that EPA has insufficient information upon which to make a designation. Your letter did not identify, however, any specific data gap or other information need that would justify such an approach. EPA believes that it has sufficient information to make the correct designation in this area. The technical support document for the final designation action, available at <http://www.epa.gov/pmdesignations>, provides further explanation of the Agency's views on this decision

EPA has carefully evaluated the concerns raised in your petition for reconsideration. EPA appreciates the significant efforts that Dynegy will be making to achieve additional emission reductions pursuant to the Consent Decree. Nevertheless, the Agency continues to

believe that Baldwin Township should be designated nonattainment because of its contribution to PM-2.5 nonattainment in the St. Louis area. Therefore, your petition is denied. The Agency looks forward to working with the State of Illinois, and with Dynegy, to ensure achievement of the NAAQS in the St. Louis area.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. Johnson', written over the printed name.

Stephen L. Johnson

cc: Laurel Kroack
Illinois Environmental Protection Agency