THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

DEC 14 2012

Ms. Jessica L. Keiser
Assistant VP ESH
Targa Resources Corp.
1000 Louisiana, Suite 4300
Houston, Texas 77002

Dear Ms. Keiser:

I am pleased to respond to your July 20, 2012, letter in which you filed a petition for reconsideration on behalf of Targa Resources Corp. concerning the U.S. Environmental Protection Agency's final rule, "Air Quality Designations for the 2008 Ozone National Ambient Air Quality Standards." *See* 77 *Federal Register* 30008 (May 21, 2012). The petition requests that the EPA reconsider the nonattainment designation for Wise County, Texas, as part of the Dallas-Fort Worth ozone nonattainment area and to stay the effectiveness of the designation for Wise County pending reconsideration.

The EPA has carefully evaluated the issues and information presented in your petition. For the reasons provided in the enclosure, the EPA is denying your petition. The EPA continues to believe that Wise County is properly designated nonattainment because of its contribution to ozone nonattainment in the DFW area.

The enclosure addresses the specific issues raised in your petition and provides the basis for this denial. The EPA hopes that the responses will help to explain the agency's conclusions so that you will better understand our final decision. The EPA considers the designation of nonattainment areas with appropriate boundaries to be an important step in implementing the 2008 ozone standards.

Please know that we look forward to working with the state of Texas and those in the Dallas-Fort Worth area to ensure achievement of the 2008 ozone standards.

In the meantime, I thank you for your interest in protecting the quality of our environment.

Sincerely,

Lisa P. Jackson

Enclosure

Enclosure

EPA Response to Petition for Reconsideration from Targa Resources Corp.

On July 20, 2012, 2012, Targa Resources Corp. petitioned the EPA to reconsider the final area designation for Wise County in the Dallas-Fort Worth (DFW) area and to stay the effectiveness of the designation for Wise County pending reconsideration. For the reasons discussed below, the EPA is denying Petitioner's reconsideration request. Therefore, the EPA is also denying the stay request. For the sake of clarity, we have organized this response according to the structure of the July 20, 2012 petition.

I. Economic Harm

Issue: Petitioner claims that an ozone reduction strategy for Wise County would likely call for new emissions reductions from Targa's Wise County assets and suppliers, and more stringent permitting requirements could affect development or expansion by Targa – all which could adversely affect Targa's business interests.

Response: This issue was raised during the comment period, and we responded to these comments in our Response to Comments document (RTC). Thus it is not an appropriate basis for reconsideration. As stated in the RTC, "under section 107(d) of the Clean Air Act (CAA), the EPA is required to designate as nonattainment an area that is violating a new or revised national ambient air quality standard or that contributes to a nearby violation. . . . In determining whether an area should be designated nonattainment, the EPA does not consider economic impacts because that is not relevant for determining whether an included area is violating the NAAQS or is a nearby area that is contributing to a violation as provided under CAA section 107(d)." *See* RTC pages 14-15. As such, the criteria for designations in Section 107 of the CAA do not provide for the EPA to consider economic effects. *See* RTC, pages 52-53. As we stated in our RTC document, we intend for the implementation rulemaking for the 2008 ozone NAAQS to address the minimum planning and emissions control obligations for areas designated nonattainment. As the EPA considers the required elements of implementation for the 2008 ozone NAAQS, it is our goal to propose approaches that provide flexibility and opportunity for efficiency to the extent such approaches are consistent with the CAA and will not jeopardize expeditious attainment of the public health and welfare goals of the CAA. To the extent the CAA does not mandate specific control measures, states may consider economic concerns in development of their state implementation plans to address air quality. (*See* RTC pages 14-15, 52-53, and 61). Finally, we note that DFW counties designated nonattainment, such as Dallas, Denton, Collin, Parker, Tarrant, etc., have continued to grow despite their nonattainment designations. *See* TSD page 10, Table 6.

II. HYSPLIT Analysis

Issue: Petitioner claims that the HYSPLIT data does not support a nonattainment designation for Wise County for the following reasons: (1) HYSPLIT trajectories show that Wise County emissions are rarely transported to high-ozone areas nearby, only 2 high-ozone days in 4 years; (2) HYSPLIT analysis overstates any potential ozone-forming effect of Wise County emissions; (3) HYSPLIT trajectories are unreliable because their starting height was too low; (4) HYSPLIT trajectories by themselves do not establish a causal connection between Wise County emissions and ozone formation; and (5) the EPA's use of the HYSPLIT data was inconsistent with prevailing historical wind data used in other EPA regional offices in promulgating designations, and prevailing wind patterns.

Response: Petitioner raised the HYSPLIT issue during the comment period and the EPA responded to those comments. Therefore, reconsideration is not appropriate. We conducted HYSPLIT analysis of several monitors in DFW for purposes of both the Preliminary TSD (December 2011) and the Final TSD (April 2012). In the Final TSD, we noted that "[t]he HYSPLIT model yields an estimate of the path an air mass has traveled before reaching a monitor at a specific location and time. Specifically, the model provides the centerline of the probable path. By knowing where an air mass has traveled before reaching a monitor where an exceedance has occurred, one can consider what potential areas and emission sources could have contributed to the exceedance."

In the Final TSD at 14, we stated, "[w]e focused on the Keller and Eagle Mountain Lake monitors in Tarrant County and the Parker County monitor because the Keller and Eagle Mountain Lake monitors have recorded some of the highest ozone levels in the region, and inclusion of the Parker County monitor provided a good cross-section of the monitors in the western DFW area that experienced exceedances in the 2006-2010 period." The EPA included trajectory plot maps for the Keller and Eagle Mountain Lake monitors in both the Preliminary and Final TSDs and also made the individual back trajectory files available for review during the comment period. Analysis of the plots in the TSDs indicates that 3 trajectory 'centerlines' directly traversed Wise County for the Keller monitor, and at least 7 trajectory 'centerlines' traversed Wise County for the Eagle Mountain Lake monitor. In addition, some other back trajectories that did not directly traverse Wise County had centerlines near Wise County, suggesting a path of upwind influence involving Wise County emissions. Accordingly, we concluded that there are a number of days with back trajectories transecting Wise County that are well in excess of the Petitioner's assertion that only two trajectories passed through Wise County.

We also note in the record at page 23 of the Final DFW TSD that a review of the individual trajectory files shows that several of the days during which trajectories passed through Wise County were also days that made up the 1st to 4th highest monitored values, which are the values used in establishing the design value at the Eagle Mountain Lake and Keller monitors during the periods evaluated. These individual trajectory files were included in the supporting materials for the EPA's intended and final designations and were made available upon request. In fact, five of the seven back trajectories that traversed Wise County occurred on days that contributed to the Eagle Mountain Lake Design value calculation.

We note that the EPA Region 6's reliance on HYSPLIT modeling was consistent with actions in other Regions. The EPA evaluated the meteorological information that was available for each area, and HYSPLIT modeling was available for a total of 16 areas. The fact that HYSPLIT modeling was not available for all areas does not mean that our consideration of that information, where available, was inconsistent. "While it is true that the EPA was unable to use HYSPLIT modeling to inform our decisions for all areas, we believe that it is a valuable tool and should not be disregarded where the information is available, even if the information is not available in all areas." *See* RTC p. 59.

Furthermore, we recognized that HYPLIT modeling is a particularly useful tool in areas such as Dallas. The EPA believes that simple trajectory analyses of local transport patterns on high ozone days provided by models such as HYSPLIT, in conjunction with the remainder of the multi-factor analysis, can inform an adequate assessment of appropriate boundaries for a nonattainment area. As we stated in the RTC, "[i]n terms of identifying potential local and regional source/receptor patterns, HYSPLIT wind trajectory or other modeling-based tools are excellent tools for determining the frequencies for which areas potentially contribute to high ozone levels and are preferred over more basic assessments of wind speed and direction at a given point location (e.g., wind roses, or pollution roses). These basic assessments, such as wind roses, are potentially misleading in cases where wind speeds are light and the

wind direction is variable…."[1] The light and variable meteorological regime is one of the classic meteorological types that results in high ozone in the DFW area.

With regards to Petitioner's claims that the EPA's HYSPLIT trajectories are unreliable because their starting height was too low, the EPA addressed this issue in the final TSD for the Houston area. In the Houston TSD, we noted that TCEQ did not identify any specific EPA trajectories that were unreliable because of this issue. While TCEQ used 800 meters as the starting point elevation for their independent HYSPLIT back trajectories, TCEQ did not provide any examples of differences in results that occurred due to the different start heights and furthermore did not share any concerns with conclusions that the EPA had made about the results of our HYSPLIT analysis. We note that in the TSD for Houston, the EPA indicated a concern with the start height of 800 meters used by Texas in its analysis. Specifically, we stated that we believed this level was too high because it does not accurately reflect ground level conditions. Despite this concern, the analyses performed by Texas largely support the analyses conducted by the EPA.

Issue: Petitioner claims they had insufficient opportunity to review the EPA's HYSPLIT analysis.

Response: This issue was raised during the comment period. Thus it is not an appropriate basis for reconsideration. The meteorological data on which the EPA based its HYSPLIT model analysis was available to the public during the comment period.[2] On December 20, 2011 (76 FR 78872), the EPA published a notice in the Federal Register inviting public comment from interested parties other than states and tribes on the letters sent to states with the intended designations. The notice provided that any comments should be received on or before January 19, 2012, but in response to requests from several parties, the EPA extended the public comment period to February 3, 2012. (*See* 77 FR 2678, January 19, 2012). The EPA provided a copy of the meteorological and ambient monitoring data upon request and posted copies of the data to the rulemaking docket.

III. Source Apportionment Modeling Analysis – 1% Threshold

Issue: Petitioner claims that the EPA's reliance on a 1% of the NAAQS threshold was not identified during the public comment period or available for comment, and the use thereof was inappropriate. Additionally, Petitioner claims that the EPA did not take into account overstated emissions that were used in the modeling which influenced the designation.

Response: Our analysis of the state's SAM modeling was not available for comment at the time of proposal because it was done in response to modeling information submitted by the state during the 120-day period. Thus, we do not believe this issue warrants reconsideration. In response to the EPA's 120-day letter notifying it of the intended designations, the state submitted, among other things, source apportionment modeling (SAM) data and results. Our evaluation of the SAM was in response to such submittal and was consistent with the process established by Congress in section 107(d) of the Act. For initial area designations for a new or revised NAAQS, section 107(d)(1) of the CAA sets forth a detailed and specific process between the EPA and the states. This provision provides: (i) that Governors of states make the initial recommendations to the EPA for designations and boundaries; and (ii) that the EPA provide the states with 120 days notice of any intended modifications to the state recommendation prior to finalizing the designation. The 120-day notification process is for the purpose of providing "such State with an opportunity to demonstrate why any proposed modification is inappropriate." We

[1] *See* page 59 of the RTC.

[2] The meteorological data on which EPA based its HYSPLIT model analysis was accessible to the public at the NCAR FTP site at *ftp://arlftp.arlhq.noaa.gov/pub/archives/edas40/*.

note that the CAA does not expressly provide a role for any other entity and, moreover, expressly waives the notice and public comment process of the Administrative Procedure Act for initial designations for new or revised NAAQS. *See* CAA section 107(d)(2)(B). Although no public comment period is required, the EPA opted to provide such a comment period for the ozone designations for the 2008 ozone NAAQS. We appropriately followed the process specifically contemplated by the Act. The EPA's response to TCEQ's SAM is detailed in the EPA's final TSD. *See* Final DFW TSD at 15-20.

Further, and as a general matter, agencies are not required to provide an additional opportunity for public comment on material supporting a final rule, such as responses to comments or on information supporting a response to a comment. Such an approach would result in an unworkable endless rulemaking process. *See Catawba County, North Carolina v. EPA*, 571 F.3d 20, 50-51 (D.C. Cir. 2009) (In rejecting a claim by New York that it should have been allowed additional input into the EPA's decision to rely on a different monitor for evaluating contribution for the final designation than it did for the intended designation the court noted that such an ongoing exchange with the states is inconsistent with the CAA and that "Congress imposed deadlines on the EPA and thus clearly envisioned an end to the designation process.") *See* also *International Fabricare Institute v. EPA*, 972 F.2d 384, 399 (D.C. Cir. 1992) (notice and comment is not intended to result in "interminable back-and-forth") and *Community Nutrition Institute v. Block*, 749 F.2d 50, 58 (D.C. Cir. 1984) (agency is not required to provide additional opportunity to comment on its response to comments).

With regard to the SAM submitted for Dallas and Houston, our basis for identifying days with a non-trivial impact is discussed on page 17 of the TSD where we explained, "[o]ften in attainment demonstration modeling, controlling of sources is evaluated and results in only a few tenths of a ppb change, therefore we used a 1% of the standard threshold for the days where we would consider Hood or Wise County's emissions to be significant." We also note that modeling from TCEQ in a 2007 8-hour Ozone Attainment Demonstration for DFW included multiple analyses of individual control strategies and the resultant impacts on monitors in DFW area, where Texas had chosen controls that provided changes of a few tenths of a ppb. In addition, we considered the recent Cross State Air Pollution Rule, which used a one percent threshold in the source apportionment modeling to determine if a state's emissions significantly impacted a downwind state's nonattainment or maintenance area. Thus we determined that an impact of 0.75 ppb, or one percent of the 2008 ozone standard, which is higher than that used by the state in determining emissions strategies for the DFW area, would be appropriate as a metric to identify days with a nontrivial impact.

It is important to note that the number of days with an impact of 0.75 ppb or more is only one of the metrics evaluated from the SAM results. In the DFW Final TSD and in supporting files, we discussed all of the metrics used in our assessment of the SAM results, and the unique factors that we weighed in our analysis of SAM results for DFW. Given the detailed daily information available for analyzing SAM for the DFW and Houston areas designations, we evaluated the average impact, maximum impact, and an additional metric, the number of days where impacts may be high enough that reductions might be beneficial in development of an attainment demonstration.

These other model output metrics also help explain the impact of Wise County. For example, on some specific modeled days the impact of Wise County was much larger than 0.5 ppb. As noted in the Final TSD: "…Wise County had even larger impacts up to 5 ppb on the Eagle Mountain Lake monitor which is one of the monitors in DFW that sets the DV for the DFW area."

With regards to the emissions data on which TCEQ's SAM was based, we did consider the Texas's representation that the model was not based on the most recent VOC emissions information for

pneumatic valves and addressed how the new emissions information that the state submitted in October 2011, including how that information might affect the modeled results. As noted in our Final TSD and RTC, we revised the Wise County VOC emissions inventory in our analysis of emissions inventory to reflect the new information submitted by the State of Texas.[3] We also indicated in the RTC and other supporting materials that DFW is a NOx limited area and VOC reductions have not shown significant benefit in reducing ozone levels in past modeling conducted by TCEQ. The Petitioner seems to recognize this point when it notes: "TCEQ has demonstrated through complex modeling that it is NOx, not man-made VOC that drives ozone formation in the DFW region." Furthermore, in the record we recognized that the VOCs that are potentially overestimated are from oil and gas operations and that these VOC emissions "are relatively nonreactive," i.e., they are less likely to result in ozone formation than VOCs that are more reactive. Accordingly, we did consider the potential impact of the new reported VOC emission levels on our interpretation of the SAM results for Wise County and concluded that the impacts would be negligible.[4]

IV. Use of Future Emissions for Setting Nonattainment Area Boundaries

Issue: Petitioner claims that the EPA is inconsistent on whether it may consider emissions trends in determining an area's attainment status.

Response: This issue was raised during the comment period, and we responded to these comments in our RTC. Thus it is not an appropriate basis for reconsideration. We did not look at future trends, such as future reductions that may result from new air regulations, in this designation process. *See* RTC at page 58 ("[w]e agree that we did not consider the impact of new air regulations. The implementation of new and existing regulations should result in lower ozone precursor emissions in the future; however, for purposes of designating areas, we consider whether such areas are "currently contributing" (i.e., current activities) to violations of the 2008 ozone NAAQS and do not assess or predict future source emissions"). Our evaluation found that Wise County is currently contributing to violations of the 2008 ozone NAAQS.

To clarify, we do consider past trends such as growth rates and patterns as indicators of the location of emissions associated with area and mobile source emissions.[5] As an example, we state in the final DFW TSD that "[r]apid growth in population or vehicle miles traveled (VMT) in a county on the urban

[3] Final TSD, page 6; RTC pages 52-56.

[4] Final TSD, pages 6-8; Houston Final TSD, pages 5-7; RTC pages 52-56, including "…the VOC emissions resulting from oil & gas production activities are relatively nonreactive in the photochemical generation of ground-level ozone and that additionally the DFW area is NOx-limited such that VOC emissions in general do not contribute as much as NOx emissions to the generation of ground-level ozone." And "EPA has since reviewed the updated emissions data reported by the TCEQ and notes that the revised numbers do not affect the ranking of the counties for VOC emissions. EPA's analysis indicates that even with the reduced 2009 VOC emissions data, the emissions from Wise County still contribute to measured violations of the 2008 ozone NAAQS at monitors in neighboring counties. In making our final decision, we considered the reduced emissions and the reduction in drilling activity since 2009." The Governor Perry's comment letter dated February 29, 2012, pages 17-21, also referred to other TCEQ documents that further support that DFW area is a NOx limited regime and changes to VOC levels do not result in much impact in ozone levels: TCEQ 2011 DFW 1997 8-hour Ozone Attainment Demonstration SIP – "APPENDIX E: Protocol for the Eight-Hour Ozone Modeling of the Dallas-Fort Worth Area," and "APPENDIX D: Conceptual Model For The DFW Attainment Demonstration SIP Revision For The 1997 Eight-Hour Ozone Standard."

[5] *See* "Factors EPA Plans to Consider in Determining Nonattainment Boundaries in Designations for the 2008 Ozone NAAQS", Attachment 2 to the December 4, 2008 EPA memorandum "Area Designations for the 2008 Revised Ozone National Ambient Air Quality Standards" from Robert J. Meyers, Principal Deputy Assistant Administrator to Regional Administrators, Regions I-X.

perimeter signifies increasing integration with the core urban area, and indicates that it may be appropriate to include such perimeter area(s) as part of the nonattainment area" *See* TSD page 9.

V. State Recommendation

Issue: Petitioner claims that the EPA failed to demonstrate that it was "necessary" to disregard Texas's nonattainment recommendations under 42 U.S.C. §7407(d)(1)(B)(ii). The Petitioner also claims the EPA should defer to Texas's plan for achieving attainment in the DFW nonattainment area.

Response: The CAA contemplates cooperation and coordination between the Agency and states in the context of initial designations for a new or revised NAAQS. Under section 107(d) of the CAA, Congress has set forth an explicit process and chronology for states and the EPA to make initial designation decisions. Section 107(d)(l)(A) provides that the Governor of each state shall make the initial recommendations for designations of areas within such state, as attainment, nonattainment, or unclassifiable, as those terms are explicitly defined. Section 107(d)(l)(B) provides that the EPA must promulgate the designations, and "may make such modifications as the Administrator deems necessary to the designations of the areas" recommended by the states. In the event of a decision by the EPA to modify the recommendation of a state, section 107(d)(B)(ii) provides that the EPA must notify the state and give the state an opportunity to demonstrate why the agency's proposed modification is inappropriate.

Petitioner asserts that the EPA may make modifications to state recommendations only when "necessary." The EPA notes that this term is not explicitly defined in section 107(d), but the Agency interprets the term in light of the definition of a nonattainment area as an area that is violating the standard or contributing to a violation of the standard. Both the initial and final TSDs set forth the EPA's analysis of why we determined Wise County is contributing to the violations in the DFW area. Regarding the Petitioner's point that the EPA should defer to the state's plan for bringing the DFW area into attainment with the NAAQS, we note that such plan is not yet due and has not been submitted. While the CAA does mandate some measures that states must adopt in nonattainment areas, it also provides states with substantial discretion in choosing the mix of control measures necessary to reach attainment. However, the EPA must review any plan to ensure that it meets the minimum requirements of the CAA.

V. Adequacy of Record

Issue: Petitioner claims that the EPA's multi-factor analysis does not support inclusion of Wise County in the DFW ozone nonattainment area.

Response: This issue was raised during the comment period and we did address it in our TSDs and our RTC. Thus it is not an appropriate basis for reconsideration. While we acknowledged that Wise County's population and VMT are smaller in comparison to that of other parts of the DFW nonattainment area,[6] we explain in our record that emissions from the area and distance from the violating monitors were two of the compelling factors for determining "contribution" of Wise County. The total emissions from Wise County are significant and rank comparatively high against the emissions from other counties in the area. The 2008 emissions inventory of all Wise County sources (with revisions submitted by Texas) lists the County's emissions as 11,911 tons per year (tpy) for NOx and

[6] *See* the final DFW TSD, which includes an evaluation of population data and traffic data for the 19 counties in the DFW CSA (TSD, pages 9-14). The TSD included data for Wise County and the DFW CSA (TSD, tables 6, 8 and 10).

17,609 tpy for VOC (TSD, table 3).[7] Wise County's population and VMT data indicated that Wise County's relatively high total emissions derive more from point and area sources associated with oil and gas production activities in the county. Lastly, the close proximity of Wise County's comparatively high emissions to violating monitors provided further support that the county should be included in the nonattainment area (TSD, page 23). Furthermore, and as detailed above and in our TSDs and RTC, the EPA's meteorological assessment concluded that transport of Wise County emissions to violating monitors in nearby counties does occur on days on which those monitors are recording some of the highest ozone levels.[8]

[7] Table 3 shows emissions of NOx and VOC (expressed in tpy) for violating and nearby counties that we considered for inclusion in the DFW area. The VOC emissions in Table 3 include revisions for Hood and Wise Counties submitted by TCEQ during the comment period.

[8] For the Eagle Mountain Lake Monitor, the following days were the 1st thru 4th High values that set the monitor's DV. Highlighted in BOLD are the days that EPA's HYSPLIT analysis indicates potential contribution from Wise County emissions. 2006 (6/14 – 107 ppb, 6/9 – 106 ppb, 6/28 – 98 ppb, 7/18 – 98 ppb); 2007 (**8/14 – 121 ppb**, 8/15 – 101 ppb, 10/04 – 86 ppb, **9/22 – 84 ppb**, 7/25 – 84 ppb); 2008 (8/04 – 98 ppb, **6/18 – 92 ppb**, 6/23 – 86 ppb, 6/19 – 85 ppb); 2009 (**6/25 – 100 ppb**, 6/5 – 92 ppb, 6/26 – 92 ppb, **8/26 – 91 ppb, 7/2 – 91 ppb**); 2010 (6/4 – 94 ppb, 8/27 – 91 ppb, 8/28 – 83 ppb, 5/29 – 81 ppb). When there was a tie for the fourth high value we looked at trajectories for both days.