Office of Air and Radiation

March 2011

United States Environmental Protection Agency



## PSD AND TITLE V PERMITTING GUIDANCE FOR GREENHOUSE GASES

Prepared by the

Office of Air Quality Planning and Standards U.S. Environmental Protection Agency Research Triangle Park, North Carolina 27711 permitting authority may find that while a control option with high overall energy efficiency has higher economic costs, those costs are outweighed by the overall reduction of emissions of all pollutants that comes from that higher efficiency. There are no "right" answers to these permitting decisions that can be described in this general guidance, because permitting authorities have a wide range of discretion in their consideration of the various direct and indirect economic, energy, and environmental impacts that might be informative to the top-down BACT analysis for GHG emissions, as well as the BACT determinations for other pollutants. Given the case-by-case nature of the BACT analysis and the importance of considering impacts on the local environment and community (e.g., job loss and the potential movement of production overseas), EPA still believes this flexibility provided for deciding how best to weigh the trade-offs associated with a particular emissions control option continues to be appropriate when evaluating BACT for GHGs. The exact scope and detail of that consideration – including the final decision regarding various trade-offs that may arise in a permitting decision - is dependent on many factors, including the specific facts of the proposed facility, local interests and concerns, and the nature of issues raised in public comments. Accordingly, permitting authorities must ensure that their impacts analysis fully considers the relevant facts and concerns for the facility at issue and that the support for the environmental, economic, and energy choices made during the impacts analysis of the BACT determination is well-documented in the permit record. In so doing, we encourage permitting authorities to use their discretion to consider the full range of impacts from the various controls that could result in facilities that are energy efficient and that lower the overall impact of the GHG emissions from those facilities, while maintaining relatively high levels of controls of other pollutants.

## F. BACT Step 5 – Selecting BACT

## **General Concepts**

In Step 5 of the BACT determination process, the most effective control option not eliminated in Step 4 should be selected as BACT for the pollutant and emissions unit under review and included in the permit. During Step 3, permitting authorities often consider control alternatives that have a range of potential effectiveness for reducing the pollutant emissions at issue, and thus they must identify an expected emissions reduction range for each technology. In setting the BACT limit in Step 5, the permitting authority should look at the range of performance identified previously and determine a specific limit to include in the final permit. In determining the appropriate limit, the permitting authority can consider a range of factors, including the ability of the control option to consistently achieve a certain emissions rate, available data on past performance of the selected technology, and special circumstances at the specific source under review which might affect the range of performance.<sup>114</sup> In setting BACT limits, permitting authorities have the discretion to select limits that do not necessarily reflect the highest possible control efficiencies but that will allow compliance on a consistent basis based on the particular circumstances of the technology and facility at issue, and thus may consider safety factors unique to those circumstances in setting the limits.<sup>115</sup> EPA has also recognized that in

<sup>&</sup>lt;sup>114</sup> In re Prairie State Generating Company, 13 E.A.D. at 67-71.

<sup>&</sup>lt;sup>115</sup> In re Prairie State Generating Company, 13 E.A.D. at 71, 73 (and cases cited therein).