

Guidance Concerning Prevention of Significant Deterioration (PSD) Ambient Air Increments

[Updated April 15, 2019]

SC Regulation 61-62.5 Standard No. 7 (Standard 7) Section (k) requires that facilities requesting a construction permit for a major stationary source submit a source impact analysis that, among other things, demonstrates that "allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of: ...Any applicable maximum allowable increase over the baseline concentration in any area." Section (B)(6)(b)(ii) of Standard 7 indicates that "actual emissions increases and decreases...at any (emphasis added) stationary source occurring after the minor source baseline date" are subject to the applicable maximum allowable increase (also known as the PSD increment). The minor source baseline dates are set by county for pollutants for which PSD increments have been established where a major stationary source or a major modification submits, in an area designated as attainment or unclassifiable under the applicable regulations, a complete application under the relevant regulations for a proposed source or modification that would emit in significant amounts or where there would be a significant net emissions increase as defined by Standard 7. The Department maintains a list on the SC DES website, by pollutant, of counties where the minor source baseline dates have been set. This list can be found at https://des.sc.gov/programs/bureau-air-quality/air-dispersion-modeling-overview/airdispersion-modeling-guidance-and-general-information

Thus, according to Standard 7, once a minor source baseline date is set for a pollutant in a particular county, actual emission increases and decreases at any stationary source are subject to regulation under Standard 7. Under previous guidance, the Department requested that all facilities located in counties where a minor source baseline date has been set submit an air quality analysis with their permit application using modeling or other information that demonstrates compliance with any applicable PSD increments for all non-exempt emissions. This project-by-project demonstration tracked not only all increases and decreases on a project-by-project basis, but also tracked increment status. The Department recognizes there are other methodologies to track these emissions and that the source impact analysis under (k)(2) is required when a proposed source or modification actually triggers PSD applicability. Because compliance with the PSD increments can properly be addressed during the PSD permitting process and because the Department will continue to track all applicable emission increases and decreases, we will no longer require that facilities include an air quality analysis for PSD increments in permit applications for those pollutants that do not trigger PSD permit actions.

Since emissions changes at permitted facilities in counties where the minor source baseline date has been set will continue to be subject to regulation under the PSD increments, all facilities in these counties will be required to submit, as part of their construction permit applications, all information required for assessing the consumption of the applicable increments. This requirement will apply for all non-exempt emissions, and the information required will include emission increases and decreases after the applicable minor source baseline date, emission point locations (UTM or latitude and longitude coordinates), release heights, exit velocities and temperatures, stack diameters for each emission point, and existence of any rain protection device or other impediment to vertical dispersion (or other applicable information on the emissions characteristics needed to accurately describe each source's dispersion characteristics, i.e., area, volume, open pit, and/or flare specifications). Facilities will also be required to submit updated information, as necessary, during permit modification, at operating permit renewal, or when otherwise deemed necessary by the Department. Finally, this document does not preclude SC DES from requiring that a facility submit air dispersion modeling for any applicable PSD increments should a specific situation warrant such a request.