
Clarification to Response to RAI AQ-6

ISP has identified two items related to the response to RAI AQ-6 for which clarification may be useful to NRC Staff.

1. Total NO₂ impact (µg/m³) provided in Environmental Report (ER) Table 4.6-1 and Table 4.6-2

- Description: The total NO₂ impact provided in Table 4.6-1 and Table 4.6-2 are both 33.17 µg/m³ even though Table 4.6-1 is for Phase 1 activities, and Table 4.6-2 is for Phases 2 – 8 and Operations. Given that the inputs are significantly different for the calculations in each table, it may seem peculiar that both totals are identical.
- Clarification: The footnotes indicate in each U.S. National Ambient Air Quality Standards (NAAQS) table that the total impacts are the maximum of activities not expected to take place simultaneously. For the activities associated with Phase 1 (Table 4.6-1), the total is the maximum of 1) Earthwork activities; 2) the sum of Cask and Admin Building construction; and 3) the sum of Spent Nuclear Fuel (SNF) Pad and Protected area construction, since the sum of SNF Pad and Protected Area construction (Activity 3) results in the maximum value of 33.17 µg/m³ reported in Table 4.6-1. Likewise, for activities associated with Phase 2 and Operations (Table 4.6-2), the total is the maximum of simultaneous activities, which again, is the sum of that which is in the SNF Pad and Protected Area construction for a given phase and is, therefore, once again 33.17 µg/m³ reported in Table 4.6-2.

2. Basis for National Ambient Air Quality Standards (NAAQS) values

- Description: NAAQS values can be “design” or “maximum” values. Given that typically “design” and “maximum” values differ, the clarification below provides a discussion about which values were used in ISPs evaluations.
- Clarification: Design values were not available to be used as background concentrations from the Environmental Protection Agency’s (EPA’s) Office of Air Quality Planning and Standards at the time of the evaluation. The EPA releases design values annually for areas that are not in attainment with the NAAQS. Since Andrews County is in attainment with NAAQS, design values are not published. Therefore, background concentrations were evaluated using the most recent ambient air quality data from the closest Texas Commission on Environmental Quality ambient air monitors within the state of Texas. For sites where the maximum monthly pollutant concentration did not appear to be an outlier as it related to the monthly average, the maximum concentration was used as a background for the evaluation. For sites where the most recent monthly data appeared to have a maximum value that did not align with the monthly average and was likely affected by an emission upset event at a nearby unrelated facility, the monthly average was used so as to represent the most accurate impact as it relates to ambient data. Since many of these monitors that are referenced are located in areas where there is either a high density of population or industrial activity, this approach would serve as a conservative surrogate for background concentrations relative to the WCS CISF site.