This question and answer document (Q&A) explains the requirements of regulations, describes NCDAQ policies, and recommends procedures for permitting authorities to use to ensure that permitting decisions are consistent with applicable regulations. This Q&A is not a rule or regulation, and the guidance it contains may not apply to a particular situation based upon the individual facts and circumstances. This Q&A does not change or substitute for any law, regulation, or any other legally binding requirement and is not legally enforceable. The use of non-mandatory language such as "guidance," "recommend," "may," "should," and "can," is intended to describe policies and recommendations. Mandatory terminology such as "must" and "required" are intended to describe controlling requirements under the terms of the Clean Air Act and NCDAQ regulations, but the Q&A does not establish legally binding requirements in and of itself.

Establishing a Plantwide Applicability Limitation for Sources of GHGs

Question: May a source be issued a permit with a plantwide applicability limitation (PAL) for greenhouse gases (GHG)?

Answer: Yes, a GHG PAL may be established using actual emissions under the PAL provisions in 40 CFR 51.166(w). Under 40 CFR 51.166(v), a PAL level is calculated and established for a source by adding the "baseline actual emissions" of the PAL pollutant (for each emissions unit at the source) to the pollutants' significance level which EPA has defined as 75,000 tons per year as CO2e.[1] The use of GHG PALs using CO2e is required under the regulations and is consistent with the policy of promoting flexibility while encouraging sources to cap GHG emissions. The following discussion outlines the salient regulatory language related to setting PALs for GHGs.

The definition of "Plantwide Applicability Limit" specifically authorizes PALs to be set in tons per year "for a pollutant at a major stationary source." [2] It is important to note here, and throughout this discussion, that all of the PAL provisions rely on the term "pollutant" and not the more limited term "regulated NSR pollutant" as defined elsewhere in the PSD regulations. GHGs have, since the US Supreme Court's decision in 2007 been considered air pollutants under the CAA. *See* Massachusetts v. EPA, 549 U.S. 497 (2007). In 2010 EPA revised the PSD regulations and in doing so grouped six air pollutants as a single "pollutant" called GHGs.[3] Although not relevant to our PAL discussion, in this same rulemaking EPA established rules for when GHGs would be considered subject to regulation and thus become "regulated NSR pollutants."[4]

> *Greenhouse gases (GHGs),* the air pollutant defined in § 86.1818–12(a) of this chapter as the aggregate group of six greenhouse gases: Carbon dioxide, nitrous oxide, methane,

[1] 75 Fed. Reg. 31606 (June 3, 2010) (''significant'' is defined as 75,000 tpy CO2e instead of applying the value in paragraph (b)(23)(ii) of this section.) [emphasis added]

[2] 40 CFR 51.166(w).

[3] NC adopted the relevant GHG Tailoring rule provisions and they were made effective by Executive Order 81.

[4] As noted already, the PAL provisions use the more general term "pollutant" and not "regulated NSR pollutant" and therefore the establishment of a PAL does not turn on whether GHGs are subject to regulation of regulated NSR pollutants.

> hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, shall not be subject to regulation except as provided in paragraphs (b)(48)(iv) through (v) of this section.

The plain language of the regulation requires the establishment of PALS for "pollutants" and the regulation sets out the procedures for establishing an actuals PAL.

> *Actuals PAL* for a major stationary source means a PAL based on the baseline actual emissions (as defined in paragraph (b)(47) of this section) of all emissions units (as defined in paragraph (b)(7) of this section) at the source, that emit or have the potential to emit the PAL pollutant.

The term *PAL pollutant* is then defined as,

> "the pollutant for which a PAL is established at a major stationary source."

40 CFR 51.166(w)(ii)(x). Again, the regulation uses the term "pollutant" instead of the term "regulated NSR pollutant." Finally, in establishing the baseline for GHGs, the PAL regulation says the baseline actual emissions shall be established in accordance with 40 CFR 51.166(b)(48)(ii) and (iii). These provisions

> (ii) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted **the pollutant** …"

Consistent with the discussion above, the BAE is established for "the pollutant" and whether a pollutant is a "regulated NSR pollutant" or subject to regulation is not relevant.

Having established the baseline actual emissions of the pollutant, the PAL is established at the BAE "plus an amount equal to the applicable significant level for the PAL pollutant under paragraph (b)(23) of this section." The EPA established the significance value for GHGs as follows,

> For the pollutant GHGs … ''significant'' is defined as 75,000 tpy CO2e instead of applying the value in paragraph (b)(23)(ii) of this section.

75 Fed. Reg. 31606 (June 3, 2010). EPA regulations and the preamble both unambiguously confirm that the values in (b)(23) do not apply. The regulation at (b)(49) states "'significant' is defined as 75,000 tpy CO2e instead of applying the value in paragraph (b)(23)(ii) of this section."