Response to comments on the proposed changes to Title 129 incorporating the Greenhouse Gas (GHG) Tailoring Rule

Chapter 1 Comments

Comment #1: NPPD, OPPD, and NICE recommended that we should either include the definition of "Subject to Regulation" or reference the definition in the rules. Their justification was that if the legal challenges prevail and GHGs is not subject to regulation, this definition would provide the Nebraska Department of Environmental Quality (NDEQ) with the ability to say that GHGs are not regulated under Title 129 – Nebraska Air Quality Regulations (Title 129). Without this definition, the Title 129 language would be more stringent than the Federal requirements.

Response: The definition of "Subject to Regulation" was omitted from the definitions due to legal implications. This definition not only provides an "off ramp" for the GHGs but also provides an illegal "on ramp" for any new pollutant the may become regulated in the future. This could result in that new pollutant becoming regulated without the proper rule making process. State statutes require transparent, informed rulemaking in Nebraska; therefore, NDEQ is prevented from regulating pollutants in this manner.

Comment #2: OPPD recommended that we should remove the following from the definition of "regulated NSR pollutant" (131): *"GHGs (expressed as mass, not CO2e); and, potential to exceed 0 tons per year*" (CO2e means Carbon dioxide equivalent). In addition they recommended that we should add language in regard to emitting 75,000 tons per year (typ) CO2e.

Response: The NDEQ has included the above language because the Clean Air Act (CAA) explicitly requires that applicability under the PSD program be on a mass basis and the federal program requires applicability on a mass basis for GHGs before moving to the second step of CO2 equivalency. Under the CAA, a modification occurs if there is a physical change or change in the method of operation "which increases the <u>amount</u> (emphasis added) of any air pollutant emitted …." CAA section 165(a), 169(2)(c), and 111(a)(4). Because of this language, there first must be an increase in the amount of GHG emissions on a mass basis and that amount must be greater than zero. By definition, CO2e is an equivalent measurement, not a strict mass measurement. If the NDEQ were to delete that language from the proposal and replace it with the recommended language, the language would not be consistent with the CAA, nor the federal GHG Tailoring Rule. In addition, the suggestion could result in some modifications that would otherwise be exempt, i.e., no change in mass, to be subject because of the change in CO2e. Lastly, the reference to 75,000 tons per year CO2e is not necessary in this section. It is appropriately placed in Chapter 19.

Comment #3: NPPD and NICE commented there appears to be important discrepancies between the federal regulations and the pre-proposed draft language. One such discrepancy is that the pre-proposal

draft makes no reference to the 75,000 tpy CO2e threshold that applies at the start of the initial phase on January 2, 2011.

Response: Although the 75,000 tpy CO2e criterion is not in addressed in the same manner as it is in the Federal regulations, it is addressed within the existing Title 129 regulatory structure. Because the 75,000 tpy CO2e threshold that applies at the start of the initial phase (January 2, 2011) is a significance threshold, that threshold has been addressed by including it in Chapter 19, Section 010. This section provides the thresholds for when an increase in emissions is significant. GHGs and C02e are addressed in Sections 010.17A and 010.27B respectively. During the initial phase, before GHGs are regulated a project must either be a new source or a major modification of an existing source for a regulated NSR pollutant other than GHGs. This aspect is addressed in definitions 131.05A and 131.05B respectively. However, as pointed out in this comment, there also must be a significant net emissions increase of 75,000 tpy CO2e. As stated above, we have addressed this requirement in Chapter 19, Section 010.17B. We have handled this requirement in this manner because the need to determine whether a significant net emissions increase has occurred is inherent to the PSD program.

The following will provide an abbreviated example to illustrate how this would work. For this example, we are assuming a source has a project and they have triggered PSD for a regulated NSR pollutant other than GHGs. The source should then review the definition of regulated NSR pollutant to determine which pollutants they have to evaluate. There they would find that if they have a project between January 2, 2011 and June 30, 2011 they also must evaluate GHGs. Knowing they must evaluate GHGs, the source would then go through the provisions of Chapter 19, Section 008 to determine if the project will result in a significant emissions increase of GHGs and CO2e. If there is a significant emissions increase, the source would then do the evaluations under Section 009 to determine whether there is a significant net emissions increase. To determine if the increase in GHGs and CO2e is significant under Sections 008 and 009, the source would look at the criteria in Sections 010.17A and 010.17B. If the project is under either of those thresholds, i.e., GHGs less than zero by mass or CO2e less than 75,000 tpy, then PSD does not apply for GHGs. If both are over the thresholds, then the remaining provisions of Chapter 19 apply, including Section 017.02 for new sources and Section 017.03 for modifications at existing sources. The requirement to apply best available control technology under Section 017.02 (new sources) and Section 017.03 (existing sources) is on a pollutant by pollutant basis and is only triggered when there is a significant emissions increase for that pollutant (as defined under Sections 010.17A and 010.17B).

Chapter 2 Comments

Comment #1: NPPD and OPPD commenters suggested that we add language to Section 002.01 to clarify the criteria in this section does not apply to GHGs.

Response: No changes were made to this Section. For the reasons discussed below, the criteria in this section does apply to GHGs (see Comment and Response below).

Comment #2: OPPD recommended we delete the following from Section 002.02: *"meets the criteria in 002.01 and"*.

Response: This language has been modified to read "exceeds the applicable criteria in 002.01 for GHGs on a mass basis and". As discussed above, the CAA requires that pollutants be assessed on a mass basis. Section 302 (j) of the CAA defines major stationary source for operating permit purposes as follows: "(j) Except as otherwise expressly provided, the terms "major stationary source" and "major emitting facility" mean any stationary facility or source of air pollutants which directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant (including any major emitting facility or source of fugitive emissions of any such pollutant, as determined by rule by the Administrator)." Based on this language, a source must meet the mass requirements, i.e., 100 tons per year, to be considered a major source. By definition, CO2e is an equivalent measurement, not a strict mass measurement. If the NDEQ were to delete the language in the proposal, the resulting language would not be consistent with the CAA.

The tailoring rule makes the major source evaluation a two step process. A source must emit or have the potential to emit more than 100 tons per year of GHGs on a mass basis and more than 100,000 tons per year of CO2e to be major under the operating permit program. This two step process was implemented to comply with the language of the CAA and to tailor the rule so that it only impacted the larger emitting sources in the state. If we were to delete the reference to the mass requirement, it may cause some sources that are otherwise exempt, i.e., mass of GHG emissions less than 100 tons per year, to be classified as a major source due to the CO2e criterion.

Comment #3: OPPD recommended we delete the following from Section 008.04: *"meets the criteria in 008.01 or 008.02 and"*.

Response: This language has been modified to read "exceeds the applicable criteria in 008.01 or 008.02 for GHGs on a mass basis and". As has been discussed previously, the CAA requires that pollutants be assessed on a mass basis. The CAA section 169(1) defines a major emitting facility under the PSD program as follows: "(1) The term "major emitting facility" means any of the following stationary sources of air pollutants which emit, or have the potential to emit, one hundred tons per year or more of any air pollutant from the following types of stationary sources:" or "any other source with the potential to emit two hundred and fifty tons per year or more of any air pollutant." A source must meet the mass requirements, i.e., 100 tons per year or 250 tons per year, to be considered a major source under the PSD program. By definition, CO2e is an equivalent measurement, and does not consider the actual mass of the pollutants comprising GHGs at that particular source. If the NDEQ were to delete the language in the proposal as suggested, the resulting language would not be consistent with the CAA.

The tailoring rule makes the major source evaluation a two step process. A source must emit or have the potential to emit more than 100 or 250 tons per year of GHGs on a mass basis and more than 100,000 tons per year of CO2e to be considered major under the PSD program. This two step process was implemented to comply with the language of the CAA and to tailor the rule so that it only impacted the larger emitting sources in the state. If we were to delete the reference to the mass requirement, it may cause some sources that are otherwise exempt, i.e., mass of GHG emissions less than 100 or 250 tons per year, to be classified as a major source due to the CO2e criterion.

Comment #4: One commenter suggested that we add the following language to Section 008.04: "A stationary source that is major for GHGs is not major for non GHG pollutants unless the criteria in 008.01 or 008.02 is also met."

Response: This language was not added. While the suggested language is true, it is true for all regulated NSR pollutants. Once a source is major for one pollutant under the PSD program, all regulated NSR pollutants being emitted are subject to the requirements of Chapter 19. All regulated NSR pollutants must then go through the evaluations in Chapter 19 to determine if there was a significant emissions increase and a significant net emissions increase. Any pollutant meeting these two criteria must then go through the remaining provisions of Chapter 19 whether or not the pollutant caused the source to be major.

Chapter 5 Comments

Comment #1: OPPD suggested that we delete the following language from Section 001.03: *"less than 100 tons per year and/or"*.

Response: This language has been modified to read "less than 100 tons per year on a mass basis and/or". Please see the above discussions in regard to the need to include ton per year criteria on a mass basis.

Comment #2: A commenter suggested that we delete "and/or" from Section 001.03 and replace it with "and". They stated that the phrase "and/or" makes the language ambiguous.

Response: The phrase "and/or" was used because, as discussed above, a source must have both GHG emissions greater than 100 tons per year and CO2e emissions greater than 100,000 tons per year to be a major source under the operating permit program. Since a source must meet both criteria to be major, they can become a synthetic minor source by limiting either GHG or CO2e below their respective criteria. If we required that a source meet both criteria by saying "and", it would make the regulatory language more stringent than is necessary to be considered a synthetic minor source.

Chapter 19 Comments

Comment #1: OPPD suggested that we delete the following language from Section 010.17: *"010.17A Greater than 0 tons per year; and"*.

Response: This language was modified and now reads "010.17A Greater than 0 tons per year on a mass basis; and". Again, the reason for including the language is to meet the requirements of the CAA in regard to mass. If the NDEQ were to delete the language in the proposal as suggested, the resulting language would not be consistent with the CAA because it does not consider mass.

Other Comments

Comment #1: NPPD and NICE commented that the pre-proposal draft does not seem to make clear that the phase 2 thresholds applying on July 1, 2011, are additive and therefore apply in addition to the thresholds established for phase 1.

Response: The steps for evaluating a project during phase 1 were discussed above. After June 30, 2011, the criteria in definitions 131.05A and 131.05B will no longer be in effect. That means on July 1, 2011, GHGs are a regulated NSR pollutant and would cause a project to go through the PSD program regardless of the increase of other regulated NSR pollutants. Chapter 2 makes it clear that beginning July 1, 2011, a source can be major based solely on their GHGs emissions. So, if a source is major for PSD for any pollutant and they have a project that is subject to PSD, the source would look at the definition of regulated NSR pollutant to determine which pollutants they have to consider. There they would find that after June 30, 2011 they must evaluate GHGs with no caveats. Knowing they must evaluate GHGs, the source would then go through the provisions of Chapter 19 to determine if the project will result in a significant emissions increase of GHGs and CO2e and, if so, whether there is a significant net emissions increase. To determine if the increases are significant they would look at the criteria in Sections 010.17A and 010.17B. Although the 75,000 tpy CO2e criterion is not in addressed in the same manner as it is in the Federal regulations, it is addressed within the existing regulatory structure in Title 129.

Comment #2: NPPD and NICE commented that the multiple definitions of major stationary sources in Chapter 2 and how those revised definitions work with the revised definitions for "regulated air pollutant" and "regulated NSR pollutant" in Chapter 1 are confusing.

Response: The regulatory structure described has not changed with this proposed rule. The NDEQ has always had multiple definitions of major stationary sources in Chapter 2. This is because the Environmental Protection Agency (EPA) has multiple definitions in their regulations. In order to have an approvable program, Chapter 2 must be consistent with the definitions in the various EPA programs. The same logic applies to the definitions of "regulated air pollutant" and "regulated NSR pollutant". We have to include multiple definitions because the respective EPA programs have different definitions.

As stated above, the regulatory structure described has not changed with this proposed rule. A source has always had to refer to Chapter 2 to determine if they are major. In addition, they have always had to refer to the definitions to determine which pollutants are regulated under the respective programs. So, from that context, the regulatory evaluation process is not being changed by this proposal.

The NDEQ has made one change in Chapter 2 to clarify which pollutants are regulated under the operating program. Currently, Section 002 states, in part, "Except as otherwise expressly provided herein, a major stationary source of air pollutants (emphasis added) is one that directly emits or has the potential to emit, 100 tpy or more of any air pollutant (including any major source of fugitive emissions of any such pollutant, as determined by rule by the Administrator of EPA)." In the proposed language we have replaced the phrase "air pollutants" with the phrase "regulated air pollutant". We believe

making this change brings clarity to this definition. The definition of "air pollutant" is ambiguous and open-ended in that it does not provide specifics on which pollutants must be considered when doing a major source analysis. By including "regulated air pollutant", which is clearly defined, a source can easily determine which pollutants they must consider in this evaluation.

Comment #3: NPPD and NICE commented that the Nebraska rule can be much clearer if it is consistent with the EPA rule. This can be achieved by using the same language that has been used in the EPA rule.

Response: In preparing the proposed language, the NDEQ evaluated whether to just adopt the EPA language or handle it as we have in the proposal. There were several reasons NDEQ chose the route it did. 1) as stated earlier the illegal "on ramp" in the definition of subject to regulation; 2) lack of clarity in the federal rule due to references to the original PSD program; and 3) the lack of compatibility between the Tailoring Rule and Title 129 structure. For these reasons, the NDEQ decided to adapt the EPA language to Title 129. If we would have used the same language that has been used by EPA it would have resulted in fragmented regulations. As evidenced by the comments that have been raised, the language used in the EPA rule wasn't very clear. If it were, the NDEQ would not have received so many comments about the requirement to address the mass of GHGs in addition to addressing the CO2e requirements. NDEQ has shared the draft rules with EPA region 7. EPA Region 7's feedback has been positive.

Comment #4: NICE commented that the NDEQ has provided a means for sources to accept synthetic minor limits for purposes of the operating permit program. Such a provision should also be available for purposes of the construction permit program.

Response: The NDEQ evaluated the Chapter 17 language and determined that the existing regulations included sufficient language to where a source could take synthetic minor limitations under the construction permit program. Chapter 17, Section 014 includes the following language:

> "014 Any source not required to obtain a construction permit pursuant to 001 may request a construction permit to be issued in the manner prescribed by 002 through 013 for the following purposes:
>
> 014.01 Establishing enforceable limits to avoid otherwise applicable requirements under the provisions of Title 129."

Because the PSD regulations are requirements that are applicable to sources, the above provision would allow a source to take a limitation that would make either the source and/or a modification at the source minor under those regulations and thus avoid an otherwise applicable requirement.

Comment #5: NICE commented that the fiscal impact statement is not accurate. The rule is going to result in significant costs associated with added permitting and compliance requirements that will result from this rule.

Response: The fiscal impacts are an evaluation of the consequences of adopting the proposed regulations in Nebraska. For Federal standards, where sources are subject to the standard whether or not we adopt them, there are very few, if any, additional impacts on sources if we adopt the rule. In other words, if a source is subject to a Federal standard or regulation, they have to comply with that standard or regulation regardless of whether we adopt the regulation. So the fiscal impacts will be there whether or not we adopt the regulation. The fiscal impact statement for this rule was written with that in mind.

Comment #6: NICE asked if it is possible for sources that become major for operating permit purposes only because of GHG emissions to be exempt from the requirement of paying emissions fees.

Response: No. Once a source is major under the operating permit program, they are required to pay fees. This is a requirement of the CAA and the Nebraska Environmental Protection Act (NEPA). Section 502(b) of the CAA states, in part:

"(3)(A) A requirement under State or local law or interstate compact that the owner or operator of all sources subject to the requirement to obtain a permit under this title pay an annual fee, or the equivalent over some other period, sufficient to cover all reasonable (direct and indirect) costs required to develop and administer the permit program requirements of this title. . ."

Section 81-1505.04 of the NEPA states, in part:

"(1)(a) The department shall collect an annual emission fee from major sources of air pollution. Each major source shall pay the emission fee for regulated pollutants in the amount of. . ."

Comment #7: NICE commented they are concerned by the absence of guidance on BACT to comply with the requirements of the rule.

Response: The NDEQ shares this concern. The EPA is to provide guidance on BACT by January 2011. They plan to provide training and webinars. Once the NDEQ staff has received training, we will provide information on this issue.

Comment #8: There were comments made in regard to the legality of the rule and the challenges at the Federal level.

Response: The NDEQ understands the concern of the commenter, however, absent a stay or vacatur of the rule, the rule will take effect January 2, 2011. If the NDEQ does not have these regulations adopted into Title 129 and submitted to EPA for approval, there is a very high likelihood that EPA will take over the operating and PSD permitting programs in regard to GHGs. If that were to occur, construction projects at the major source level would likely come to a virtual halt. This proposal is Nebraska's contingency plan should the rule go into effect at the federal level. If the rule is adopted, NDEQ will advise the Governor to wait to sign the rule into effect until as late of date as possible. Furthermore, should the federal rule be vacated after the Nebraska rule goes into effect, NDEQ would not implement the rule and would remove it at the earliest possible EQC hearing.