E. SCOTT PRUITT
ADMINISTRATOR

December 7, 2017

**MEMORANDUM**

**SUBJECT:** New Source Review Preconstruction Permitting Requirements: Enforceability and Use of the Actual-to-Projected-Actual Applicability Test in Determining Major Modification Applicability

**FROM:** E. Scott Pruitt

**TO:** Regional Administrators

## I. Introduction and Purpose of Memorandum

In accordance with presidential priorities for streamlining regulatory permitting requirements for manufacturing and other types of facilities, the U.S. Environmental Protection Agency is conducting a review of the agency's implementation of the preconstruction permitting requirements under the Clean Air Act, which are generally known as the New Source Review program. This review will involve an assessment of opportunities for the EPA to make improvements by clarifying or revising the EPA regulations implementing the NSR program, providing technical support and oversight to the states that administer the program and evaluating the agency's enforcement of the NSR requirements. With respect to the latter, there continue to be disputes pending in the United States courts in NSR enforcement cases that began before the EPA initiated the current review of the NSR program. The United States is represented in those matters by the Department of Justice and the Office of Solicitor General. As those cases proceed toward resolution, the EPA continues to have implementation and oversight responsibilities for the NSR program.

Based on an initial assessment, I understand that two recent appellate court decisions[1] in the pending enforcement proceeding against DTE Energy have created uncertainty regarding the applicability of NSR permitting requirements in circumstances where the owner or operator of an existing major stationary source projects that proposed construction will not cause an increase in actual emissions that triggers NSR requirements. As we begin the EPA's current review of the

[1] These appellate decisions are *U.S. v. DTE Energy Co.*, 711 F.3d 643 (6th Cir. 2013) and *U.S. v. DTE Energy Co.*, 845 F.3d 735 (6th Cir. 2017).

NSR program, this memorandum communicates how the EPA intends to apply and enforce certain aspects of the applicability provisions of the NSR regulations that have been addressed in these appellate decisions.

In particular, this memorandum addresses the EPA's intended approach concerning the procedures contained in the NSR Reform Rules[2] (and approved state regulations that reflect the content of those rules) for sources that have used or intend to use "projected actual emissions" in determining NSR applicability and the associated pre- and post-project source obligations. While this memorandum describes our current intended approach for future matters, decisions about how to proceed in ongoing enforcement matters will be made on a case-by-case basis. We believe this memorandum is necessary to provide greater clarity for sources and states implementing the NSR regulations. The guidance is also generally consistent with the NSR Reform Rules and with EPA objectives and ongoing efforts to clarify and streamline the NSR program requirements and reduce burden on regulated sources in accordance with recent Presidential actions.[3]

The remainder of this memorandum is organized into two sections. Section II contains relevant CAA, regulatory and litigation background. Section III contains a discussion of the issues raised by the DTE litigation and addresses the EPA's current intended approach concerning the following specific topics: 1) consideration of post-project emissions management in determining NSR applicability; 2) the role of post-project actual emissions in major modification applicability; 3) the EPA oversight and enforcement of pre-project NSR applicability analyses involving the actual-to-projected-actual applicability test; and 4) the role of EPA-approved state and local NSR programs in implementing NSR requirements.

This memorandum explains how the EPA intends to apply and enforce certain requirements of the NSR regulations as we begin review of that program. This document 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 memorandum does not change or substitute for any law, regulation or other legally binding requirement and is not legally enforceable. This memorandum is not final agency action, but merely clarifies the EPA's current understanding regarding certain elements of the NSR regulations.

## II. Background on CAA and Regulatory Provisions and DTE Litigation

### *A. Relevant CAA and EPA Regulatory Provisions*

The NSR provisions of the CAA and of the EPA's implementing regulations require new major stationary sources and major modifications at existing major stationary sources to, among other things, obtain an air quality permit before beginning construction. This permitting process for major stationary sources is required whether the major source or major modification is planned for an area where the national ambient air quality standards (NAAQS) are exceeded

[2] In 2002, the EPA issued a final rule that revised the regulations governing the major NSR program. 67 FR 80186. We refer generally to these rule provisions as "NSR Reform."

[3] *See e.g.*, Presidential Memorandum: Streamlining Permitting and Reducing Regulatory Burdens for Domestic Manufacturing (January 24, 2017); Executive Order 13777: Enforcing the Regulatory Reform Agenda (February 24, 2017).

(nonattainment areas) or an area where the NAAQS have not been exceeded (attainment and unclassifiable areas). In general, permits for sources in attainment areas and for other pollutants regulated under the major source program are referred to as prevention of significant deterioration (PSD) permits, while permits for major sources emitting nonattainment pollutants and located in nonattainment areas are referred to as nonattainment NSR (NNSR) permits. The entire preconstruction permitting program, which includes the PSD and the NNSR permitting programs, is referred to as the NSR program.[4]

The CAA defines a "modification" as "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted." 42 U.S.C. § 7411(a)(4). A "major modification" is defined in the regulations as "any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase (as defined in paragraph (b)(40) of this section) of a regulated NSR pollutant (as defined in paragraph (b)(50) of this section); and a significant net emissions increase of that pollutant from the major stationary source." 40 C.F.R. § 52.21(b)(2)(i).

The NSR applicability procedures in the regulations reaffirm the role of the "project" emissions increase[5] and "net emissions increase"[6] in determining major modification applicability: "...a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases – a significant emissions increase (as defined in paragraph (b)(40) of this section), and a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase." 40 C.F.R. § 52.21(a)(2)(iv)(*a*).

Prior to beginning construction of a project the owner or operator of the major stationary source must calculate the emissions increases that it projects will be caused by the project and potentially the net emissions increase to determine if NSR permitting is required. The procedure for calculating whether a significant emissions increase will occur as a result of a modification is emission unit specific and depends upon whether the emissions unit is new or existing. For new emissions units, increases are calculated using the "actual-to-potential" test, and for existing emissions units, increases are calculated using the "actual-to-projected-actual" applicability test.

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[4] The CAA requirements for PSD programs set forth under at 42 U.S.C. §§ 7470-7479 are implemented by the EPA's PSD regulations found at 40 C.F.R. § 51.166 (minimum requirements for an approvable PSD State Implementation Plan) and 40 C.F.R. § 52.21 (PSD permitting program for permits issued under the EPA's federal permitting authority). The CAA sets forth requirements for state implementation plans for nonattainment areas at 42 U.S.C. §§ 7501-7515, and the general provisions include NNSR permitting requirements at 42 U.S.C. §§ 7502(c)(5) and 7503. The CAA's NNSR permitting requirements are implemented by the EPA's NNSR regulations found at 40 C.F.R. § 51.165, § 52.24 and part 51 of Appendix S. This memorandum cites certain definitions and requirements in the federal PSD regulations at 40 C.F.R. § 52.21. However, the other NSR regulations identified contain analogous definitions and requirements, and the statements in this memorandum also apply to those analogous provisions.

[5] A "project" is defined as "a physical change in, or change in the method of operation of, an existing major stationary source." 40 C.F.R § 52.21(b)(52).

[6] The net emissions increase is calculated as the sum of the project emissions increase, calculated pursuant to 40 C.F.R. § 52.21(a)(2)(iv), and any other increases and decreases in actual emissions at the major stationary source that are contemporaneous and otherwise creditable. *See* 40 C.F.R. § 52.21(b)(3).

*See* 40 C.F.R § 52.21(a)(2)(iv). Under both applicability tests, pre-project actual emissions are established using "baseline actual emissions," which are defined specifically for existing electric utility steam generating units and separately for all other existing emissions units. *See* 40 C.F.R § 52.21(b)(48). Under the actual-to-potential test, an emissions increase is calculated as the difference between the potential to emit (as defined at 40 C.F.R § 52.21(b)(4)) following completion of the project and the baseline actual emissions. Under the actual-to-projected-actual applicability test, an emissions increase is calculated as the difference between the projected actual emissions (as defined at 40 C.F.R § 52.21(b)(41)) and the baseline actual emissions.[7]

The focus of this memorandum is on the actual-to-projected-actual applicability test and associated requirements in the NSR regulations. "Projected actual emissions" is defined as "the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the 5 years following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source." 40 C.F.R § 52.21(b)(41)(i). In making a projection, the owner or operator "[s]hall consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the State or Federal regulatory authorities, and compliance plans under the approved State Implementation Plan." 40 C.F.R § 52.21(b)(41)(ii)(*a*). In order to determine the projected increase that results from the particular change consistent with the definition of "major modification," the owner or operator "[s]hall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under paragraph (b)(48) of this section and that are also unrelated to the particular project, including any increased utilization due to product demand growth."[8] 40 C.F.R § 52.21(b)(41)(ii)(*c*). Finally, the rules contain objective calculation requirements (e.g. for electric utility steam generating units, baseline actual emissions must be based on a consecutive 24-month period in the 5-year period immediately preceding the project, and in order not to trigger NSR permitting requirements, the calculated emissions increase may not equal or exceed numerical "significance" thresholds). *See* 40 C.F.R. §52.21(b)(23), (48).

With respect to the role of post-project actual emissions in the major modification applicability provisions, the regulations state the following: "Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase." 40 C.F.R. § 52.21(a)(2)(iv)(*b*). In addition, the regulations contain specific recordkeeping, monitoring and reporting provisions set forth at 40 C.F.R. § 52.21(r)(6) that apply in circumstances where there is a "reasonable

[7] In lieu of using projected actual emissions, owners or operators may use potential to emit. *See* 40 C.F.R § 52.21(b)(41)(ii)(*d*).

[8] This provision is sometimes referred to as the "demand growth exclusion," when used in the context of utilities or the "independent factors exclusion," when used in the context of other manufacturing operations, and qualifying emissions are sometimes referred to as "excludable emissions." There is no presumption that an emissions increase following that change was caused by the change, but rather, this is the analysis required under §52.21(b)(41)(ii)(c).

possibility," as that term is defined at 40 C.F.R. § 52.21(r)(6)(vi), that a project that is not projected to cause a significant emissions increase may nevertheless result in an actual significant emissions increase of a regulated NSR pollutant.[9] Depending on the reasonable possibility criteria applicable to a project and the type of emissions unit(s) involved, owners or operators must comply with one or more of the following requirements: 1) document and maintain a pre-project record of the NSR applicability information identified at 40 C.F.R. §52.21(r)(6)(i); 2) for electric utility steam generating units only, submit the information set out in paragraph (r)(6)(i); 3) monitor and record emissions, on a calendar-year basis, for a period of five or 10 years after the unit resumes regular operations after the change (depending on whether there is an increase in the design capacity or potential to emit); 4) for electric utility steam generating units only, submit a report of annual emissions for each year that monitoring is required; and 5) for all other units, submit a report if annual emissions exceed the baseline actual emissions by a significant amount and if such emissions differ from the pre-construction projection. *See* 40 C.F.R. § 52.21(r)(6)(i) - (v). For projects subject to 5-year post-change emissions tracking, the EPA indicated in the NSR Reform rule preamble that it would "presume that any increases that occur after 5 years are not associated with the physical or operational changes."[10]

*B. DTE Litigation*

Since 2010, the EPA has been involved in an enforcement action and litigation concerning a construction project at the DTE Monroe, Michigan power plant. At issue in that litigation has been a dispute between the EPA and DTE on the relationship between the requirements in the regulations that govern pre-project NSR emission projections and the role of post-project emissions monitoring.

The DTE litigation has resulted in two separate decisions by the same panel of three judges on the U.S. Court of Appeals for the Sixth Circuit. Neither of these decisions were unanimous, and in the second decision, each judge wrote a separate opinion. In the first decision, two of the three judges agreed that the EPA could pursue enforcement based solely on a claim that the source had failed to properly project, in accordance with the regulations, future emissions, even though actual emissions from the source had not increased after the construction was completed and the source resumed operation. *See U.S. v. DTE Energy Co.*, 711 F.3d 643, 649-650, 652 (6th Cir. 2013). In allowing enforcement based solely on violations of EPA regulations governing future emission projections, the majority opinion cautioned against EPA "second guessing" a projection. The third judge dissented based on her view that there was no enforceable violation of the EPA's projection regulations when there was no post-construction emissions increase. *See id.* at 652-53. After the case reached the Sixth Circuit for the second time, the two judges who had agreed in the first case (that the EPA could pursue enforcement based solely on an allegedly improper projection) were unable to agree on the extent to which the EPA could "second guess" such a projection. *United States v. DTE Energy Co.*, 845 F.3d 735 (6th Cir. 2017). One of these two judges concluded that DTE had satisfied the basic requirements for making projections and the other concluded DTE had not. *Compare id.* at 738-740 *with id.* at 751-55. The third judge (the same one who dissented in the first case) concluded that she was required to follow the majority holding in the first case that the EPA could pursue enforcement based solely on an improper projection and then sided with the

[9] These provisions are sometimes referred to as the "reasonable possibility" rule provisions.
[10] 67 FR 80197 (December 31, 2002).

judge who found DTE had not adequately justified its projection (while declining to support the parts of her colleague's opinion that could be read to expand the majority opinion in the first case). *See id.* at 742.

The matters at issue in the DTE litigation are complex, and the appellate court decisions have left ambiguity regarding the scope of the applicable regulations and what sources must do to comply. Further, the Supreme Court has been asked to review the second appellate court opinion. Considering this uncertainty, the EPA believes it would be helpful to explain to stakeholders how the EPA plans to proceed in implementing and exercising its authority under those regulations pending further review of these issues by the EPA.

## III. Discussion

As described previously, the NSR regulations require owners or operators to perform a pre-construction applicability analysis to determine whether a proposed project would result in a significant emissions increase and a significant net emissions increase, thus triggering the requirement to obtain an NSR permit. The regulations also specify the information used in that analysis that, when certain criteria in the "reasonable possibility" rule provisions are met, shall be documented, maintained and in certain cases submitted to the reviewing authority prior to beginning construction. *See* 40 C.F.R. §§ 52.21(a)(2), 52.21(r)(6)(i), (ii). If required, the pre-project record must contain: 1) a description of the project; 2) identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and 3) a description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph (b)(41)(ii)(c) and an explanation for why such amount was excluded and any netting calculations,[11] if applicable. *See* 40 C.F.R. § 52.21(r)(6)(i).

One issue that has arisen with respect to determining projected actual emissions resulting from a proposed project is whether it is permissible under the regulations for an owner or operator to factor into the projection an intent to actively manage future emissions from the project on an ongoing basis to prevent a significant emissions increase or a significant net emissions increase from occurring. The EPA notes that the rule language specifically provides that "all relevant information" shall be considered in making a projection. *See* 40 C.F.R § 52.21(b)(41)(ii)(*a*). Pending further review of the issues described above by the EPA, the EPA intends to apply the NSR regulations in accordance with this language such that the intent of an owner or operator to manage emissions from a unit in that manner after a project is completed represents relevant information in the context of projecting future actual emissions from that unit that could be considered along with other relevant information in making an emissions projection, as provided in the NSR regulations.

In finalizing the 2002 NSR rule revisions, the EPA explained that owners or operators "will not be required to make the projected actual emissions projection through a permitting action" and

[11] The term "netting" refers to determining the net emissions increase. The net emissions increase is calculated as the sum of the projected emissions increase, calculated pursuant to 40 C.F.R. § 52.21(a)(2)(iv), and any other increases and decreases in actual emissions at the major stationary source that are contemporaneous and otherwise creditable. *See* 40 C.F.R. § 52.21(b)(3).

that it "also believe[d] that it is not necessary to make ... future projections enforceable in order to adequately enforce the major NSR requirements. The Act provides ample authority to enforce the major NSR requirements if ... physical or operational change results in a significant net emissions increase at [a] major stationary source." 68 FR 80204 (December 31, 2002). Moreover, the regulations are clear that owners or operators need not obtain approval of their pre-project NSR applicability analyses from the reviewing authority before construction.[12]

As the EPA explained in 2002, a key objective of the projected actual emissions provisions was to avoid the need for permitting authority review of NSR applicability determinations prior to implementation of a project. The rules instruct the affected source to consider "all relevant information," (as defined in 40 C.F.R. §52.21(b)(41)(ii)) in making an applicability determination. They also include specific instructions as to when and how actual emissions projections must be documented and when post-project emissions monitoring and reporting is required. If an affected source complies with those requirements, it has satisfied the source obligations that are required under our NSR rules.

The NSR rules instruct the source to exclude from a projection those emissions that both could have been accommodated during the baseline period and that are unrelated to the project. Because increased emissions may be caused by multiple factors, the EPA has recognized that the source must exercise judgement to exclude increases for which the project is not the "predominant cause." 45 Fed. Reg. 32,327 (1992). The NSR rules provide no mechanism for agency review of procedurally compliant emission projections. To infer the existence of such a mechanism would be tantamount to inferring agency authority to require pre-approval of emissions projections. Such an outcome is inconsistent with the text of the EPA rules and with the agency's clearly stated intent in adopting those rules.

Consistent with these regulations, the EPA intends to focus on the fact that it is the obligation of source owners or operators to perform pre-project NSR applicability analyses and document and maintain records of such analyses as required by the regulations. It also intends to focus on the fact that the post-project monitoring, recordkeeping and reporting requirements provide a means to evaluate a source's pre-project conclusion that NSR does not apply and that the NSR applicability procedures make clear that post-project actual emissions can ultimately be used to determine major modification applicability. This is reflected in the following sentence: "Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase." 40 C.F.R. § 52.21(a)(2)(iv)(*b*). In addition, the post-project monitoring and recordkeeping requirements under the "reasonable possibility" rule provisions described previously further confirm the important role that actual post-project emissions data play in determining NSR applicability.

Based on the foregoing, and while further review of these issues by the EPA is pending, the EPA intends to implement and exercise its authority under the NSR provisions to clarify that

[12] With respect to existing electric utility steam generating unit(s), for which submittal of the pre-project record is required before beginning actual construction, the regulations explicitly state: "Nothing in this paragraph ... shall be construed to require the owner or operator or such a unit to obtain any determination from the Administrator before beginning actual construction." 40 C.F.R. § 52.21(r)(6)(ii). For all other emissions unit categories, there is no requirement to submit the pre-project applicability record before construction.

when a source owner or operator performs a pre-project NSR applicability analysis in accordance with the calculation procedures in the regulations, and follows the applicable recordkeeping and notification requirements in the regulations, that owner or operator has met the pre-project source obligations of the regulations, unless there is clear error (e.g. the source applies the wrong significance threshold). The EPA does not intend to substitute its judgement for that of the owner or operator by "second guessing" the owner or operator's emissions projections.

Furthermore, when an owner or operator projects that a project will result in an emission increase or a net emissions increase less than the significant emissions rate in accordance with the NSR regulations, the EPA intends to focus on the level of actual emissions during the 5- or 10-year recordkeeping or reporting period after the project for purposes of determining whether to exercise its enforcement discretion and pursue an enforcement action. That is, the EPA does not presently intend to initiate enforcement in such future situations unless post-project actual emissions data indicate that a significant emissions increase or a significant net emissions increase did in fact occur. Although the majority in the first DTE opinion held that the EPA may pursue enforcement of its projection regulation where a source owner or operator has failed to perform a required pre-project applicability analysis or has failed to follow the objective calculation requirements of the regulations regardless of the level of post-project emissions, the court decision does not compel the EPA to pursue enforcement in such situations. The EPA has substantial discretion regarding prosecution of violations of the CAA and the first DTE opinion does not limit the EPA's discretion to consider whether prosecution of other sources is warranted in similar circumstances. Thus, pending further review of these issues by the courts and the EPA, the agency does not intend to pursue new enforcement cases in circumstances such as those presented in the DTE matter.

Finally, the EPA notes that while this memorandum refers to federal NSR regulations at 40 C.F.R. § 52.21, in states with EPA-approved NSR programs, the state and local regulations that the EPA has approved into the SIP are the governing federal law. To be approvable, the NSR requirements in a state plan must be at least as stringent as the federal rule requirements in 40 C.F.R. §§ 51.165 and 51.166 for NNSR and PSD programs, respectively, but may be more stringent at the state's discretion. The implementation of the NSR program is one example of cooperative federalism under the CAA under which the state regulations have primacy once they are approved by the EPA. However, if it is later determined that the NSR program approved into the SIP is deficient, the EPA has the authority under 42 U.S.C. § 7410(k)(5) to call for a state to revise its regulations. In the absence of such a SIP call, it is the EPA-approved state regulations that govern NSR applicability.

cc: Ryan Jackson
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