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CLEAN AIR ACT GENERAL CONFORMITY REQUIREMENTS and the NATIONAL ENVIRONMENTAL POLICY ACT PROCESS

April 2000

U.S. Department of Energy
Environment, Safety and Health
Office of NEPA Policy and Assistance

Clean Air Act
General Conformity Requirements
and the
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Contents

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1. BACKGROUND

1.1 Purpose of the Guidance

The purpose of this guidance is to describe how to: (1) apply the Clean Air Act (CAA) general conformity requirements to a proposed DOE action, (2) address CAA conformity requirements in National Environmental Policy Act (NEPA) documents, and (3) coordinate the CAA conformity and NEPA public participation processes. Appendix I to this guidance provides a more detailed discussion of the general conformity requirements. In addition to an overview of the CAA general conformity statutory requirements (Section I), Appendix I presents detailed information about the general conformity review and determination processes (Section II) and associated regulatory requirements (Section III). Appendix I also discusses what would be included in a conformity determination and when a completed determination may become invalid (Section IV). Appendix II provides a list of references. Relevant sections of the appendices are referenced in this guidance as appropriate.

1.2 Statutory and Regulatory Framework for Conformity Assurance

Section 176(c)(1) of the CAA requires Federal agencies to assure that their actions conform to applicable implementation plans[1] for achieving and maintaining the National Ambient Air Quality Standards for criteria pollutants. Also, this section assigns primary oversight responsibility for conformity assurance to the agencies themselves, not to the Environmental Protection Agency (EPA) or the States. Specifically, for there to be conformity, a Federal action must not contribute to new violations of standards for ambient air quality, increase the frequency or severity of existing violations, or delay timely attainment of standards in the area of concern (e.g., a State or a smaller air quality region).

[1] In most cases, the applicable implementation plan will be the State implementation plan, which is an EPA-approved State plan for the regulation and enforcement of National Ambient Air Quality Standards in each air quality region within a State. In rare instances, the applicable implementation plan could be a Federal or Tribal implementation plan.

In 1993, the EPA issued general conformity regulations (40 CFR Part 93, Subpart B)[2] containing procedures and criteria for determining whether a proposed Federal action[3] would conform with CAA implementation plans. The regulations apply to a proposed Federal action that would cause emissions of criteria air pollutants above certain levels (described in Figure 1, Section 2.1) to occur in locations designated as nonattainment or maintenance areas (defined in Section 2.1) for the emitted pollutants. The Federal regulations apply unless EPA has approved State[4] or Tribal regulations.

Criteria Pollutants: Air pollutants for which EPA has set National Ambient Air Quality Standards (40 CFR Part 50), i.e., sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, lead, and particulate matter.

1.3 Coordination of CAA General Conformity and NEPA Requirements

CAA conformity is an issue to be addressed during the NEPA process. The preamble to EPA's rulemaking on general conformity States that conformity "should be viewed in a manner that fits within a broader view including NEPA activities," and that "EPA expects the conformity analysis to be coupled with the NEPA analysis and, thus, not result in undue delays" (58 FR 63214, November 30, 1993). In addition, the Council on Environmental Quality's NEPA regulations state that Federal agencies shall integrate NEPA requirements for a proposed action with other environmental review and consultation requirements to the fullest extent possible (40 CFR 1502.25(a)).

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[2] Other conformity regulations, at 40 CFR Part 93, Subpart A, relate specifically to transportation plans, programs, and projects that are developed, funded, or approved under Title 23 U.S.C. or the Federal Transit Laws (49 U.S.C. Chapter 53). DOE does not expect to propose actions that will be subject to the Transportation Conformity Rule.

[3] Consistent with Section 176(c)(1) of the CAA, the general conformity regulations (40 CFR 93.152) define a Federal action very broadly to mean "any activity engaged in by a department, agency, or instrumentality of the Federal government, or any activity that a department, agency or instrumentality of the Federal government supports in any way, provides financial assistance for, licenses, permits, or approves, other than activities related to transportation plans, programs, and projects developed, funded or approved under Title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 *et seq.*)...."

[4] State conformity regulations must be consistent with EPA's regulations for State programs (40 CFR Part 51, Subpart W), but can be more stringent than Federal regulations, provided the more stringent requirements apply equally to Federal and non-Federal entities (40 CFR 51.851(b)).

Previous Department of Energy (DOE) guidance[5] concerning the CAA general conformity regulations indicated that DOE "intends to implement the general conformity regulations in the context of its existing NEPA requirements." The recommendations presented below aim to include information about the conformity status of proposed DOE actions (including all analyzed alternatives) in the NEPA process. This is needed both for good decision making and to avoid delays in subsequent implementation of the decision.

The CAA general conformity regulations focus on how a Federal action that an agency intends to take conforms to the applicable implementation plan for criteria air pollutants. The NEPA regulations differ in that they require a substantially similar degree of analysis of the potential environmental impacts of all analyzed alternatives. Integration of part or all of the CAA conformity and NEPA processes, however, poses some advantages, as discussed below.

The following recommendations on integrating the general conformity requirements into DOE's NEPA process address the two phases of the CAA conformity process differently with respect to alternatives. (The two phases are the conformity review and the conformity determination processes, described briefly below and more fully in Section 2 of the guidance and in Appendix I, Sections II and III.) With respect to timing, however, the recommendation for both phases is to conduct the NEPA and CAA conformity processes in parallel and to integrate them to the extent possible.

The first phase – ***the conformity review process*** – evaluates whether the conformity regulations would apply to an action (i.e., whether a determination is needed).

Recommendation: Conduct the conformity review process for all proposed actions. In the case of an environmental assessment (EA) or environmental impact statement (EIS), conduct the conformity review for each analyzed alternative. (Special considerations for the application of categorical exclusions are discussed in Section 3.1.)

Rationale: The conformity review, in most cases, should be a simple analysis that determines whether a conformity determination is needed. Most of the emissions and attainment status information needed for a conformity review also is needed for a NEPA impact assessment. Consistent with NEPA and with principles of good management, a conformity review of all analyzed alternatives in an EA or EIS would facilitate a comparative evaluation of alternatives with respect to air quality issues.

[5] Memorandum from Raymond F. Pelletier, Director, Office of Environmental Guidance, to DOE Program and Field Offices: *Final Clean Air Act Rule Requiring that Federal Actions Conform to Applicable State Implementation Plans*, January 27, 1994.

The second phase – ***the conformity determination process*** – demonstrates how an action would conform with the applicable implementation plan.

Recommendation: In the case of an EA or EIS, (1) conduct the conformity determination (if needed) for only the preferred alternative, and (2) integrate the CAA conformity and NEPA documentation and public participation processes, to the extent possible.

Rationale: A conformity determination, unlike the conformity review, may involve extensive analyses, e.g., local and area-wide air quality modeling, or mitigation measures and offsets. Considering that a Federal agency may need to negotiate binding mitigation measures or offsets with non-DOE entities, or that changes may be needed in an applicable implementation plan to demonstrate conformity, conducting a conformity determination on all alternatives that would require one (if they were to be implemented) may not be the best use of resources.

EPA's conformity guidance[6] reflects this view in stating that when needed, a conformity determination is required for "only the one [alternative] that the Federal agency ultimately approves, permits, or funds."

This approach is frequently used when considering compliance with certain environmental laws and regulations, e.g., when addressing air quality or hazardous waste permitting requirements, where permits would only be completed for the preferred alternative, even though health and environmental impacts analysis of all analyzed alternatives for the Federal action would be included in the NEPA document.

Note that the costs of conducting a conformity determination for only the preferred alternative normally would not prejudice DOE's NEPA process. This is because the costs of a conformity determination are small compared to other project planning costs and total project costs. Therefore, preparing a conformity determination for only the preferred alternative would not favor the preferred alternative.

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[6] *General Conformity Guidance: Question and Answers*, issued by the Office of Air Quality Planning and Standards, U.S. EPA, July 13, 1994.

While in most situations, conducting a conformity determination for more than one alternative would provide little new information for choosing among alternatives, there may be cases where it would be better to conduct a draft conformity determination for each of the analyzed alternatives that would require one if it were selected to be implemented.

For example, if time is at a premium, a manager might want fallback alternatives able to be selected in case the preferred alternative did not succeed for any reason. (Indeed, if severe time pressures could occur, a good NEPA strategy would be to conduct a conformity determination for each alternative that would require one.) In another case, a manager might want to know the full cost requirements of each alternative, including the cost of mitigation measures and offsets needed to achieve conformity, before choosing among alternatives.

With regard to the integration recommendation, there are management advantages to conducting the conformity determination with the NEPA process.[7]

- Early project planning benefits from knowing the likelihood that a preferred alternative would conform with the applicable implementation plan, or what mitigation measures or offsets would be necessary to make it conform to the plan.

- Project managers who delay conducting a needed conformity determination until after the NEPA process is completed may be delaying their ability to implement the project.

[7] Notwithstanding such advantages, the CAA conformity determination process could be conducted outside the NEPA process. See Appendix I for a discussion of the applicable CAA requirements.

2. APPLYING CAA GENERAL CONFORMITY REQUIREMENTS

This Section provides a general overview for both the conformity review process and the conformity determination process. More detailed information can be found in Appendix I, Sections II and III.

2.1 Overview of the Conformity Review Process

The purpose of a conformity review is to evaluate whether the conformity determination requirements would apply to an action (including all alternatives being analyzed in an EA or EIS).

> **Conformity Review:** Process of evaluating whether the conformity requirements would apply to an action (that is, whether a conformity determination is needed).

In an EA or EIS, do not limit the conformity review to the preferred alternative. Conduct a conformity review for all analyzed alternatives regardless of the nature of the alternatives – whether alternative sets of activities, alternative sites, or alternative technologies. Normally, a conformity review is not needed for the no action alternative. A conformity review may be needed, however, if activities associated with the no action alternative have pollutant air emissions that have not been subject to a conformity review.

A conformity review may require completion of four steps, as outlined in Figure 1. Three of the four steps of the conformity review process can be taken in any order. The order presented here is likely to be the most efficient, however, because the information needed for steps one and two should be readily available.

First, determine whether the proposed action (or analyzed alternative) causes emissions of criteria pollutants or their precursors (Appendix I, Section II.A).

Second, determine whether the emissions of a criteria pollutant or its precursors[8] would occur in a nonattainment or maintenance area for that pollutant. (See the text box for attainment descriptions of status designations. See Appendix I, Section II.B, for a discussion of how to determine the most recent attainment status designation for various locations.)

[8] "Precursors" of a criteria pollutant are: (1) for ozone, nitrogen oxide (unless an area is exempt from nitrogen oxide requirements under Section 182(f) of the CAA), and volatile organic compounds; and (2) for particulate matter, those pollutants described in the nonattainment area's implementation plan as significant contributors to the particulate matter levels.

Third, determine whether the proposed action (or analyzed alternative) is exempt from the CAA conformity requirements. (See Appendix I, Section II.C, for a discussion and examples of the types of actions that are exempt from the conformity requirements.)

To the extent possible, these three steps of the conformity review process should be conducted concurrently with a determination of the appropriate level of NEPA review for a proposed action (i.e., whether a proposed action may be categorically excluded or requires the preparation of an EA or EIS). (See the discussion on level of NEPA review in Section 3.1.)

Attainment Status Designations

Attainment Area: An area designated or redesignated by the EPA as having attained the relevant National Ambient Air Quality Standard for a given criteria pollutant.

Nonattainment Area: An area that the EPA currently designates as not meeting (i.e., not being in attainment with) one or more of the National Ambient Air Quality Standards for criteria pollutants.

Maintenance Area: An area that was in nonattainment for one or more criteria pollutants but has achieved attainment status and has a maintenance plan approved under Section 175(a) of the CAA.

Unclassified Area: An area that cannot be classified on the basis of available information as meeting the national primary and secondary ambient air quality standards for the pollutant.

The fourth step in the conformity review process, if needed, is to estimate the total emissions of the pollutant(s) of concern from the proposed action (or analyzed alternative) and compare the estimate(s) to the threshold emissions rate(s) and to the nonattainment or maintenance area's emissions inventory for each pollutant of concern.

Appendix I, Section II.D.1, describes how to estimate emissions and presents related definitions (e.g., "direct," "indirect," and "total of direct and indirect emissions"). Exhibit 2 in that Section lists potential emissions sources to consider when estimating emissions. Appendix I, Section II.D.2, describes how to compare estimated emissions of each pollutant of concern to both the threshold emissions rate and the nonattainment or maintenance area's emissions inventory for the pollutant, and how to decide if a conformity determination is needed. Exhibit 3 in that Section is a consolidated list of threshold emissions rates for criteria pollutants and their precursors in nonattainment and maintenance areas, at or above which the conformity determination requirements would apply.

Figure 1 – Conformity Review Process.

Follow these steps for a proposed action (and each analyzed alternative) to evaluate if the conformity determination requirements apply to the action.

Step 1. *Would the proposed action (alternative) cause emissions of criteria pollutants or their precursors?*	
YES. Go to Step 2	**NO**. The conformity determination requirements do not apply to the action (alternative).
Step 2. *Would emissions of a criteria pollutant or its precursors occur in a nonattainment or maintenance area of that pollutant (i.e., are there emissions of a pollutant of concern[9])?*	
YES. Go to Step 3	**NO**. The conformity determination requirements do not apply to the action (alternative).
Step 3. *Is the proposed action (alternative) exempt from the CAA conformity requirements?*	
NO. Go to Step 4	**YES**. The conformity determination requirements do not apply to the action (alternative).
Step 4. *Would the estimated total of direct and indirect emissions[10] of each pollutant of concern from the proposed action (alternative) be below the threshold emissions rate[11] and also below 10 percent of the emissions inventory[12] for the nonattainment or maintenance area?*	
NO. The conformity determination requirements apply to, and a conformity determination would be needed for that action (alternative), if selected.	**YES.** The conformity determination requirements do not apply to the action (alternative).

[9] "Pollutant(s) of concern" refers in this guidance to those criteria pollutant(s) or pollutant precursor(s) (i.e., volatile organic compounds and oxides of nitrogen) that cause an area to be a nonattainment or maintenance area.

[10] "Total of direct and indirect emissions" means the sum of direct and indirect emissions increases and decreases caused by the Federal action – i.e., the "net" emissions considering all direct and indirect emissions. The portion of emissions that is exempt under 40 CFR 93.153 (c), (d), and (e) is not included in the "total of direct and indirect emissions." The "total of direct and indirect emissions" includes emissions of criteria pollutants and emissions of precursors of criteria pollutants (40 CFR 93.152).

[11] "Threshold emissions rate" refers in this guidance to the criteria pollutant or precursor emissions rate for nonattainment and maintenance areas in 40 CFR 93.153(b)(1) and (2), respectively, below which the CAA conformity requirements would not apply.

[12] "Emissions inventory" means a listing, by source, of the amount of air pollutants discharged into the atmosphere of a community and which EPA or the State often uses to establish air emissions standards for the community.

Maintain a written record of the application of each step in the conformity review process
Discussion of the conformity review in an EA or EIS may serve as documentation for conformity compliance purposes; see Section 3.3, below. If the conformity review proceeds to Step 4, the written record for conformity compliance should include a record of emissions estimates for the pollutant(s) of concern, assumptions used in the emissions calculations, and the results of the comparisons of the emissions to the threshold emissions rate(s) and to the area's emissions inventory.

2.2 Overview of the Conformity Determination Process

The purpose of the conformity determination process is to demonstrate how an action would comply with the applicable implementation plan. (Section 2.1 details the conditions that would trigger the need for a conformity determination.)

> Normally conduct the conformity determination (if one would be needed) for only the preferred alternative in an EA or EIS. (See rationale on page 4.)
>
> Make a conformity determination before implementing any action to which the conformity requirements apply. Initiate the conformity determination process early enough to avoid delaying an action.

The conformity determination process begins by identifying which criteria could be used to demonstrate that an alternative (e.g., the preferred alternative) conforms to the applicable implementation plan. The conformity determination criteria,[13] which are summarized in Appendix I, Section III.A, include the baseline criterion and additional

Conformity Determination Process

The process begins by identifying which criteria could be used to demonstrate conformity. The process would likely include a conformity analysis and identification of mitigation or offsets measures, and conclude with a formal conformity determination.

Conformity determination criteria: Criteria used to determine how the direct and indirect emissions of pollutants of concern from an action (e.g., the preferred alternative) would conform to the applicable implementation plan.

Conformity analysis: Any analysis, including the results of any air quality modeling, used to demonstrate conformity to the applicable implementation plan.

Conformity Determination: Written finding that the action (e.g., the preferred alternative) would conform to the applicable implementation plan; issued after a minimum 30-day public comment period on a draft determination.

[13] The baseline criterion and the additional criteria can be found in 40 CFR 93.158(c) and (a), respectively.

criteria. The baseline criterion is consistency of the total (direct and indirect) emissions of the pollutant(s) of concern from the action (e.g., the preferred alternative) with the requirements and milestones contained in the applicable implementation plan, such as progress schedules, prohibitions, numerical emissions limits, and work practice requirements.

One of several additional criteria also must be met. For example, one criterion is that the action would not cause or contribute to any new, or increase the frequency and severity of any existing, air quality violations, as shown through use of specified air quality models.

A conformity analysis[14] usually is needed as part of the conformity determination process to demonstrate how the action (e.g., the preferred alternative) would conform to the applicable implementation plan.

The conformity analysis requirements (40 CFR 93.159) contain detailed procedures for analyzing how an action would conform to the applicable implementation plan. For example,

- use of the latest local or area-wide planning assumptions, or

- use of specific emissions scenarios that are expected to occur from the action.

The emissions estimates determined during the conformity review (using standard emissions factors and calculations) are used in a conformity analysis to conduct local and area-wide modeling. (See Appendix I, Section III.B, for more information on conformity analysis.)

When preparing a conformity determination, consult with the Regional EPA office and/or the State or Tribal air permitting agency, as appropriate, early in the process to discuss which conformity determination criteria to use and the most up-to-date models, emissions factors, and population estimates for the conformity analysis.

If the emissions from an action (e.g., the preferred alternative) cannot be reduced sufficiently (e.g., through the imposition of additional emission controls), and if air dispersion modeling cannot demonstrate conformity, then either a plan for mitigating or a plan for offsetting the emissions will need to be pursued. Mitigation and offset measures, in the context of the general conformity regulations, would involve the participation of another emissions source. (See Appendix I, Section III.A, concerning emissions offsets, and Section III.C for more information on mitigation measures.)

[14] The conformity regulations allow a Federal agency to adopt the conformity analysis of another Federal agency if multiple agencies have jurisdiction for aspects of a project (40 CFR 93.154). (Each agency, however, must issue its own conformity determination.)

The conformity determination documents DOE's finding that an action (e.g., preferred alternative) would conform to the applicable implementation plan. The determination describes how the conformity determination criteria would be met, the results of any conformity analysis conducted, and any mitigation measures or offsets needed to demonstrate conformity with the applicable implementation plan. (See Appendix I, SectionIV, for more information on conformity determinations.)

3. ADDRESSING CAA CONFORMITY IN NEPA DOCUMENTS

To provide a comprehensive consideration of the potential impacts of a proposed DOE action (including all analyzed alternatives), address CAA conformity issues in all EAs and EISs.[15]

Include for each analyzed alternative information concerning the conformity review

Also, if the conformity regulations would apply to an alternative and a conformity determination is conducted during the NEPA process (or was conducted earlier), include information concerning the conformity determination process and attach the conformity determination.

Use the sliding scale approach[16] to determine the amount of detail to include and whether to provide qualitative or quantitative information concerning the results of the conformity review and any conformity determination. More information and more quantification would be needed when a conformity determination is needed, or when mitigation measures or offsets are needed for an alternative to conform to the applicable implementation plan.

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[15] See Section 2.3.5 of the *Environmental Impact Statement Checklist* (November 1997) and Section 2.3.4 of the *Environmental Assessment Checklist* (August 1994), both issued by the U.S. Department of Energy, Office of Environment, Safety and Health. (This guidance addresses the format, applicable requirements, and recommendations for preparing EAs and EISs; the referenced sections specifically address compliance with air quality regulations.)

[16] The sliding scale approach for DOE NEPA analysis is discussed in *Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements* (Office of NEPA Oversight, U. S. Department of Energy, May 1993). (This guidance helps to focus NEPA document preparers and reviewers on significant environmental impacts, adequately analyzing impacts, and effectively presenting the analysis.)

3.1 Level of NEPA Review

When the conformity requirements would apply to a proposed DOE action (and therefore a conformity determination would be needed), or it is not readily apparent (without detailed calculations) that the requirements would not apply, the proposed action normally could not be categorically excluded from the requirement to prepare an EA or EIS.

The categorical exclusions listed in DOE's NEPA regulations in Appendix A to 10 CFR Part 1021, Subpart D, would not have air emissions or would have only very small emissions. For this reason, conformity determinations would not be needed for DOE proposed actions that fall within an Appendix A categorical exclusion.

The categorical exclusions listed in Appendix B to 10 CFR Part 1021, Subpart D, contain as an integral element the condition that the proposed action would not threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, or health. (See integral element B(1) in Appendix B to 10 CFR Part 1021, Subpart D.) Normally, when a conformity determination is needed to establish how the proposed DOE action would conform to the applicable implementation plan (and therefore it cannot be demonstrated without detailed analysis, as described in Appendix I, Section III.B, how integral element B(1) could be met), a categorical exclusion would not be appropriate.

3.2 Description of Alternatives and Affected Environment

In describing the analyzed alternative(s) (including the preferred alternative), and the affected environment(s), include information regarding emissions of criteria pollutant(s).

In describing the air pollutants that would be emitted under each alternative, indicate whether emissions of criteria pollutant(s) would be expected.

In the affected environment section, for the location(s) of each alternative,

- document the attainment status designation(s)
- identify all criteria pollutant(s) of concern
- present monitoring data for the existing ambient air concentrations of criteria pollutant(s), e.g., as 1- or 8-hour average concentrations.

3.3 Discussion of Environmental Consequences

In the environmental consequences section of an EA or EIS, present the results of the conformity review process for all analyzed alternatives, the results of the conformity determination process (if one is conducted before or during the NEPA process), and provide a comparison of alternatives with regard to CAA conformity issues.

The conformity review and determination processes do not analyze impacts from air emissions in the same manner as is done in the NEPA process, in that they do not address how emissions of pollutant(s) of concern affect, for example, human or ecological receptors. Presenting the results of the conformity review and determination in a subsection of the air resources section in the environmental consequences part of a NEPA document, however, would assist a comprehensive review of air quality issues.

Results of the conformity review process

For each alternative, tell whether the conformity requirements would apply and explain the basis for the conclusion, including if and how the following were used:

- criteria pollutant(s) or precursors expected to be emitted, if any
- emissions of pollutants of concern occurring in a nonattainment or maintenance area
- whether the alternative is exempt from the CAA conformity requirements
- emissions estimates for pollutant(s) of concern, if needed.

For each alternative for which emissions of one or more pollutant(s) of concern were estimated,

- present the estimate(s) in tons per year[17] for the year when the maximum emissions are expected to occur

[17] For purposes of demonstrating conformity, present emissions of only the pollutant(s) of concern, in terms of an emissions rate, i.e., tons per year. For purposes of health impacts analysis under NEPA, present all estimated criteria air pollutant concentrations, e.g., 1- or 8-hour average concentrations.

- compare estimated maximum year emissions of the pollutant(s) of concern with

  - threshold emissions rate(s) and
  - 10 percent of the nonattainment or maintenance area's total emissions inventory of the pollutant(s) of concern

- show that all emissions sources associated with the alternative were considered in the estimate (as discussed above in Section 2.1 and in Appendix I, Section II.D.1)

- describe assumptions and calculations used to determine the emissions rates.

Results of a conformity determination process *(when conducted)*

For each alternative for which a conformity determination is conducted:

- briefly describe how the conformity determination criteria would be met

- summarize how any conformity analysis was conducted and the results, including

  - direct and indirect emission sources of the pollutant(s) of concern (i.e., identification of sources and tabulation of emissions)
  - local or area-wide planning assumptions (e.g., employment, population, travel, and congestion)
  - methodology for calculating emissions of the pollutant(s) of concern
  - methodology (including assumptions and input data) for air quality modeling

- describe any mitigation measures or offsets needed to demonstrate conformity, and the process for implementing and enforcing the mitigation measures or offsets.

Provide a comparison of all analyzed alternative(s) with regard to conformity, e.g., with regard to whether a conformity determination is required to show how an alternative would conform to the applicable implementation plan, and, to the extent known, any mitigation measures or offsets needed to achieve conformity.

3.4 Applicable Laws and Regulations

When the general conformity regulations apply to any of the analyzed alternatives, briefly describe the CAA statutory requirements of Section 176(c)(1). In addition, describe the

applicable EPA regulatory requirements (40 CFR 93, Subpart B), or the EPA-approved State or Tribal general conformity regulations that are in effect.

3.5 NEPA Document Appendices

If a conformity determination is conducted during the NEPA process, provide the draft conformity determination, in full, as an appendix or separate volume of a draft EIS or of an EA issued for preapproval review.

Provide the final conformity determination, in full, as an appendix or separate volume of a final EIS or of an approved EA. Consolidate responses to public comments on the draft conformity determination with responses to comments on the EA or EIS.

3.6 Record of Decision and Finding of No Significant Impact

In a record of decision (ROD) or finding of no significant impact (FONSI), briefly describe any conformity determination(s).[18]

In a ROD, if a conformity determination process for the selected alternative is complete, include any commitments to implement mitigation measures or offsets needed to achieve conformity with the applicable implementation plan, and reference the preparation of a NEPA mitigation action plan. (See 10 CFR 1021.331(a) and (b).)

If DOE has not made a needed final conformity determination at the time a final EIS is issued, issue the final conformity determination concurrent with the ROD, and in addition to describing the final conformity determination, provide responses to public comments on the draft determination.

[18] If the alternative selected subsequent to a FONSI or selected in a ROD is not the alternative for which a conformity determination was made before or during the NEPA process, then a revised conformity determination would have to be completed before the selected alternative could be implemented. An exception would occur if the criteria pollutants or precursors emitted from the new alternative were identical to those from the previously selected alternative, and if the emissions rates of the criteria pollutants or precursors from the new alternative were the same as, or less than, the emissions rates of those pollutants from the preferred alternative for which the conformity determination was made. Under this guidance, which recommends conducting a conformity determination, when needed, for only the preferred alternative, this situation could occur if the selected alternative was not the preferred alternative or if the selected alternative is a "hybrid" alternative that acceptably (under NEPA) combines aspects of several analyzed alternatives.

In the unlikely event that DOE has not made a needed final conformity determination at the time a ROD is issued, the decision could not be implemented until the final conformity determination and responses to public comments were issued.

In a FONSI, include any commitments to implement mitigation measures or offsets and reference the NEPA mitigation action plan. (See 10 CFR 1021.322(b)(1) and (e) with regard to mitigated FONSIs.)

3.7 Supplemental NEPA Documents

As DOE refines the design of and implements an alternative for which a NEPA document has been completed and a ROD or FONSI issued, substantial changes in the alternative or significant new circumstances or information relevant to environmental concerns may require a supplemental EIS or a new EIS or EA.

An alternative may change such that there is an increase in emissions of the pollutant(s) of concern for a nonattainment or maintenance area, at or above the threshold emissions rate(s), or at or above 10 percent of the area's emissions inventory for the pollutant(s) of concern. If so, a conformity determination may be required where one had not been required before, or a revised conformity determination may be required.

If a supplemental EIS or a new EIS or EA is needed because of changes in air emissions or another reason, describe any new or revised conformity determination in the supplemental or new NEPA document. Discuss how the conformity determination criteria would be met, summarize the results of any conformity analyses, and describe any mitigation measures or offsets that would be used to demonstrate conformity. Attach the new or revised determination to the supplemental or new NEPA document, as discussed in Section 3.5, above.

3.8 Mitigation Action Plan

In any NEPA mitigation action plan (10 CFR 1021.331), discuss plans for implementing conformity mitigation or offset commitments, including schedule. Report progress on these commitments in the annual progress reports on the NEPA mitigation action plan. Reflect modifications to conformity mitigation measures or offsets in revisions to the NEPA mitigation action plan.

4. COORDINATING THE CONFORMITY DETERMINATION AND NEPA PUBLIC PARTICIPATION PROCESSES

When the preferred alternative in an EA or EIS requires a conformity determination, coordinate the conformity determination and NEPA public participation processes, to the extent possible, to efficiently facilitate public participation in both processes.[19] The guidance below is for cases where the conformity determination and NEPA processes are being integrated.

The EPA conformity regulations contain specific reporting and public participation requirements for a conformity determination (40 CFR 93.155 and 93.156, respectively), which are described below. Considerations for coordinating with the EIS and EA public participation processes follow each description.

The conformity regulations do not require advanced public notice before starting the conformity determination process. When giving public notice of NEPA review for a proposed DOE action, however, consider including notice of any conformity determination requirements.

- For an EIS, if the need for a conformity determination is identified before the notice of intent to prepare an EIS is issued, state in the notice of intent that preparation of the EIS and CAA conformity determination will be coordinated. This will alert the public to consider CAA conformity issues in the public scoping process for the EIS.

- For an EA, if the need for a conformity determination is identified before notifying the host State(s) and tribes, potentially affected States and tribe(s), and other stakeholders of DOE's determination to prepare an EA, state in the notice that preparation of the EA and the CAA conformity determination will be coordinated.

The EPA conformity regulations (40 CFR 93.155(a)) require a Federal agency to distribute a description of the proposed Federal action and the draft conformity determination, in the form of a 30-day notice to the appropriate EPA Regional Office(s), and State and local air quality agencies, and, when applicable, affected Federal land managers, the agencies designated under Section 174 of the CAA to develop the applicable implementation plan(s), and the Metropolitan Planning Organization. In addition, a Federal agency must make the draft conformity determination and supporting materials describing the analytical methods and assumptions available to any person upon request.

[19] As discussed in Section 3.3, if the conformity review process concludes that a conformity determination is not required, include the results of the conformity review in the EA or EIS, so that those results receive public review through the NEPA public participation process.

- To coordinate this conformity requirement with the NEPA process, for both a draft EIS issued for public comment and an EA provided to the public for preapproval review, include the draft conformity determination in an appendix to the NEPA document and consider expanding the NEPA distribution to include the agencies indicated above and any members of the public who request copies of the draft conformity determination.

- If an EA is not being provided to the public for preapproval review, in addition to including the draft conformity determination in an appendix to the EA for State and Tribal preapproval review, also distribute the draft determination separately to the agencies indicated above and members of the public who specifically requested it.

The EPA conformity regulations require a Federal agency to announce the availability of the draft conformity determination for public review and comment by placing a prominent advertisement in a daily newspaper in the affected area of the proposed action.

- In all public notices inviting comment on a draft conformity determination, also specifically invite comment on the draft EIS or EA provided for preapproval review, and vice-versa.

The EPA conformity regulations require a minimum 30-day public comment period on a draft conformity determination.

- For an EIS, the comment period for the draft conformity determination can readily fit within the minimum 45-day public comment period for the draft EIS. Therefore, to the extent practicable, establish the public comment periods for the draft EIS and draft conformity determination to occur concurrently. If DOE publishes a notice of availability for the draft EIS in the *Federal Register*, announce the availability of the draft conformity determination in the notice.

- For an EA that is being provided to the public for preapproval review, consider setting the preapproval review period at 30 days (rather than the minimum 15 days under NEPA). If an EA is not being provided to the public for preapproval review, establish, to the extent possible, concurrent periods for public comment on the draft conformity determination and State and Tribal preapproval review period for the EA.

The EPA conformity regulations require a Federal agency to notify, within 30 days after a final conformity determination, the appropriate EPA Regional Office(s), State and local air quality agencies, and, when applicable, affected Federal land managers, the agencies designated under Section 174 of the CAA to develop the applicable implementation

plan(s), and the Metropolitan Planning Organization. In addition, the conformity regulations require that a Federal agency make comments and responses on the draft conformity determination available, upon request by any person, within 30 days of the final conformity determination.

- For a final EIS and an approved EA/FONSI, provide copies of the NEPA document to the Federal, State, and local agencies that require copies of the final conformity determination, and any persons who requested copies of the draft conformity determination.

The EPA conformity regulations also require that a Federal agency make public its final conformity determination by placing a prominent advertisement in a daily newspaper in the area affected by the action, within 30 days of the final conformity determination.

- For both a final EIS and an approved EA/FONSI, publish an announcement of the availability of the NEPA document and final conformity determination in the local newspaper within 30 days after a final conformity determination. In addition, if DOE publishes a notice of availability for the final EIS in the *Federal Register*, the notice also should announce the availability of the conformity determination.

Clean Air Act General Conformity Requirements

Contents

APPENDIX I

Clean Air Act General Conformity Requirements

Appendix I provides information about the Clean Air Act (CAA) general conformity requirements. Section I provides an overview of the CAA general conformity statutory requirements. Section II discusses the conformity review process and contains three exhibits. Exhibit 1, in Section II.C, contains examples of Federal actions that are exempt from the conformity requirements. Exhibit 2, in Section II.D, contains a list of potential emission sources to consider in estimating emissions. Exhibit 3, also in Section IID, contains a consolidated list of threshold emissions rates, at or above which the conformity requirements apply. Section III discusses the conformity determination process. Section IV describes what should be included in a conformity determination.

More specific information on the CAA conformity requirements can be found at 40 CFR Part 93, Subpart B, or in the corresponding State or Tribal conformity regulations. When implementing this guidance, review the CAA conformity regulations, as well as other materials referenced in this guidance. A summary and analysis of the general conformity regulations were provided in previous guidance.[1]

I. Overview of Statutory Conformity Requirements

Section 176(c)(1) of the CAA states that "[n]o department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve, any activity which does not conform to an implementation plan" for achieving and maintaining ambient air quality standards. This Section goes on to state that the "assurance of conformity to such an implementation plan shall be an affirmative responsibility of the head of such department, agency, or instrumentality."

As defined by Section 176(c)(1) of the CAA, "[c]onformity [of a Federal action] to an implementation plan means –

> (A) conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards; and

[1] Memorandum from Andrew Wallo, III, Director of the Air, Water, and Radiation Division, to field and program offices: Analysis – Clean Air Act (CAA) Final Rule Requiring that Federal Actions Conform to Applicable State Implementation Plans, February 3, 1995. The analysis can be found at http://tis.eh.doe.gov/oepa/guidance/caa/conform.pdf.

(B) that such activities will not –

(i) cause or contribute to any new violation of any standard in any area;
(ii) increase the frequency or severity of any existing violation of any standard in any area; or
(iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area."

Section 176(c)(4) of the CAA directed the Environmental Protection Agency (EPA) to issue criteria and procedures for determining conformity. This Section is the statutory basis for the general conformity regulations at 40 CFR 93, Subpart B.

II. The Conformity Review Process

The conformity review process may require completion of four steps to determine whether the conformity determination requirements apply to an action and, therefore, that a conformity determination may be needed. This Section presents the four steps and points out when the conformity determination requirements would or would not apply to an action. The*first three steps* of the conformity review process can be taken in any order. The order presented here is likely to be the most efficient, however, because the information needed for steps one and two should be readily available. Maintain a written record of the application of each step in the conformity review. The description of the results of the conformity review in an EA or EIS may serve this documentation purpose.

A. Step 1 – Determine whether criteria pollutants or their precursors would be emitted

The conformity determination requirements apply only to an alternative that would result in the release of direct or indirect emissions of criteria pollutants or their precursors. Criteria air pollutants are defined as air pollutants for which EPA has set National Ambient Air Quality Standards (40 CFR Part 50), i.e., sulfur dioxide (SO_2), nitrogen dioxide (NO_2), carbon monoxide (CO), ozone (O_3), lead (Pb), and particulate matter (PM-10).[2] In addition, the conformity determination requirements apply to emissions of volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), which are chemical precursors involved in the production of ozone. If any alternative would result in emissions of criteria pollutants or their

[2] Although EPA promulgated new ambient standards for fine particulate matter (PM-2.5) on July 18, 1997 (62 FR 38652), a May 1999 decision by the Court of Appeals for the District of Columbia has effectively barred EPA from enforcing these standards. The Federal government has appealed this decision to the Supreme Court. If the decision is reversed, EPA will in the future designate PM-2.5 nonattainment areas, and conformity with these new standards would need to be demonstrated.

precursors, the next step is to determine the attainment status designation(s) for the area(s) where these emissions occur.

B. Step 2 – Determine whether emissions of criteria pollutant(s) or precursors would occur in a nonattainment or maintenance area

The program or field office proposing an action should determine whether emissions from the action would occur in a nonattainment[3] or maintenance area. Attainment status designations are listed in 40 CFR Part 81, Subpart C. Maintenance areas are identified by the date the area was no longer in nonattainment.

General information about areas in nonattainment and lists of the EPA Regional Office contacts can be obtained at: http:/www.epa.gov/oar/oaqps/greenbook. Contact the appropriate EPA Regional Office for information regarding pending changes in attainment status designations and classifications or for information not in 40 CFR Part 81, Subpart C.[4]

Information on the attainment status designation of Department of Energy (DOE) facilities is available in a report titled *Updated Air Quality Area Designations and Classifications for DOE Facilities*, on the Office of Environmental Policy and Assistance's web site, at the following location: http://tis.eh.doe.gov/oepa/guidance/caa/airclassregbull.pdf.

The conformity determination requirements would not apply to an action in an attainment or unclassified area with regard to all the National Ambient Air Quality Standards, except when indirect emissions from sources associated with the action would occur in a nonattainment or maintenance area.

The conformity determination requirements would only apply to an action that causes emissions to occur in a nonattainment or maintenance area, or an ozone or carbon monoxide nonclassifiable area.[5] Further, the conformity requirements would apply only if an action in a

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[3] For any O_3, CO, or PM-10 nonattainment area, the nonattainment classification (i.e., description of the severity of the ambient pollution levels) should also be determined. Classifications for O_3 nonattainment areas are marginal, moderate, serious, severe, and extreme, based on measured O_3 concentrations. Classifications for CO and PM-10 nonattainment areas are either moderate or serious.

[4] Listings in 40 CFR Part 81, Subpart C, are updated annually and so may not always be complete. For example, EPA may have reclassified an area, but the reclassification may not yet be reflected in revisions to Subpart C.

[5] A nonclassifiable area is a designated nonattainment area that has been classified as an "incomplete data" ozone area or a "not classified" carbon monoxide area. Any emissions from an alternative in such a nonattainment area are subject to the general conformity regulations.

nonattainment or maintenance area would emit the pollutant(s) of concern[6] for the nonattainment or maintenance area. (For example, in an area designated as being in nonattainment for particulate matter (but in attainment for other criteria pollutants), the conformity requirements would not apply if the action would emit any other of the criteria pollutants but would not emit particulate matter.)

The next step is to determine whether the action that would emit pollutant(s) of concern for the maintenance or nonattainment area is exempt from the conformity determination requirements.

C. Step 3 – Determine whether the action is exempt

The conformity determination requirements would not apply to an action that is exempt from the CAA conformity requirements, regardless of whether the action would emit pollutant(s) of concern or is in an nonattainment or maintenance area for those pollutants. The conformity regulations identify specific actions that are exempt from the conformity requirements (40 CFR 93.153(c)(2)-(e)). Examples of exempt actions identified in the regulations are provided in Exhibit 1. These actions include those that EPA has determined would:

result in no or *de minimis* emissions[7]

have emissions that are not "reasonably foreseeable"

have emissions that are associated with a conforming program (such as prescribed burning)

be analyzed under certain other environmental regulations (such as those implementing the Comprehensive Environmental Response, Compensation, and Liability Act), or

be taken in response to an emergency or natural disaster.

When the action would emit one or more criteria pollutant(s) or their precursors, would occur in a nonattainment or maintenance area for the criteria pollutant(s) (or precursor(s)) emitted, and is not listed in 40 CFR 93.153(c)(2)-(e) as an exempt action, the next step is to estimate the emissions of the pollutant(s) of concern.

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[6] Pollutants of concern are those criteria pollutant(s) or O_3 precursors (i.e., VOCs and NO_x) that cause an area to be classified as a nonattainment or maintenance area.

[7] If there are emissions of pollutant(s) of concern and the action is not specifically identifiedin 40 CFR 93.153(c)(2)-(e), then the emissions calculations and assumptions should be documented.

Exhibit 1. Examples of actions that are exempt from the general conformity requirements

Listed below are exempt actions that are relevant to DOE activities. This list is not meant to be comprehensive.

Actions with no, or only *de minimis*, increase in emissions (40 CFR 93.153(c)(2))

- Rulemaking and policy development and issuance
- Administrative actions, such as personnel actions, organizational changes, and internal agency audits
- Continuing and recurring activities, such as permit renewals, where activities conducted will be similar in scope and operation to activities currently being conducted
- Routine maintenance and repair activities
- Planning, studies, and provision of technical assistance
- Routine, recurring transportation of materiel and personnel
- Maintenance dredging and debris disposal where no new depths are required.
- Relocation of personnel and disposition of Federally owned existing structures, provided that future activities will be similar in scope and operation to current activities
- Granting of leases, licenses, permits, and easements where activities will be similar in scope and operation to current activities
- Routine operation of facilities, mobile assets, and equipment
- Transfers of ownership, interests, and titles in land, facilities, and real and personal properties
- Transfers of land, facilities, title, and real properties through an enforceable contract or lease agreement where the delivery of the deed is required to occur promptly and the Federal agency does not retain authority to control emissions

Actions where the emissions are not reasonably foreseeable (40 CFR 93.153(c)(3))

- Electric power marketing activities that involve acquisition, sale, and transmission

Actions that implement a decision for a conforming program (40 CFR 93.153(c)(3))

- Prescribed burning actions that are consistent with a conforming land management plan

Actions related to other environmental regulations and objectives (40 CFR 93.153(d))

- Major new or modified stationary sources that require a permit under the CAA new source review and prevention of significant deterioration programs
- Research, investigations, studies, demonstrations, or training, where no environmental detriment is incurred or the particular action furthers air quality research
- Alteration and additions of existing structures required by environmental legislation or regulations
- Direct emissions from remedial and removal actions carried out under the Comprehensive Environmental Response, Compensation, and Liability Act and associated regulations

Actions in response to emergencies or natural disasters (40 CFR 93.153 (d)(2) and (e))

- Response to emergencies or natural disasters such as hurricanes or earthquakes

D. Step 4 – Estimate emissions and compare to the threshold emissions rate and the nonattainment or maintenance area's emissions inventory

The conformity determination requirements would not apply to an action for which the estimated emissions of criteria pollutant(s) of concern are below threshold emissions rate(s) and also below 10 percent of the nonattainment or maintenance area's emissions inventory for the pollutant(s) of concern.

To determine if the conformity requirements apply to an action, Step 4 has two parts. First, estimate the total emissions of the pollutant(s) of concern from the action. Second, compare the estimate(s) to the threshold emissions rate(s)[8] and the nonattainment or maintenance area's emissions inventory[9] for each pollutant of concern. Both parts of Step 4 are discussed in greater detail below.

D.1. Estimate the emissions of the pollutant(s) of concern

For an action that would emit criteria pollutant(s) of concern in a nonattainment or maintenance area, and that is not exempt, estimate the emissions for each pollutant of concern based on the "total of direct and indirect emissions."[10]

> Direct emissions are those emissions of criteria pollutant(s) or precursors that are initiated or caused by[11] the Federal action and occur at the same time and place as the action (40 CFR 93.152).

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[8] "Threshold emissions rate" refers in this guidance to the criteria pollutant emissions or precursor emissions rate for nonattainment and maintenance areas in 40 CFR 93.153(b)(1) and (2), respectively, below which the CAA conformity requirements would not apply.

[9] "Emissions inventory" means a listing, by source, of the amount of air pollutants discharged into the atmosphere of a community and which EPA or the State often use to establish air emissions standards for the community.

[10] "Total of direct and indirect emissions" means the sum of direct and indirect emissions increases and decreases caused by the Federal action; i.e., the "net" emissions considering all direct and indirect emissions. The portion of emissions that is exempt under Section 93.153 (c), (d), and (e), is not included in the "total of direct and indirect emissions." The "total of direct and indirect emissions" includes emissions of criteria pollutants and emissions of precursors of criteria pollutants (40 CFR 93.152).

[11] "Caused by," as used with the terms "direct emissions" and "indirect emissions," means emissions that would not otherwise occur in the absence of the Federal action (40 CFR 93.152).

Indirect emissions are those emissions of criteria pollutant(s) or precursors that are caused by the Federal action, but may occur later in time and/or may be further removed in distance from the action itself, although still reasonably foreseeable;[12] and which the Federal agency can practicably control[13] and will maintain control over due to a continuing program responsibility[14] of the Federal agency (40 CFR 93.152).

Indirect emissions are to be included in the emissions estimate only if they are both caused by the Federal action and can practicably be controlled by the Federal agency. Indirect emissions typically will include emissions from mobile sources and emissions generated by private entities operating in response to the Federal action.[15] Fugitive emissions[16] are also included when estimating both direct and indirect emissions.

Use current data and information to estimate direct and indirect emissions.[17] Emissions estimates should be realistic and technically defensible. If relatively well-defined emissions estimates are not feasible, develop upper-bound estimates based on reasonably foreseeable

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[12] "Reasonably foreseeable emissions" are projected future indirect emissions that are identifiable, i.e., the location of such emissions is known and the emissions are quantifiable (40 CFR 93.152).

[13] The term "control" means the ability to regulate in some way the emissions from the Federal action.

[14] "Continuing program responsibility" refers to emissions that are specifically caused by an agency carrying out its authorities, but does not include emissions that occur due to subsequent activities, unless such activities are required by the Federal agency. When an agency implements an action or imposes conditions that result in emissions by a non-Federal entity, such emissions are covered by the meaning of a continuing program responsibility. An example of an action for which DOE would have "continuing program responsibility" would be the leasing of DOE land to a private developer, in which DOE imposes lease conditions controlling future activities on the leased DOE land.

[15] Emissions estimates from motor vehicles operating in response to the proposed DOE action and analyzed alternative(s) should take into account vehicle occupancy rates, the effects of any special vehicle inspection and maintenance requirements, and the number of work days in the calendar year.

[16] Fugitive emissions are defined as "those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally-equivalent opening" (40 CFR 70.2). Fugitive emissions should be estimated as part of the total of direct and indirect emissions from a DOE action (58 FR 63232, November 30, 1993).

[17] Information that is useful for estimating conformity emissions from mobile sources can be found in EPA's Compilation of Air Pollutant Factors (AP42) at www.epa.gov/oms/ap42.htm, and on the California Air Resources Board mobile sources emissions inventory program Web site at www.arb.ca.gov/msei/msei.htm.

emissions. The assumptions and methodology used to estimate direct and indirect emissions need to be documented.

Project emissions typically are not the same each year of the project. Total direct and indirect emissions for each pollutant of concern should be estimated for each year of construction and for the first full year of operation. If subsequent operating years will have higher emissions than the first year, estimate emissions for the subsequent years. Use total net emissions (in tons per year) for the year when emissions are at their maximum level for comparison to the threshold emissions rate and the nonattainment or maintenance area's emissions inventory (as discussed in Section D.2) for the pollutant(s) of concern.

In the emissions estimates, include, as appropriate to the action, emissions from:

operating facilities and activities
construction activities
mobile sources of air pollution, and
open burning of vegetation.

A list of potential emissions sources to be considered in the conformity review can be found in Exhibit 2. The specific types of emissions and sources[18] that need to be considered in a conformity review will depend upon the nature of the action.

When estimating emissions, an action cannot be segmented into individual components in order to avoid the conformity requirements. For example, emissions from each component of an action might be below the threshold emissions rate(s) and the nonattainment or maintenance area's emissions inventory, although emissions from the action as a whole might exceed the threshold emissions rate(s) or the nonattainment or maintenance area's emissions inventory. However, when the action includes activities that are exempt from the conformity requirements (40 CFR 93.153(c)(2)-(e) and Exhibit 1), that portion of the emissions from the exempt activities is not included in the emissions estimates. For example, emissions from routine maintenance and repair activities and emissions from a major new or modified stationary source subject to the permitting requirements under the CAA prevention of significant deterioration or new source review programs (as in Exhibit 1) would not be included in the emissions estimate.

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[18] The types of emissions sources considered in the conformity review may be more narrow than the sources that are considered in an air quality impact analysis included in EAs and EISs. For example, as noted in Exhibit 1, emissions of pollutant(s) of concern from a source subject to the new source review program (40 CFR 93.153(d)) are not included in the emissions estimates for a conformity review. These emissions would, however, be considered in an air quality impacts analysis in an EA or EIS.

After estimating the emissions, the next step is to compare the estimated emissions of each pollutant of concern to the threshold emissions rates and the nonattainment and maintenance area's emissions inventory for that pollutant.

D.2. Compare estimated emissions to the threshold emissions rate and the emissions inventory

For each pollutant of concern, compare the total net emissions (in tons per year) for the year when the emissions would be at their maximum level to:

- the threshold emissions rates (40 CFR 93.153(i) and Exhibit 3), and
- ten percent of a nonattainment or maintenance area's total emissions inventory for that pollutant (40 CFR 93.153(i)). (Consult with the appropriate air quality agency to obtain the relevant emissions inventory.)

If the estimated emissions of any pollutant of concern for an action are at or above the threshold emissions rate, a conformity determination may be needed. Even if the estimated emissions are below the threshold emissions rate, however, a conformity determination could be required for an action whose total air emissions would represent 10 percent or more of a nonattainment or maintenance area's emissions inventory for the criteria pollutant(s) of concern. Such an action is called a "regionally significant action" (40 CFR 93.153 (i) and (j)).

If the estimated emissions are at or above the threshold emissions rate or 10 percent or more of the nonattainment or maintenance area's emissions inventory, consider whether the action could be modified to reduce emissions (for example, by using additional pollution controls) before proceeding with a conformity determination. The modifications would need to reduce estimated emissions below the threshold emissions rate and 10 percent of the nonattainment or maintenance area's total emissions inventory for each pollutant of concern. If such modification is not feasible, then the conformity determination process should be initiated.

Exhibit 2. Examples of Potential Emissions Sources to Consider in Performing Conformity Review

Listed below are general types of emissions sources that should be considered in emissions estimates for the action. This list is not meant to be comprehensive.

All stationary sources, including, for example, facilities used for:

- Storage, warehousing, and handling activities
- Waste management, including waste characterization, treatment, and disposal
- Steam and/or electricity generation
- Laboratories
- Pilot plants
- Research, development, and experimental activities
- Production activities
- Non-routine facility maintenance activities
- Vehicle repair
- Training and demonstration

Construction phase emissions

- Surface disturbances
- Facility construction, including emissions from paints, coatings, and solvents
- Mobile sources (see below)

All mobile sources

- Construction equipment (bulldozers, backhoes, etc.)
- On- and off-road equipment and vehicles
- Delivery trucks and lawn and garden equipment
- Locomotives
- Ground support equipment and aircraft (when flying below 3,000 feet)
- Private motor vehicles and buses used for commuting
- Government fleet and private motor vehicles used on-the-job

Open burning of vegetation*

* On May 21, 1998, EPA issued an "Interim Air Quality Policy on Wildland and Prescribed Fires." Under this policy, Federally prescribed fire projects would be considered to conform with the implementation plan if they are managed under a certified basic smoke management program. The interim policy is available on the Office of Environmental Policy and Assistance's web site at http://tis.eh.doe.gov/oepa/guidance/caa/fires.pdf.

Exhibit 3. Consolidated list of threshold emissions rates, at or above which a conformity determination may be needed (based on 40 CFR 93.153(b))

Criteria Pollutants and Air Quality Classifications	Threshold Emission Rates (tons/year)
O_3 Precursors (VOCs or NO_x)*	
Serious nonattainment	50
Severe nonattainment	25
Extreme nonattainment	10
Other O_3 nonattainment areas outside an O_3 transport region**	100
Marginal and moderate nonattainment areas inside an O_3 transport region**	
VOC	50
NO_x	100
O_3 (NO_x emissions) maintenance areas	100
O_3 (VOC emissions) maintenance areas inside a O_3 transport region**	50
O_3 (VOC emissions) maintenance areas outside an O_3 transport region**	100
CO, SO_2, or NO_2	
Nonattainment or maintenance	100
PM-10	
Moderate nonattainment	100
Serious nonattainment	70
Maintenance	100
Pb	
Nonattainment or maintenance	25

* For determining total emissions levels for O_3, VOCs and NO_x are treated separately (i.e., are not added together).

** Section 184 of the CAA designates a single ozone transport region consisting of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and the District of Columbia.

III. The Conformity Determination Process

This Section discusses the conformity determination process, i.e., the process of demonstrating how an action would conform to the applicable implementation plan. The process begins by identifying which of the conformity determination criteria, in addition to the baseline criterion, could be used to demonstrate that an action conforms to the applicable implementation plan. A conformity analysis would likely be needed to demonstrate that the action would not cause new, or increase the frequency or severity of existing, air quality violations. To achieve conformity for the action, it may be necessary to develop mitigation measures or obtain emissions offsets[19] from one or more sources in the air quality area. The conformity determination process concludes with a written finding of conformity (SectionIV).

A. Conformity determination criteria

The criteria for determining conformity with an applicable implementation plan are summarized below. (Consult 40 CFR 93.158 or comparable State or Tribal regulations for more information when conducting a conformity determination. Use only that portion of an implementation plan that EPA has approved to determine conformity.)

The baseline criterion applies to a conformity determination for any pollutant of concern. The baseline criterion is whether the total of direct and indirect emissions of the pollutant(s) of concern from an action is in compliance or consistent with the general requirements and milestones[20] contained in the applicable implementation plan (40 CFR 93.158(c)).

In addition to meeting the baseline criterion of consistency, one of the following criteria must also be met in order to demonstrate conformity with the applicable implementation plan (40 CFR 93.158(a)).

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[19] "Emissions offsets" means emissions reductions that are quantifiable, consistent with the State Implementation Plan (SIP) attainment and reasonable further progress demonstrations, surplus to reductions required by, and credited to, other applicable SIP provisions, enforceable at both the State and Federal levels, and permanent within the timeframe specified by the program. Emissions offsets are emissions reductions that DOE would obtain from other sources within the same nonattainment or maintenance area, including potentially another DOE source.

[20] The term "milestones" is given the meaning in Sections 182(g)(1) and 189(c)(1) of the CAA, and generally refers to measures or reductions included in an implementation plan that are used to achieve improvement in air quality, e.g., reasonable further progress schedules, prohibitions, numerical emission limits, and work practice requirements (40 CFR 93.152).

For any criteria pollutant:

The total of direct and indirect emissions of the pollutant(s) of concern from an action are specifically identified and accounted for in the applicable implementation plan. (While this could be the easiest way to demonstrate conformity, emissions information about the action would need to be included in an implementation plan when the plan is being revised. Because emissions information on proposed DOE actions is not likely to be available when revisions to an implementation plan are approved, it is not likely that proposed DOE actions would be accounted for in an implementation plan.)

For PM-10, CO, Pb, or SO_2:

The total of direct and indirect emissions of the pollutant(s) of concern for an action meets the requirements of 40 CFR 93.158(b), i.e., emissions would not cause or contribute to any new violations or increase the frequency or severity of any existing violation of any standard in any area.

This can be demonstrated through one of the following ways:

- Areawide[21] and local[22] air quality modeling (40 CFR 93.158(a)(3)(i)) (see Section III.B); *or*
- Local air quality modeling and meeting the requirements in the next bullet in this subsection (40 CFR 93.158(a)(3)(ii)); *or*
- Local air quality modeling (PM-10 and CO only) when the appropriate air quality agency determines that areawide air quality modeling is not needed (40 CFR 93.158(a)(4)(i)); *or*
- Areawide modeling (PM-10 and CO only) when the appropriate air quality agency determines that areawide air quality modeling is needed, but a local air quality modeling analysis is not (40 CFR 93.158(a)(4)(ii)).

[21] Areawide air quality modeling analysis is defined as "an assessment on a scale that includes the entire nonattainment or maintenance area which uses an air quality dispersion model to determine the effects of emissions on air quality" (40 CFR 93.152).

[22] Local air quality modeling analysis is defined as "an assessment of localized impacts on a scale smaller than the entire nonattainment or maintenance area, including, for example, congested roadway intersections and highways or transit terminals, which use an air quality dispersion model to determine the effects of emissions on air quality" (40 CFR 93.152).

For O_3 or NO_2 specifically, and all other criteria pollutants[23]

- The total of direct and indirect emissions of pollutant(s) of concern from the action

  Together with all other emissions in the area, would not exceed the area's emissions budget in an EPA approved implementation plan (40 CFR 93.158(a)(5)(i)(A)) ; *or*
  Together with all other emissions in the area, would exceed the emissions budget in the State's implementation plan, but the Governor makes a written commitment to EPA to submit a revision to the State's plan, which includes specific elements set out in the regulations (40 CFR 93.158(a)(5)(i)(B)); *or*
  Would not, in future years, increase baseline emissions (40 CFR 93.158(a)(5)(iv)), when EPA has not approved a revision to the applicable implementation plan;*or*
  Are included in a current transportation plan (40 CFR Part 93, Subpart A), which conforms with the applicable implementation plan (40CFR 93.158(a)(5)(ii)); *or*
  Would be fully offset within the same nonattainment or maintenance area through an implementation plan revision (or an equally enforceable measure), so that there is no net increase in emissions of the pollutant(s) of concern (40 CFR 93.158(a)(5)(iii)).[24]

  or

- The action involves regional water and/or wastewater projects sized to meet only the needs of the population projections in the applicable implementation plan (40 CFR 93.158(a)(5)(v)).

B. Conformity analysis

The conformity determination regulations include procedures for conducting a conformity analysis (40 CFR 93.159). The analysis is to be based on the latest planning assumptions (e.g., population, employment, travel, and congestion) from estimates approved by the relevant Metropolitan Planning Organization (MPO),[25] or other agencies authorized to make

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[23] Through 40 CFR 93.158(a)(3)(ii) and 93.158(a)(4)(ii).

[24] The possibility of "bubbling" can also be considered as a means of accomplishingan emissions offset. Under this approach, DOE would reduce emissions of the pollutant of concern at another DOE facility or activity within the same air quality area. If sufficient reductions can be made so that the net emissions of the pollutant of concern from the alternative is zero, then conformity would be achieved.

[25] An MPO is an "organization designated as being responsible, together with the State, for

such estimates. Any revisions to these assumptions – e.g., shifts in employment, populations, or congestion – must be approved by the MPO or other authorized agency.

The conformity analysis must also be based on the latest and most accurate emissions estimation techniques for both direct and indirect emissions, unless such techniques are inappropriate.[26] Any air quality dispersion modeling conducted to demonstrate conformity must be based upon, and reflect, the most recent version of EPA's *Guideline on Air Quality Models* (40 CFR 51, Appendix W). Specific requirements for modeling emissions from motor vehicles and non-motor vehicle sources are included in the conformity regulations (40 CFR 93.159(b)(1) and 40 CFR 93.159(b)(2), respectively). For example, for non-motor vehicle sources (including stationary and area source emissions), the latest emission factors specified by EPA in the *Compilation of Air Pollutant Emission Factors* (AP-42) are to be used unless more accurate emission data are available (40 CFR 93.159(b)(2)). Emission factors for mobile sources can be found at www.epa.gov/oms/ap42.htm.

The types of emission sources that need to be included in a conformity analysis are the same as those used to estimate emissions for the conformity review and can be found above in Section II, D.1, Exhibit 2.

Conformity analyses must reflect emissions scenarios that are expected to occur under each of the following cases (40 CFR 93.159(d)):

For actions that would have emissions in a nonattainment area – A conformity analysis must be conducted for the attainment year the CAA mandates for the nonattainment area.

For actions that would have emissions in a maintenance area – A conformity analysis must be conducted for the last year for which emissions are projected in the air quality maintenance plan.

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conducting the continuing, cooperative, and comprehensive planning process under 23 U.S.C. 134 and 49 U.S.C. 1607" (40 CFR 93.152).

[26] Written approval to use another technique must be obtained from the Regional EPA Administrator (40 CFR 93.159(c)(2)).

For actions that would have emissions in either a nonattainment or maintenance area

- A conformity analysis must be conducted for the year during which the total direct and indirect emissions from the action is expected to be the greatest on an annual basis;[27] and

- A conformity analysis must be conducted for any year for which the applicable implementation plan specifies an emissions budget.[28]

For an action to conform to an applicable implementation plan, it must conform in all of the cases described above (58 FR 63243, November 30, 1993).

Do not assume that a nonattainment or maintenance area will become an attainment area at a particular date unless EPA confirms the assumption.

State or Tribal air quality regulations (which may be found in the applicable implementation plan) may impose different requirements for the conformity analysis; consult with the appropriate air quality agency for advice.

C. Mitigation measures to reduce air emissions

If the emissions from an action subject to a conformity determination can not be reduced sufficiently (e.g., through the imposition of additional emissions controls), and if air dispersion modeling can not demonstrate conformity, then a plan for developing mitigation measures or finding emissions offsets[29] for the action should be pursued. (Emissions offsets are described in footnote 19.) As discussed below, mitigation measures under the general conformity regulations are defined more narrowly than mitigation measures under NEPA.

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[27] Emissions will typically vary from year to year during a project, so calculate the total of direct and indirect emissions for each year to determine the year during which the emissions will be the greatest.

[28] Emissions budget is defined as "those portions of the applicable SIP's projected emissions inventories that describe the levels of emissions (mobile, stationary, area, etc.) that provide for meeting reasonable further progress milestones, attainment, and/or maintenance for any criteria pollutant or its precursors" (40 CFR 93.152).

[29] Emissions reductions that DOE carries out to reduce its emissions to below the threshold emissions rate (or below 10 percent of the emissions inventory for the nonattainment or maintenance area) in order not to need a conformity determination are not considered mitigation measures in the context of the conformity rule.

Mitigation measures would involve the participation of one or more non-DOE emissions sources.

Mitigation measures are subject to the enforcement and implementation provisions of 40 CFR 93.160.

An example of a mitigation measure would be commitments from a State to mitigate emissions from sources not under DOE's control and to revise the State Implementation Plan accordingly so that the alternative (which otherwise could not conform) may proceed.

After mitigation measures are identified, establish the process for implementing and enforcing the measures (40 CFR 93.160(a)). Written commitments from the appropriate person or agencies who would be implementing the mitigation measures are required (40 CFR 93.160(b)).

If the emissions cannot be mitigated sufficiently to achieve conformity with the applicable implementation plan, the action cannot proceed because the conformity determination would not demonstrate that the proposed action conforms with the applicable implementation plan.

IV. The Conformity Determination

A conformity determination documents a finding that the action that DOE intends to implement would conform to the applicable implementation plan. The determination discusses the conformity determination criteria and, when needed, the conformity analysis and mitigation measures or offsets (and the process for implementation and enforcement of the mitigation measures or offsets) necessary to achieve conformity.

A conformity determination lapses after five years unless the action has been completed or is being implemented within a reasonable time (40CFR 93.157(a)). An ongoing action that has a conformity determination is not subject to periodic redeterminations provided that the emissions of pollutant(s) of concern are within the scope of the final conformity determination (40 CFR 93.157(b)). If, after a conformity determination is final, the DOE action is changed so that emissions of criteria pollutant(s) of concern increase above the level in the final determination, then a new conformity determination is required (40CFR 93.157(c)).

Related References

I. Legislation

Clean Air Act (42 USC 7401)

National Environmental Policy Act (42 USC 4321)

II. Regulations

Council on Environmental Quality, Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR Parts 1500-1508)

U.S. Department of Energy, National Environmental Policy Act Implementing Procedures (DOE Regulations) (10 CFR Part 1021)

U.S. Environmental Protection Agency, Designation of Areas for Air Quality Planning (40 CFR Part 91)

U.S. Environmental Protection Agency, Determining Conformity of Federal Actions to State or Federal Implementation Plans (40 CFR Part 93, Subpart B)

U.S. Environmental Protection Agency, Guideline on Air Quality Models (40 CFR Part 51, Appendix W)

U.S. Environmental Protection Agency, National Primary and Secondary Ambient Air Quality Standards (40 CFR Part 50)

U.S. Environmental Protection Agency, Requirements for Preparation, Adoption, and Submittal of Implementation Plans (40 CFR Part 51)

U.S. Environmental Protection Agency, State Operating Permit Program (40 CFR Part 70)

III. Department of Energy Guidance

Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements (sometimes referred to as the "Green Book") (issued by the Assistant Secretary for Environment, Safety and Health, May 1993), available at http://tis.eh.doe.gov/nepa/tools/guidance/reccom/toc_rec.htm

Environmental Assessment Checklist (issued by the Assistant Secretary for Environment, Safety and Health, August 1994), available at http://tis.eh.doe.gov/nepa/tools/guidance/Guidance-PDFs/iv-7.pdf

Environmental Impact Statement Checklist (issued by the Assistant Secretary for Environment, Safety and Health, November 1997), available at http://tis.eh.doe.gov/nepa/tools/guidance/wischkz.pdf

EH-41 Analysis of EPA's Rule Requiring that Federal Actions Conform to State Implementation Plans (issued by the Office of Environmental Policy and Assistance, February 1995), available at http://tis.eh.doe.gov/nepa/guidance/eaa/conformity.pdf

IV. Environmental Protection Agency Guidance

General Conformity Guidance: Questions and Answers (issued by the Office of Air Quality Planning and Standards, U.S. EPA, July 13, 1994), available at http://www.epa.gov/ttncaaa1/t1/fact_sheets/conform.zip

Interim Air Quality Policy on Wildland and Prescribed Fires (issued May 21, 1998), available at http://tis.eh.doe.gov/oepa/guidance/caa/fires.pdf