

1. Air Quality

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Air quality is the measure of the condition of the air expressed in terms of ambient pollutant concentrations and their temporal and spatial distribution. Air quality regulations in the United States are based on concerns that high concentrations of air pollutants can harm human health, especially for children, the elderly, and people with compromised health conditions; as well as adversely affect public welfare by damage to crops, vegetation, buildings, and other property.

1.1. Regulatory Setting

Under the Clean Air Act (CAA) the U.S. Environmental Protection Agency (EPA) developed the National Ambient Air Quality Standards (NAAQS) for six common air pollutants. These criteria air pollutants are carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM), sulfur dioxide (SO₂), and lead (Pb).¹ The EPA determined that these criteria air pollutants

¹ EPA regulates particulate matter (PM) in two categories, particles with aerodynamic diameters of 10 micrometers or less (PM₁₀) and particles with aerodynamic diameters of 2.5 micrometers or less (PM_{2.5}).

may harm human health and the environment, and cause property damage. The EPA regulates these pollutants to permissible levels through human health-based (primary standards) and environmental-based (secondary standards) criteria. Exhibit 1-1 lists the primary statute, the CAA, related to air quality. Additional information on the CAA can be found in Appendix B.1. Related topics are covered as well, including designation of areas by air quality status and Conformity.

Exhibit 1-1. Statute Related to the Protection of Air Quality

Statute	Location in U.S. Code	Implementing Regulation(s)	Oversight Agency ^a	Summary ^a
Clean Air Act ²	42 U.S.C. §§ 7401-7671q	40 CFR parts 6, 9, 50-53, 60, 61, 63, 66, 67, 81, 82, and 93	EPA	Regulates air pollutant emissions from stationary and mobile sources; authorizes EPA to establish NAAQS for criteria pollutants and to regulate HAPs.

^a U.S.C. = United States Code; CFR = Code of Federal Regulations; EPA = U.S. Environmental Protection Agency; HAPs = Hazardous Air Pollutants

According to the CAA, the NAAQS are applicable to all areas of the United States and associated territories. For the poor air quality regions that have ambient concentrations of criteria pollutants above the NAAQS, the EPA has designated these areas as not being in attainment of the NAAQS, or “nonattainment areas.” Each nonattainment area is required to have an applicable State Implementation Plan (SIP) that prescribes mitigation measures and timelines necessary to bring ambient concentrations of criteria pollutants below the NAAQS. When a nonattainment area attains the NAAQS, EPA designates the area as a “maintenance area” because the applicable SIP ensures that the ambient concentrations of criteria pollutants do not increase above the NAAQS again. For aviation-related Federal actions planned to occur in a nonattainment or maintenance area, the proposed impacts to air quality must conform to the conditions of the applicable SIP, also known as General Conformity. The steps of General Conformity are addressed later in this chapter, and further detail is provided in Appendix B.1.

1.1.1. Permits

To be in compliance with Federal or state requirements, a project may be required to obtain certain permits or approvals before the project can be implemented. For example, airport projects, particularly those that involve stationary air pollutant sources (e.g., boilers or power plants at airports), may be subject to permitting, certification, or approval under other provisions of the CAA and/or state and/or local regulations. A list of all required permits and licenses should be included in a NEPA document along with an indication of their issuance date. For additional information on the EPA’s Air Permit Programs, see the EPA’s Air Quality Planning and Standards, Air Permit Programs website at: <http://www.epa.gov/airquality/permjmp.html>.

Nitrogen oxides (NO_x) are defined as the combination of nitrogen dioxide (NO₂) and nitrogen monoxide (NO). Both NO_x and volatile organic compounds (VOC) are precursors of O₃.

² <http://www.epa.gov/lawsregs/laws/caa.html>.

1.1.2. State/Local Air Quality Requirements

In addition to Federal requirements, there often are state and/or local air quality requirements that are applicable to a project. These requirements vary widely from location to location, and should be addressed on a project-by-project basis. Examples of state or local air quality requirements that may be applicable are more stringent state and local ambient air quality standards, Federally-approved state general conformity rules, and indirect source thresholds. Applicable state and local requirements should be identified as early as possible during the NEPA scoping process and described in the NEPA documentation.

1.1.3. Indirect Source Review

Each project should assess whether additional investigation of indirect sources is required by state or local regulations. The definition of indirect source may vary from state to state. Indirect sources may include airports and commercial space launch sites as well as highways, parking facilities, sports and entertainment facilities, and office buildings. Any applicable indirect source requirements should be identified as early as possible during the NEPA scoping process and described in the NEPA documentation.

Some states require indirect source review (ISR) as part of their SIP when proposed Federal actions are located in nonattainment or maintenance areas. States that require ISR generally establish thresholds for property, road, or parking areas that attract motor vehicle traffic and, indirectly, causes pollution. For example, a state may require ISR for all projects that increase total airport passengers at an airport by more than 100,000 passengers per year, add 1,000 new parking spaces, or increase aircraft operations by 1,000 per year. Projects that exceed the thresholds could be required to complete an indirect source analysis and obtain an indirect source permit.

1.1.4. Consultation Processes

Consultation with state or local air quality agencies, as well as EPA regional offices, may be necessary when conducting the air quality analysis. For example, as mentioned below in Section 1.3.5.3, if the FAA needs to make a General Conformity determination, the FAA may need to consult with the EPA regional office and/or the state or tribal air permitting agency early in the environmental review process to discuss which General Conformity determination criteria to use and to identify the most up-to-date models and emissions data for a conformity analysis.

Typically this type of consultation is provided in an air quality modeling protocol document, which outlines to the reviewing agencies the proposed approach to demonstrate compliance with all applicable air quality rules and requirements.

1.2. Affected Environment

The study area for air quality should be defined as the entire geographic area that could be either directly or indirectly affected by the proposed project. For example, air quality impacts from construction may be limited to a project site and immediate adjacent areas. However, air quality impacts from operations (e.g., aircraft flight) may extend beyond a project site and immediate adjacent areas, and extend vertically up to the mixing height. Dispersion of air pollutants can be

affected by meteorology, topography, the type of pollutant, and other factors. In addition, a Federal action can lead to air pollutant emissions that may occur at some distance from a project site, such as exhaust from project-generated vehicle traffic on the surrounding road network. Therefore, the study area for a project's air quality analysis could encompass many square miles and/or multiple air basins.

When discussing the existing conditions in the study area, refer to the following:

- The current NAAQS;
- Applicable state ambient air quality standards;
- The attainment status(es) of the study area;
- A summary of recent measured air pollutant concentrations, if there are any monitoring sites in the region that are representative of conditions in the study area;
- A brief description of the meteorological and topographical conditions of the study area and an indication of whether these conditions could hinder the dispersal of air pollutant emissions in the study area;
- Other conditions in the study area if relevant to air quality, e.g., local land use or large emission sources nearby. For many Federal actions, discussion of such other conditions may not be needed; and
- List or table of existing permits;
- List or table of new permits that may be required by the action;
- For commercial space launch actions, a brief description of the affected layers of the atmosphere (e.g., troposphere, stratosphere, mesosphere, ionosphere).³

See Appendix B.1 for electronic sources that may be useful when describing the affected environment for air quality.

1.3. Environmental Consequences

The FAA has a responsibility under NEPA to include in its Environmental Assessment's (EA's), Environmental Impact Statements (EIS's), and, when appropriate, Categorical Exclusion's (CATEXs), sufficient analysis to disclose the extent of a project's impact on the attainment and maintenance of the NAAQS and any applicable state air quality standards. Thus, a project's impact on air quality is assessed by evaluating whether it would cause a new violation of a NAAQS or contribute to a new violation in a manner that would increase the frequency or severity of the new violation.

The Environmental Consequences section of a NEPA document is where the potential impacts of the Federal action on air quality are disclosed. Very small projects sometimes can be evaluated qualitatively or by comparison to a previous project for which a quantitative air quality analysis is available. However, if a project requires the preparation of an EA or EIS, it is likely that a quantitative, project-specific air quality assessment would be needed. This can be accomplished by first identifying the emissions sources associated with a project, and then estimating the

³ Note: There are no air quality standards for impacts above the mixing height.

emissions for each reasonable alternative. Knowing the emissions may help to characterize a project's impact for the EA or EIS. Larger or more complex projects may require further modeling analysis to estimate changes in ambient pollutant concentrations that would result from the Federal action emissions. From the pollutant concentrations analysis, compare the emissions (or model output) of a project directly to the NAAQS. Additionally, emissions and air quality impacts may be relevant to other impact categories due to mechanisms such as deposition of emitted pollutants to soil or surface water. The air quality analysis should be coordinated with other impact categories to account for such potential impacts as necessary.

1.3.1. Applicable Guidance References

The FAA's Air Quality Handbook provides information on how to conduct an air quality analysis at: http://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook/. Additional guidance materials that may be useful include:

- For Hazardous Air Pollutants (HAPs), FAA's "Guidance for Quantifying Speciated Organic Gas Emissions from Airport Sources" at: http://www.faa.gov/regulations_policies/policy_guidance/envir_policy/media/Guidance%20for%20Quantifying%20Speciated%20Organic%20Gas%20Emissions%20from%20Airport%20Sources.pdf;
- For airport projects, the FAA *Airports Desk Reference, Chapter 1, Air Quality* at: http://www.faa.gov/airports/environmental/environmental_desk_ref/media/desk_ref_chap1.pdf;
- Information provided on the website of the EPA Office of Transportation and Air Quality at: <http://www.epa.gov/otaq/index.htm>; and
- The Transportation Research Board's Airport Cooperative Research Program documents may not represent official FAA guidance. Consult the FAA's Office of Environment and Energy (AEE) before relying on these materials and referring to handbooks, guidance, and research results issued by the National Academy of Sciences' Transportation Research Board, *Airport Cooperative Research Program* at: <http://www.trb.org/ACRP>.

1.3.2. Emissions Inventory

An emissions inventory provides a first indication of the magnitude of the action's potential air quality impact. The emission inventory provides the total amount or mass of pollutants generated by all sources affected by the action during a specified period of time (e.g., tons per year [tpy]). The inventory should start by evaluating the types of criteria pollutants and HAPs that could be emitted from all aspects of a project. Then, provide data on a project's criteria pollutant emissions (and HAPs, and ozone-depleting substances [ODS], if state requires) for each reasonable alternative. An inventory should include both direct and indirect emissions that are reasonably foreseeable which could include construction as well as operational emissions. Direct and indirect emissions are further defined in Section B.1.1.4 of Appendix B. The emissions (or the net emissions for a general conformity analysis) of an action alternative is the difference between the emissions under that alternative and the emissions under the no action alternative for that same calendar year.

The emissions inventory usually is calculated for the year(s) of project implementation, the planning horizon year(s) in the EA or EIS, and sometimes for intermediate years, if appropriate due to project phasing or if requested by a reviewing agency. Emission inventories must be generated for all project alternatives using an FAA-approved model.

Commercial space launch actions may involve commercial space launch vehicle emissions that can affect the atmosphere in specific altitude ranges. Emissions inventories for commercial space launches may need to include calculation of emissions by atmospheric layer (troposphere below 3,000 feet, troposphere above 3,000 feet, stratosphere, mesosphere, and ionosphere, or other classification as appropriate) to define such impacts.

See Section 1.3.5 for emission inventory requirements pertaining to Federal actions located in nonattainment or maintenance areas for General Conformity purposes.

1.3.3. Ambient Pollutant Concentrations Analysis

There is no single, universal criterion for deciding whether an ambient pollutant concentrations analysis (or “NAAQS analysis”) is necessary for Federal actions. However, a review of a project to identify any unusual circumstances, such as intense emission sources in close proximity to areas where the public has access, might indicate a need for further analysis. In addition, reviewing agencies may specifically request a NAAQS analysis if concerns exist regarding sensitive receptors surrounding the Federal action or if measured ambient concentrations of regulated pollutants are very close to violating a NAAQS in the immediate vicinity of the Federal action. Based on the nature of a project and consultation with state and local air quality agencies, additional analysis may be appropriate.

If a NAAQS analysis is conducted, calculate the estimated pollutant concentration for a project using the emissions inventory data and an FAA-approved dispersion model. Depending on the project, this step can require extensive data and computation. This should include collection of the latest available input data early in the environmental process. Assistance from AEE is available on a case-by-case basis by request through the respective headquarters program office. After performing dispersion modeling of the project emissions sources, add the modeled pollutant concentrations to the background (existing) pollutant concentrations and compare to the NAAQS. If modeled concentrations combined with background concentrations do not result in projected exceedances of the NAAQS, then the analysis is complete. If modeled concentrations and background concentrations combine to exceed the NAAQS in an attainment area, emissions should be mitigated or offset, or the action redesigned to reduce concentrations below the NAAQS, to the extent possible. The FAA [Air Quality Handbook](#)⁴ provides further information on air quality dispersion modeling.

See Section 1.3.5 for ambient pollutant concentration analysis requirements pertaining to Federal actions located in nonattainment or maintenance areas for General Conformity purposes.

1.3.4. Modeling Requirements

As per FAA Order 1050.1F, when conducting an air quality analysis for the purposes of complying with NEPA or General Conformity, the FAA requires use of an FAA-approved

⁴ Available at http://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook

model. For air quality, the approved model is Aviation Environmental Design Tool (AEDT) . The Guidance on the use of AEDT can be found in Appendix C, Using AEDT to Conduct Environmental Modeling for FAA Actions Subject to NEPA, of this Desk Reference.

Per FAA Order 1050.1F, air quality analyses must use the most recent version of the FAA-approved model available at the start of the environmental analysis process. In the event that the FAA-approved model is updated after the environmental analysis process is underway, the use of an updated version of the model is acceptable but is not required. Consultation with the appropriate FAA program office is recommended to help decide whether to use an updated version of the FAA-approved model after the environmental analysis process is underway. A complete description of all inputs, particularly the specification of custom values if the model's default values are not used, should be included in the documentation of the air quality analysis. Per FAA Order 1050.1F, if the analysis is conducted by a contractor or applicant, the FAA must be provided with one copy of the input files used in the analysis and the corresponding output files on media specified by the FAA.

HAPs inventory

If a HAPs inventory is required by the state, the FAA-approved AEDT model must be used. If the state or local air quality agencies request to supplement the analysis with other HAPs methodology(s) and/or model(s), then the HAPs inventory should be conducted in consultation with the appropriate Line of Business/Staff Office (LOB/SO) and AEE.

Supplemental methodologies or models

Use of supplemental methodology and models for analysis of non-aviation sources is also permitted in consultation with the appropriate LOB/SO and AEE.

For further guidance on air quality procedures, see the FAA *Air Quality Handbook*.

1.3.5. General Conformity

The General Conformity Rule establishes the procedures and criteria for determining whether certain Federal actions conform to state or Federal (EPA) air quality implementation plans (SIPs/FIPs). Hence, the General Conformity Rule is only considered when a Federal action is proposed to occur in an EPA-designated nonattainment or maintenance area. To determine whether conformity requirements apply to a proposed Federal action, consider the following:

- The nonattainment or maintenance status of the area;
- Emissions budget⁵ ;
- Exemptions from conformity;
- FAA-specific activities that are presumed to conform (*72 Federal Register* 41565-41580 (July 30, 2007)); and
- Response to emergency or disaster.

⁵ See Air Quality handbook Section 8.1.1. available at http://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook

If the Federal action is subject to EPA's General Conformity Rule (see 40 CFR part 93), then the general conformity requirements should be integrated into the NEPA process. General conformity requirements are distinct from NEPA requirements. For example, NEPA may require the FAA to analyze several alternatives in detail. If a general conformity determination is required, only the proposed action scenario must be assessed for conformance to the applicable SIP/Federal Implementation Plan (FIP).

The General Conformity Rule has public review requirements independent of NEPA's requirements. However as an efficiency step, the NEPA process could include the issuance of the draft general conformity determination along with any NEPA document for public comment⁶. While for some decisions there may be valid reasons to address general conformity separately rather than concurrently, when general conformity analysis provides information that is essential to a reasoned choice among alternatives, then a complete general conformity analysis should be performed and the final general conformity determination should be issued along with the final NEPA document. The practitioner should be mindful that the general conformity analysis can supplement the NEPA air quality analysis but usually does not, by itself, provide a fully NEPA-compliant air quality analysis⁷.

The general conformity process is conducted in three phases: applicability, evaluation, and determination. The applicability phase has two parts. First, determine if the proposed Federal action is located in an EPA-designated nonattainment or maintenance area for one or more of the regulated criteria pollutants. If it is not, then the general conformity rule does not apply. If it is, then the next part is to determine whether the Federal action is exempt from the general conformity rule or otherwise does not require further analysis to demonstrate conformity. Actions that require further analysis to demonstrate conformity proceed to the evaluation phase. The evaluation phase requires estimating the changes in emissions caused by the action and comparing them to the *de minimis* thresholds. The change in emissions is the "proposed action emission levels" minus the "no action emission levels," also known as the "net emissions" for a specific calendar year in tpy. If the net emissions due to the action exceed the *de minimis* threshold, and are not otherwise exempt or PTC, then the determination phase must be applied and a formal conformity determination must be prepared.

The General Conformity Rule establishes the *de minimis* levels to identify those actions with the potential to have air quality impacts large enough to require a conformity determination. If a project's net emissions are less than the *de minimis* levels, then the Federal action is considered to be too small to adversely affect the air quality status of the area and is automatically considered to conform with the applicable SIP/FIP, therefore the general conformity requirements have been complied with and the process is complete.

1.3.5.1. Applicability

For areas that have violated the NAAQS, the CAA requires each state to adopt a plan to achieve the NAAQS for each pollutant within the established timeframes. These air quality plans, known

⁶ For more information refer to Section 8.1.3 Interagency and Public Review subsection for General Conformity of the FAA's *Aviation Emissions and Air Quality Handbook Version 3*

⁷ For more information refer to Section 8.1 General Conformity of the FAA's *Aviation Emissions and Air Quality Handbook Version 3*

as SIPs, are subject to EPA approval to be deemed as the “applicable SIP” for the nonattainment or maintenance area. In default of an approved SIP, the EPA is required to promulgate a FIP. Section 176(c) of the CAA, as amended in 1990, requires that Federal actions conform to the appropriate FIPs or SIPs in order to attain the CAA’s air quality goals. Section 176(c) states: “No 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.”

The first phase of the general conformity process, *applicability*, evaluates whether the conformity regulations would apply to a proposed Federal action. Before the FAA can fund, support, or approve an activity in any way, it must address the conformity of the action with the applicable SIP, FIP, or Tribal Implementation Plan using the criteria and procedures prescribed in the General Conformity Rule. Details on conformity applicability can be found in Section 8.1.1 General Conformity – Applicability Analysis of the FAA’s *Aviation Emissions and Air Quality Handbook Version 3*.

1.3.5.2. Evaluation and Analysis Thresholds

In the second phase, estimate the total annual emissions of the pollutant(s) of concern from the proposed action or alternative(s) and from the no action alternative. In other words, if a Federal action is not exempt or presumed to conform, a project’s emissions must be analyzed with regard to conformity applicability emission levels. The rule established the threshold emission levels (annual threshold levels) to identify those actions with the potential to have significant air quality impacts. Include both direct and indirect emissions, and account for construction emissions in determining whether emission threshold levels are exceeded (EPA General Conformity Questions and Answers, November 1994).

If there are parts of a project that are exempt from conformity requirements or are presumed to conform, do not include those parts in the analysis. Subtract the proposed action emissions from the no action emissions to derive the difference in emissions, or net emissions, due to the action. Compare the net emissions to the *de minimis* thresholds that apply to the nonattainment or maintenance area. If the estimated net emissions are less than the applicable *de minimis* thresholds, the conformity determination requirements do not apply to a project.

The conformity determination process can be resource-intensive. If the net emissions exceed the *de minimis* thresholds, then before proceeding with a conformity determination, review the emissions analysis to identify any assumptions or data that might be overly conservative (tending to overestimate emissions). More refined analysis may show that the net emissions would not exceed the *de minimis* thresholds. If after refinement the net emissions still exceed the thresholds, investigate whether there are opportunities to redesign the project for lower emissions or to include measures that would reduce emissions increases to less than the *de minimis* levels (for example, consider the mitigation measures listed below in Section 1.4). If these measures are incorporated into the project design and a project commits to their implementation, they can then be included in the emissions analysis to show that the net emissions would not exceed the *de minimis* thresholds, and a formal conformity determination would not be required. If after consideration of emission reductions and design changes, the net emissions still exceed the thresholds, then a conformity determination must be prepared.

Conformity Determination

If a conformity determination is required, it need be conducted for the proposed action only, in contrast to the NEPA review which must be conducted for all alternatives. EPA's conformity guidance⁸ reflects the requirement to conduct a conformity determination for the proposed action only, stating that when needed, a conformity determination is required for "only the one [alternative] that the Federal agency ultimately approves, permits, or funds." In some cases the FAA's proposed action may differ from the alternative that an airport or commercial space launch site has identified as its preferred alternative. In such cases consult with the appropriate FAA program office to confirm the alternative(s) for which the conformity evaluation should be performed. When a proposed Federal action is not exempt, presumed to conform, or exceeds *de minimis* emission threshold, the agency must prepare a conformity determination based on analysis using criteria stated in EPA's General Conformity Rule (40 CFR part 93, 58 *Federal Register* 63250, (November 30, 1993)). A proposed action cannot be approved or initiated unless conformity does not apply, if the action is presumed to conform, or if emissions are less than the *de minimis* thresholds. If initial analysis does not indicate a positive conformity determination, alternative actions (including mitigation measures as part of the action) should be considered and further consultation, analysis, and documentation would be necessary.

To begin the third phase, identify which approaches, or criteria, could be used to demonstrate that the proposed action conforms to the applicable implementation plan. Consult with AEE and the EPA regional 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 to identify the most up-to-date models and data for the conformity analysis.

1.1.1.1 Approaches to Demonstrating General Conformity

The General Conformity Rule provides eight basic approaches or criteria for demonstrating conformity with the applicable implementation plan:

1. Document that the emissions from the action are specifically identified and accounted for in the implementation plan (see 40 CFR § 93.158(a)).
2. Obtain a statement from the applicable state, tribal, or local air quality agency that the emissions from the action along with all other emissions in the area do not exceed the budget for those emissions in the implementation plan (see 40 CFR § 93.158(a)).
3. Have the state or tribe agree to revise the implementation plan to include the emissions from the Federal action (see 40 CFR § 93.158(a)).
4. Have the local Metropolitan Planning Organization provide a statement that the emissions are included in the modeling for a conforming transportation plan and program (see 40 CFR § 93.158(a)).
5. Conduct air quality modeling to demonstrate that the emissions will not cause or contribute to a violation of the NAAQS (see 40 CFR § 93.158(a)). This modeling option is allowed for demonstrating general conformity of directly-emitted pollutants only. The EPA does not believe that current models are adequate to reasonably predict a project-level impact of

⁸ "General Conformity Guidance: Question and Answers," issued by the Office of Air Quality Planning and Standards, U.S. EPA, July 13, 1994.

individual sources of precursors of O₃ or the volatile portion of PM_{2.5} (see the preamble to the 2010 conformity rule amendments, *75 Federal Register* 17254, (April 5, 2010)).

6. Fully mitigate or offset⁹ the increase in emissions (see 40 CFR §§ 93.158(a) and 93.160).
7. Develop and implement a facility-wide emission budget. This approach requires a revision to the applicable implementation plan as in approach 4 above. If the net emissions from the Federal action along with the other emissions from the facility do not exceed the budget, then the Federal action is presumed to conform (see 40 CFR § 93.161).
8. Create and apply emission reduction credits. Credits must meet several requirements in order to be eligible for use in a conformity determination (see 40 CFR § 93.165).

The general conformity analysis procedures contain detailed technical requirements for demonstrating how an action would conform to the applicable implementation plan under these approaches (see 40 CFR § 93.159). Additional guidance can be found at the following locations:

- EPA's interpretation of the General Conformity Rule and answers to common general conformity questions, including a training module, is provided on EPA's General Conformity website at: <http://www.epa.gov/oar/genconform/faq.html>;
- On EPA's Office of Air and Radiation website, *General Conformity Guidance for Airports: Questions and Answers*, dated September 25, 2002 at: http://www.epa.gov/ttn/caaa/conform/airport_qa.pdf; and
- Guidance documents also can be obtained from the appropriate EPA Regional Office.

1.1.1.1.2 Draft General Conformity Documentation

After conducting the conformity analysis, prepare a draft general conformity determination. The EPA general conformity regulations require the FAA to distribute a description of the proposed action and the draft general conformity determination, in the form of a 30-day notice to the appropriate EPA Regional Office(s), state and local air quality agencies, tribes, and, when applicable, affected Federal land managers, and the agencies designated under Section 174 of the CAA to develop the applicable implementation plan(s). In addition, the draft general conformity determination and supporting materials that describe the analytical methods and assumptions must be made available to any person upon request. To coordinate the general conformity requirement with the NEPA process, for both a draft EIS or a draft EA issued for public comment, include the draft general conformity determination in an appendix to the NEPA review and consider expanding the NEPA distribution to include the agencies indicated above and any members of the public who request copies of the draft general conformity determination.

- For an EIS, if the need for a general conformity determination is identified before the Notice of Intent (NOI) to prepare an EIS is issued, state in the NOI that preparation of the EIS and general conformity determination will be coordinated. This will alert the public to consider conformity issues with the applicable implementation plan in the public scoping process for the EIS.

⁹ FAA's *Aviation Emissions and Air Quality Handbook Version 3, Section 8.1.2.2 General Conformity – Emissions Mitigation and Offsetting*

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

The EPA general conformity regulation also requires the FAA 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 general conformity determination, also specifically invite comment on the draft EIS or EA, and vice versa.

As mentioned above, the EPA general conformity regulations require a minimum 30-day public comment period on a draft general conformity determination.

- For an EIS, the comment period for the draft general 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 general conformity determination to occur concurrently. If the FAA publishes a Notice of Availability (NOA) for the draft EIS in the *Federal Register*, the FAA should announce the availability of the draft general conformity determination in the notice.
- For an EA that is being provided to the public for comment, set the review period for at least 30 days. If an EA is not being provided to the public for review, establish, to the extent possible, concurrent periods for public comment on the draft conformity determination and a state and tribal review period for the EA, as applicable.

1.1.1.1.3 Final General Conformity Documentation

After the public comment period, prepare a final general conformity determination. The final general conformity determination documents the FAA's finding that an action 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, offsets, or emission reduction credits needed to demonstrate conformity with the applicable implementation plan. Any statements that the action's emissions are or will be included in the applicable implementation plan must be documented. Any mitigation measures, offsets, or credits must be identified and the process for their implementation and enforcement must be described, including an implementation schedule. Prior to determining that the Federal action is in conformity, the FAA must obtain written commitments to implement any measures that have been identified as conditions in order for making the general conformity determination. Written commitments could come in the form of a NEPA Record of Decision (ROD) or by a separate commitment document. Reference 40 CFR § 93.160 for further details on mitigation and documentation requirements.

The EPA general conformity regulations require the FAA to notify, within 30 days after a final general conformity determination, the appropriate EPA Regional Office(s), state and local air quality agencies, tribes, 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 general conformity regulations require that the FAA make comments and responses on the draft general conformity determination

available, upon request by any person, within 30 days of the final general conformity determination. For a final EIS and an approved EA and Finding of No Significant Impact (FONSI), provide copies of the NEPA review to the Federal, state, and local agencies that require copies of the final general conformity determination, and any persons who requested copies of the draft general conformity determination.

The EPA general conformity regulations also require that the FAA make public its final general conformity determination by placing a prominent advertisement in a daily newspaper in the area affected by the action, within 30 days of the final general conformity determination. For both a final EIS and an approved EA and FONSI, publish an announcement of the availability of the NEPA review and final general conformity determination in the local newspaper within 30 days after a final general conformity determination. In addition, if the FAA publishes an NOA for the final EIS in the *Federal Register*, the notice also should announce the availability of the general conformity determination.

The NEPA document should include information concerning the general conformity review. Maintain documentation of the consultation process as part of the official administrative record for a project.

1.3.6. Significance Determination

Exhibit 4-1 of FAA Order 1050.1F provides the FAA's significance threshold for air quality:

The action would cause pollutant concentrations to exceed one or more of the National Ambient Air Quality Standards (NAAQS), as established by the Environmental Protection Agency under the Clean Air Act, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations.

1.4. Mitigation

Some examples of potential measures to mitigate air quality impacts from the proposed action or alternative(s) include but are not limited to the following:

- Implementing single or reduced engine taxiing (to the extent not already implemented) to reduce emissions;
- For airport project sponsors in nonattainment and maintenance areas, participating in the FAA Voluntary Airport Low Emissions (VALE) program;
- Providing 400 Hz power and preconditioned air at gates to minimize or eliminate the use of auxiliary power units when an aircraft is parked;
- Replacing ground support equipment that operates on conventional fuels with equipment that operates on alternative fuels with lower emissions (e.g., natural gas) or that operates on electricity;
- Implementing dust abatement techniques (e.g., water application) on unpaved or unvegetated surfaces to minimize airborne dust during construction;
- Revegetating disturbed areas as soon as possible after disturbance. This could include interim revegetation along road beds, once heavy construction is completed; and
- Covering construction materials and stockpiled soils if they are a source of fugitive dust.

Section 8 of the FAA *Air Quality Handbook* provides additional mitigation measures that may be considered to mitigate air quality impacts.

In addition, during the NEPA process agencies having jurisdiction or special expertise regarding air quality might provide letters addressing air quality impacts. These letters may include recommended measures to mitigate air quality impacts under NEPA (beyond those required to comply with applicable substantive requirements under the CAA) that may be considered for incorporation into a proposed project.

Air Quality

Federal activities affecting all environmental impact categories are governed by many statutes, regulations, and Executive Orders. Each impact category chapter of this Desk Reference (Chapters 1-14, as applicable) contains an exhibit with a tabular overview of the major applicable Federal statutes, regulations, Executive Orders, and the agencies responsible for overseeing their implementation. This appendix supplements the background information relevant to those requirements that is provided in the chapter exhibits. Please note that these requirements may not be applicable to every FAA action, and should only be included when relevant to the proposed project.

B.1. Air Quality

The Clean Air Act (CAA) is the comprehensive Federal law that regulates the emission of air pollutants from stationary and mobile sources. Among other things, the CAA authorizes the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) for common air pollutants (known as “criteria pollutants”) to protect public health and welfare, and to regulate emissions of hazardous air pollutants (HAPs).

As stated in Chapter 1, electronic sources that may be useful when describing the affected environment for air quality include:

- FAA guidance documents on HAPs and climate change available at: http://www.faa.gov/regulations_policies/policy_guidance/envir_policy/;
- EPA’s CAA website at: <http://www.epa.gov/air/caa/>;
- EPA’s General Conformity guidance, including specific guidance for airports at: <http://www.epa.gov/air/genconform/background.html>;
- EPA’s Air Toxics (i.e., HAPs) website at: <http://www.epa.gov/ttn/atw/>; and
- For the attainment status of the study area for Federal and state air quality standards, visit the applicable state air quality management agency’s website. For example, if a study area is in California, go to the California Air Resources Board Area Designations Maps / State and National website at: <http://www.arb.ca.gov/desig/adm/adm.htm>. Additionally, the EPA’s *Green Book Nonattainment Areas for Criteria Pollutants* identifies areas of the country that have not attained air quality standards for criteria pollutants.

B.1.1. Pollutants, Sources, and Health Effects

B.1.1.1. Criteria Pollutants

Criteria pollutants are those pollutants that are common and found all over the United States. The EPA calls these pollutants “criteria” air pollutants because it regulates them by developing human health-based and/or environmentally-based criteria (science-based guidelines) for setting permissible levels (see *National Ambient Air Quality Standards* discussion below). The EPA uses measurements of criteria pollutants as indicators of air quality. The EPA has identified six criteria pollutants: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate

matter (PM) with an aerodynamic diameter equal to or less than 10 microns (PM₁₀, or coarse particles) and 2.5 microns (PM_{2.5}, or fine particles), sulfur dioxide (SO₂), and lead (Pb). These pollutants can harm human health and the environment and cause property damage. According to EPA, of the six criteria pollutants, PM and ozone are the most widespread health threats.¹

Hazardous Air Pollutants

In addition to the criteria pollutants, Section 112 of the CAA authorizes the EPA to regulate emissions of HAPs, also known as toxic air pollutants or air toxics. HAPs are pollutants that cause or may cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental and ecological effects. No NAAQS have been established for HAPs (except for lead, which is regulated as a criteria pollutant and as a HAP). At present, the EPA is required to control 187 HAPs. A complete list of the regulated HAPs can be found on EPA's Air Toxics website at: <http://www.epa.gov/ttn/atw/orig189.html>. In addition, information regarding HAPs is available on the FAA's Environmental Policy website at: http://www.faa.gov/regulations_policies/policy_guidance/envir_policy/. For example, see http://www.faa.gov/regulations_policies/policy_guidance/envir_policy/media/HAPs_rpt.pdf for a bibliography on HAPs associated with aviation.

B.1.1.2. National Ambient Air Quality Standards

The NAAQS are air quality standards set by the EPA for criteria pollutants that are among the most harmful to public health and the environment. The CAA directs the states to develop plans (see *State Implementation Plans* discussion below) in order to achieve these standards.

The EPA has established a set of NAAQS for the six criteria pollutants listed above. There are primary and secondary NAAQS for most of the criteria pollutants (see Exhibit B-1 below). The primary standards were established to protect the public health with an adequate margin of safety. The secondary standards were established to protect the public welfare from any known or anticipated adverse effects of a pollutant (e.g., damage to crops and materials). Compliance with the NAAQS means the ambient outdoor levels of the criteria air pollutants are presumed safe for human health, public welfare, and the environment.

Under the CAA, states are allowed to adopt their own ambient air quality standards, provided their proposed standards are at least as stringent as the NAAQS. Similarly, state standards may include additional pollutants that are not regulated under the NAAQS. For example, the California Ambient Air Quality Standards established under the California Clean Air Act of 1988 are generally different from and more stringent than the NAAQS. Furthermore, in addition to the six pollutants regulated under the NAAQS, the California Ambient Air Quality Standards set acceptable levels for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

Federal actions that are implemented in states that have separate state ambient air quality standards are required to comply with state ambient air quality standards in the same way they are required to comply with the NAAQS. The EPA's established NAAQS are displayed in Exhibit B-1 below.

¹ <http://www.epa.gov/air/urbanair/>

Exhibit B-1. National Ambient Air Quality Standards^a

Pollutants	Primary Standards Value	Primary Standards Averaging Period	Secondary Standards
CO	9 ppm (10 mg/m ³)	8 hours	None
CO	35 ppm (40 mg/m ³)	1 hour	None
NO ₂	53 ppb	Annual (Arithmetic average)	Same as primary
NO ₂	100 ppb	1 hour	None
O ₃	0.075 ppm	8 hours	Same as primary
PM ₁₀	150 µg/m ³	24 hours	Same as primary
PM _{2.5}	15.0 µg/m ³	Annual (Arithmetic average)	Same as primary
PM _{2.5}	35 µg/m ³	24 hours	Same as primary
SO ₂	75 ppb	1 hour	None
SO ₂	None	None	500 ppb average period of 3 hours
Pb	0.15 µg/m ³	Rolling 3-month average	Same as primary

Source: EPA's NAAQS website at: <http://www.epa.gov/air/criteria.html>. The information in the table is current as of September 2012. Please refer to the website to check for updates as well as to review additional notes that pertain to these standards. The standards are codified at 40 Code of Federal Regulations (CFR) part 50.

^a CO = carbon monoxide; Pb = lead; NO₂ = nitrogen dioxide; PM₁₀ and PM_{2.5} = particulate matter with an aerodynamic diameter equal to or less than 10 microns and 2.5 microns, respectively; O₃ = ozone; SO₂ = sulfur dioxide; mg/m³ = milligram per cubic meter; ppb = part per billion; ppm = part per million; µg/m³ = microgram per cubic meter

Designation of Areas by Air Quality Status

To further define local and regional air quality, the EPA has divided the country into areas that achieve the NAAQS, called *attainment areas*, and those that do not achieve the NAAQS, called *nonattainment areas*. The nonattainment and attainment designations are based on air quality monitoring data. Areas for which available data are not sufficient to make an attainment status designation are listed as *unclassifiable*.² Unclassifiable areas are treated as attainment areas for regulatory purposes. Areas that were previously designated nonattainment and subsequently re-designated to attainment due to meeting the NAAQS are classified as *maintenance areas*. The official list of nonattainment, attainment, maintenance, and unclassified areas and a description

² Areas designated unclassifiable sometimes are referred to as “unclassified” though this term is not used in the Clean Air Act (CAA).

of their boundaries is available at 40 CFR part 81. The EPA maintains an unofficial list of these areas on its Green Book website at: <http://www.epa.gov/oar/oaqps/greenbk/>. The EPA publishes notices on its Green Book website when the status of a nonattainment area changes. The EPA also tracks *Federal Register* notices regarding status changes (see the EPA's Green Book website at: <http://www.epa.gov/oar/oaqps/greenbk/adden.html>). The EPA's Green Book website should be checked when assessing the attainment status of the study area.

State Implementation Plans

The responsibility for designating areas that are in attainment, nonattainment, or maintenance for each of the criteria pollutants has been delegated to the states by the EPA. States are required to develop EPA-approved State Implementation Plans (SIPs) to achieve or maintain the NAAQS within timeframes set under the CAA. The SIP documents how the region will reach attainment by the required date. The SIP includes inventories of emissions within the area and establishes emissions budgets (the emissions levels or targets required for the area to reach attainment) designed to bring the area into compliance with the NAAQS. In maintenance areas, the SIP documents how the state intends to maintain compliance with the NAAQS. The SIP accounts for all the emissions within the Federally-designated air quality management area that affect air quality. To comply with the SIP, a Federal action must not result in any new violations or worsen any existing violations of the NAAQS or state standards, must not delay timely attainment of any standard or any required interim emission reductions or other milestones, and must meet the conditions of the general conformity regulations (discussed below). If a state fails to submit an adequate SIP or fails to implement an approved SIP, the EPA is required to promulgate a Federal Implementation Plan (FIP).

State Implementation Plan – A state's detailed description of the regulations, programs, and measures the state will use to reduce air pollution in the state and to fulfill its responsibilities under the Clean Air Act to attain the NAAQS for all criteria air pollutants in the state within legally required timeframes.

B.1.1.3. Conformity

Conformity is defined as conformity to the SIP's (or FIP's) purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of such standards. It requires that Federal activities will not:

1. Cause or contribute to any new violation of any standard in any area;
2. Increase the frequency or severity of any existing violation of any standard in any area; or
3. Delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

Conformity typically is evaluated using an emissions analysis.

Purpose

Section 176(c) of the CAA requires that Federal actions conform to the appropriate SIPs or FIPs in order to attain the CAA's air quality goals. Section 176(c) states that no Federal entity shall engage in, support in any way or provide financial assistance for, license or permit, or approve

any activity which does not “conform” to the applicable SIP or FIP. The purpose of this conformity requirement is to ensure that Federal activities: (1) do not interfere with the budgets in the SIPs; (2) do not cause or contribute to new violations of the NAAQS; and (3) do not impede the ability to attain or maintain the NAAQS.

Applicability

To implement Section 176(c), the EPA issued the Transportation Conformity Rule (40 CFR part 93, subpart A) which applies to Federal actions funded under United States Code (U.S.C.) Title 23 or the Federal Transit Act, and the General Conformity Rule (40 CFR part 93, Subpart B) which applies to all other Federal actions. Actions that are subject to the Transportation Conformity Rule generally involve highway or transit projects and are not related to aviation, with some exceptions (see *Transportation Conformity* discussion below). Most FAA actions that are subject to conformity will be subject only to the General Conformity Rule. The conformity rules apply only to Federal actions in nonattainment or maintenance areas.

General Conformity

The General Conformity Rule was published in the *Federal Register* on November 30, 1993, and amended on April 5, 2010. A summary of the rule and amendments can be found in the EPA’s General Conformity Training Module at: http://www.epa.gov/airquality/genconform/training/09_AppendixB.html.

The General Conformity Rule established a process based on emissions analysis to determine whether a Federal action conforms to the SIP. The rule defines emissions as “direct” or “indirect” (see 40 CFR § 93.152). Actions that do not meet the definitions of direct or indirect emissions are exempt from the General Conformity Rule. “Direct emissions” are those that occur at the same time and place as the Federal action. The definition of “indirect emissions” contains four criteria, all of which must be met. As stated in 40 CFR § 93.152, indirect emissions means those emissions of a criteria pollutant or its precursors:

- That are caused or initiated by the Federal action and originate in the same nonattainment or maintenance area but occur at a different time or place from the action;
- That are reasonably foreseeable;
- That the agency can practically control; and
- For which the agency has continuing program responsibility.

When developing the General Conformity Rule, the EPA recognized that many actions conducted by Federal agencies do not result in substantial increases in air pollutant emissions in nonattainment and maintenance areas. Therefore, the EPA established threshold levels (also referred to as *de minimis* levels) for emissions of each of the criteria pollutants. When the sum of the increases in direct and indirect emissions caused by a project would be less than the *de minimis* levels, a project would not require a general conformity determination. The general conformity *de minimis* levels for the criteria pollutants are displayed in Exhibit B-2 and B-3 below.

Exhibit B-2. Nonattainment Areas General Conformity De Minimis Emission Levels^a

Pollutant (Precursor)	Area Type	Tons per Year
O ₃ (VOC or NO _x)	Serious	50
O ₃ (VOC or NO _x)	Severe	25
O ₃ (VOC or NO _x)	Extreme	10
O ₃ (VOC or NO _x)	Marginal and moderate ozone nonattainment areas outside an ozone transport region	100
O ₃ (NO _x)	Marginal and moderate ozone nonattainment areas inside an ozone transport region	100
O ₃ (VOC)	Marginal and moderate ozone nonattainment areas inside an ozone transport region	50
CO, SO ₂ , or NO ₂	All nonattainment areas	100
PM ₁₀	Moderate	100
PM ₁₀	Serious	70
PM _{2.5} (Direct emissions)	All PM _{2.5} nonattainment areas	100
PM _{2.5} (SO ₂)	All PM _{2.5} nonattainment areas	100
PM _{2.5} (NO _x , unless determined not to be a significant precursor)	All PM _{2.5} nonattainment areas	100
PM _{2.5} (VOC or ammonia, if determined to be significant precursors)	All PM _{2.5} nonattainment areas	100
Pb	All Pb nonattainment areas	25

Source: 40 CFR § 93.153 as presented in EPA. 2011. General Conformity *De Minimis* Levels. <http://www.epa.gov/airquality/genconform/deminimis.html> (last updated July 22, 2011).

^a CO = carbon monoxide; NO_x = nitrogen oxides; NO₂ = nitrogen dioxide; O₃ = ozone; Pb = lead; PM₁₀ = particulate matter with an aerodynamic diameter equal to or less than 10 microns; PM_{2.5} = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; SO₂ = sulfur dioxide; VOC = volatile organic compound.

Exhibit B-3. Maintenance Areas General Conformity De Minimis Emission Levels^a

Pollutant (Precursor)	Area Type	Tons per Year
Ozone (NO _x , SO ₂ , or NO ₂)	All ozone maintenance areas	100
Ozone (VOCs)	Ozone maintenance areas inside an ozone transport region	50
Ozone (VOCs)	Ozone maintenance areas outside an ozone transport region	100
CO or PM ₁₀	All maintenance areas	100
PM _{2.5} (Direct emissions)	All PM _{2.5} maintenance areas	100
PM _{2.5} (SO ₂)	All PM _{2.5} maintenance areas	100
PM _{2.5} (NO _x , unless determined not to be a significant precursor)	All PM _{2.5} maintenance areas	100
PM _{2.5} (VOC or ammonia, if determined to be significant precursors)	All PM _{2.5} maintenance areas	100
Pb	All Pb maintenance areas	25

Source: 40 CFR § 93.153 as presented in EPA. 2011. General Conformity *De Minimis* Levels. <http://www.epa.gov/airquality/genconform/deminimis.html> (last updated July 22, 2011).

^a CO = carbon monoxide; NO_x = nitrogen oxides; NO₂ = nitrogen dioxide; O₃ = ozone; Pb = lead; PM₁₀ = particulate matter with an aerodynamic diameter equal to or less than 10 microns; PM_{2.5} = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; SO₂ = sulfur dioxide; VOC = volatile organic compound.

Transportation Conformity

The EPA issued the Transportation Conformity Rule (see 40 CFR part 93, subpart A) to address conformity of highway, roadway, and transit plans and projects. Most Federal actions that are funded under U.S.C. Title 23 or the Federal Transit Act, and are therefore subject to transportation conformity, are sponsored by the Federal Highway Administration (FHWA) or the Federal Transit Administration. As noted above, most FAA actions to which conformity applies are subject only to the General Conformity Rule. However, some projects involving airport ground access that are funded under U.S.C. Title 23 or the Federal Transit Act may also be subject to the Transportation Conformity Rule. If any part of a project would be funded through U.S.C. Title 23 or the Federal Transit Act, the appropriate FAA Line of Business/Staff Office (LOB/SO) should be consulted with to determine how the Federal action should comply with the Transportation Conformity Rule.

Exemptions

Certain Federal actions are exempt from the requirements of the General Conformity Rule because they result in no emissions or minimal emissions. These include, but are not limited to the following (see 40 CFR § 93.153[c][2] for the complete list of actions):

- Continuing and recurring activities such as permit renewals where activities conducted will be similar in scope and operation to activities currently being conducted (40 CFR § 93.153[c][ii]);
- Routine maintenance and repair activities, including repair and maintenance of administrative sites, roads, trails, and facilities (40 CFR § 93.153[c][iv]);
- Routine operation of facilities, mobile assets, and equipment (40 CFR § 93.153[c][xiii]);
- Administrative actions such as personnel actions, organizational changes, debt management or collection, cash management, internal agency audits, program budget proposals, and matters relating to the administration and collection of taxes, duties, and fees (40 CFR § 93.153[c][vi]);
- Planning, studies, and provision of technical assistance (40 CFR § 93.153[c][xii]);
- The routine, recurring transportation of material and personnel (40 CFR § 93.153[c][vii]);
- Transfers of ownership, interests, and titles in land, facilities, and real and personal properties, regardless of the form or method of the transfer (40 CFR § 93.153[c][xiv]);
- Actions, such as the following, with respect to existing structures, properties, facilities, and lands where future activities conducted will be similar in scope and operation to activities currently being conducted at the existing structures, properties, facilities, and lands; for example, relocation of personnel, disposition of Federally-owned existing structures, properties, facilities, and lands, rent subsidies, operation and maintenance cost subsidies, the exercise of receivership or conservatorship authority, and assistance in purchasing structures (40 CFR § 93.153[c][x]);
- Civil and criminal enforcement activities, such as investigations, audits, inspections, examinations, prosecutions, and the training of law enforcement personnel (40 CFR § 93.153[c][v]); and
- Air traffic control activities and adopting approach, departure, and en route procedures for aircraft operations above the mixing height specified in the applicable SIP. Where the applicable SIP does not specify a mixing height, the FAA or applicant, as appropriate, can use the 3,000 feet above ground level (AGL) as a default mixing height, unless the FAA or applicant, as appropriate, demonstrates that use of a different mixing height is appropriate because the change in emissions at and above that height caused by the Federal action is *de minimis* (40 CFR § 93.153[c][xxii]).

Actions Presumed to Conform

In addition, the General Conformity Rule contains a provision that allows agencies to develop a list of actions presumed to conform which would be exempt from the requirements of the rule. The FAA published a list of actions presumed to conform at 72 *Federal Register* 41565-41580 (July 30, 2007); see <http://edocket.access.gpo.gov/2007/pdf/07-3695.pdf>. FAA actions presumed to conform consist of the following:

1. Pavement markings;

2. Pavement monitoring systems;
3. Non-runway pavement work;
4. Aircraft gate areas on airside;
5. Lighting systems;
6. Terminal and concourse upgrades;
7. New HVAC systems, upgrades, and expansions;
8. Airport security;
9. Airport safety;
10. Airport maintenance facilities;
11. Airport signage;
12. Commercial vehicle staging areas;
13. Low-emission technology and alternative fuel vehicles;
14. Airspace and air traffic control activities (e.g., adopting approach, departure, and en route procedures) for air operations that occur at altitudes above the atmospheric mixing height³; and air traffic control activities for air operations that occur at altitudes below the atmospheric mixing height, provided that modifications to routes and procedures are designed to enhance operational efficiency (i.e., to reduce delay), increase fuel efficiency, or reduce community noise impacts by means of engine thrust reductions; and
15. Routine installation and operation of aviation navigation aids.

For descriptions of the actions listed above, please see the FAA *Federal Register* notice.

³The FAA interprets this presumption of conformity also to apply to emissions from commercial space launch vehicles and associated aircraft operations that occur at altitudes above the atmospheric mixing height.