Transportation Conformity and Air Quality Planning

Transportation, Air Quality and Federal Laws

Working Together to Clean the Air

Challenged by the need to provide both mobility and clean air to people, Congress passed the Clean Air Act Amendments of 1990 (CAAA) and the Fixing America’s Surface Transportation Act which was signed into law on December 4, 2015. These laws require transportation planning to be conducted in a way that protects air quality and allows for a consultative process among state air quality and transportation agencies, as well as local planning commissions.

The Clean Air Act Amendments: Increased Attention to Mobile Source Emissions

Mobile sources (cars, buses and trucks) generate four major pollutants: hydrocarbons, or volatile organic compounds (VOCs), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM). VOCs react with NOx in the presence of sunlight and elevated temperatures to form ground-level ozone, a major component of smog which is one of the most serious air pollution problems in New Hampshire. New Hampshire is subject to federal requirements due to previously elevated ozone levels in the southern and Seacoast portions of the state that resulted in a nonattainment designation. Because portions of Hillsborough, Merrimack, Rockingham and Strafford counties failed to meet national EPA ozone standards, New Hampshire developed a State Implementation Plan (SIP) detailing actions the State would take to reduce VOC, NOx, CO and PM emissions from all sources. Some of the SIP programs implemented in New Hampshire to reduce motor vehicle emissions include the annual motor vehicle anti-tampering inspection program that checks for working emission control components and the on-board diagnostics inspections test that check vehicles’ on-board computers to confirm proper operation of emission control equipment.

On May 21, 2012, U.S. EPA revoked the 1997 8-hour ozone NAAQS for transportation. This means New Hampshire transportation and transit plans and projects are no longer subject to the conformity process under the ozone standards. On January 31, 2013, EPA formally approved NHDES’ State SIP request for re-designation to attainment for the 1997 8-hour ozone National Ambient Air Quality Standards (NAAQS). In that same approval, EPA approved a 10-year maintenance plan for the former non-attainment areas. On March 10, 2014, the U.S. Environmental Protection Agency approved the Carbon Monoxide Limited Maintenance Plan for the City of Manchester and the City of Nashua Carbon Monoxide Maintenance Areas.
Transportation Conformity

Perhaps the most important and far-reaching provision of the CAAA is the “transportation conformity” requirement. To ensure that state transportation and highway activities do not interfere with a state’s efforts to achieve attainment with air quality standards, all federally funded or federally approved transportation plans and projects must be able to demonstrate that they “conform” to requirements of the SIP. DES regularly participates in an interagency consultation process involving the NH Department of Transportation, the Federal Highway Administration, Federal Transit Administration, Environmental Protection Agency, the Metropolitan Planning Organizations and Regional Planning Commissions to ensure that transportation planning and the SIP work together toward common goals of mobility and environmental quality.

New Hampshire clarifies federal conformity regulations 40 CFR 93 in NH rules Env-A 1500. Conformity that describe the conformity process, responsible parties and their roles. U.S. EPA adopted 40 CFR 93 establishing the criteria and procedures that must be followed for the conformity process. As per 40 CFR 93.102 conformity determinations are required for:

1. The adoption, acceptance, approval or support of transportation plans and amendments;
2. The adoption, acceptance, approval or support of Transportation Improvement Plans (TIPs) and TIP amendments; or
3. The approval, funding or implementation of (FHWA)/(FTA) funded transportation and transit projects.

Some projects are exempt from conformity requirements. These are safety or infrastructure maintenance projects such as railroad crossing improvements, guardrail installation, repaving existing roadways and bridge repairs. Exempt projects are listed under 40 CFR 93.126. In addition to transportation conformity, the CAAA requires that all other (non-transportation) federally supported programs and projects conform to the state’s implementation plan. This requirement is known as "general" conformity.

Congestion Mitigation and Air Quality Improvement Program

While the CAAA prescribes goals and procedures for achieving air quality standards, federal transportation legislation provides greater flexibility for funding transportation emissions reductions programs. One such MAP-21 funded program is the Congestion Mitigation and Air Quality Improvement program (CMAQ), created specifically for projects that improve air quality in nonattainment and former nonattainment areas. CMAQ funds are awarded competitively in New Hampshire and are used for transportation projects that reduce congestion and improve air quality. Examples of NH CMAQ projects include public transit, RideShare programs, Park & Ride lots, idling reduction efforts and traffic signal coordination.

For more information about transportation conformity, please contact the NHDES Air Resources Division at (603) 271-1370.