

Air Toxics Standards and New Source Performance Standards

Clean Air Act and Iowa's Authority

The U.S. Clean Air Act (CAA) obligates the U.S. Environmental Protection Agency (EPA) to issue standards to control air pollution. These standards, the National Emission Standards for Hazardous Air Pollutants (NESHAP) and New Source Performance Standards (NSPS), set standards and deadlines for industrial, commercial or institutional facilities to meet uniform standards for equipment operation and air pollutant emissions.

NSPS

NSPS, authorized under CAA section 111, establish federal emission standards for categories of facilities that cause or contribute significantly to air pollution. EPA variously refers to facilities, operations, or equipment covered under NSPS as “stationary sources,” “sources,” or “category of stationary sources.” NSPS regulate “criteria pollutants” such as particulate matter and sulfur dioxide by requiring the use of technologies to control air pollution. NSPS affect new sources constructed or significantly modified after EPA proposes the standard. In developing NSPS, EPA must determine the best system of emission reduction available (taking into account the cost of control and other factors). CAA section 111 requires EPA to periodically review all NSPS and update these standards based on new technologies and cost effectiveness.

NESHAP

NESHAP, authorized under CAA section 112, regulate hazardous air pollutants (HAP), also called air toxics. NESHAP address 187 air toxics known or suspected to cause cancer or other serious health conditions. People exposed to air toxics at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects.

EPA variously refers to facilities, operations, or equipment covered under NESHAP as “stationary sources,” “sources,” or “category or subcategory of sources.” The requirements in each NESHAP vary depending on the affected sources. Generally, new sources must comply with more stringent requirements than existing sources. Additionally, NESHAP regulations differ depending on whether a facility is a “major source” or an “area source.” Major sources are typically larger facilities and have potential emissions of 10 tons or more per year of any single air toxic or 25 tons or more of any combination of air toxics. Area sources have potential air toxics emissions at less than the major source thresholds. Although area sources generally emit less HAP than major sources, area sources are more numerous and may collectively cause adverse impacts to public health.

Under CAA section 112, EPA must follow prescribed methods for determining Maximum Available Control Technology (MACT) for major sources and for establishing Generally Available Control Technology (GACT) for area sources. EPA considers the cost and availability

of controls to set GACT. Under certain conditions, EPA also may require MACT for a category or subcategory of area sources. Each NESHAP includes MACT or GACT conditions. CAA section 112 requires EPA to review all NESHAP every eight years to determine if the standards protect health.

Iowa's Delegation of Authority

Because NSPS and NESHAP are federal regulations, affected sources are subject to the federal requirements regardless of whether the State of Iowa adopts the standards into state rules. However, the Clean Air Act allows a state agency (in this case, the Iowa Department of Natural Resources (DNR)) to implement NSPS and NESHAP as a "delegated authority." The DNR and EPA have long-standing delegation agreement, most recently updated in August 2010 (available from the DNR Air Quality Bureau, upon request). The agreement states that DNR adopts NSPS and NESHAP by reference into state rules. Iowa's rules, including all compliance deadlines, are identical to the federal NSPS and NESHAP as of a specific date.

Upon state adoption, the DNR becomes the delegated authority for the specific NSPS or NESHAP. This means that DNR is the primary implementation agency in Iowa. EPA retains concurrent authority to implement the NSPS and NESHAP in any delegated state, including Iowa. Two local air agencies, Polk County and Linn County, implement these standards within their counties.