

Air Pollution Regulatory Development



RTI International has provided technical leadership in the development and implementation of air pollution regulations for more than 35 years. We offer in-depth knowledge of industrial process emissions to solve air pollution problems worldwide.

Overview

RTI assists international and U.S. governments in developing air pollution regulations to improve air quality and reduce greenhouse gas (GHG) emissions. We have researched air pollution problems and mitigation measures to inform the U.S. Environmental Protection Agency's (EPA's) regulatory development programs for over three decades. We leverage our in-depth knowledge of U.S. air pollution regulations to provide comprehensive, capacity-building support to international clients seeking to establish air quality management programs.

Areas of Expertise

RTI's program design and regulatory development support includes the following:

- Information gathering through literature review, design and implementation of comprehensive industry surveys; review of applicable emissions measurement and monitoring technologies; development of emissions test plans; and review of existing regulations and permits
- Compilation and analysis of unit-level emissions data to assess the performance of technologies, development of emission factors, and recommendations for regulatory emission limits

- Assessment of costs, as well as economic, energy, and environmental impacts of air pollution mitigation options
- Preparation of background reports and documentation of analyses performed to support regulatory development
- Assistance with developing preamble and regulatory language, public hearings, and public comment summary and response
- Implementation and outreach assistance such as meeting support; peer review coordination; and preparation of guidance documents, inspection guides, brochures, and training materials

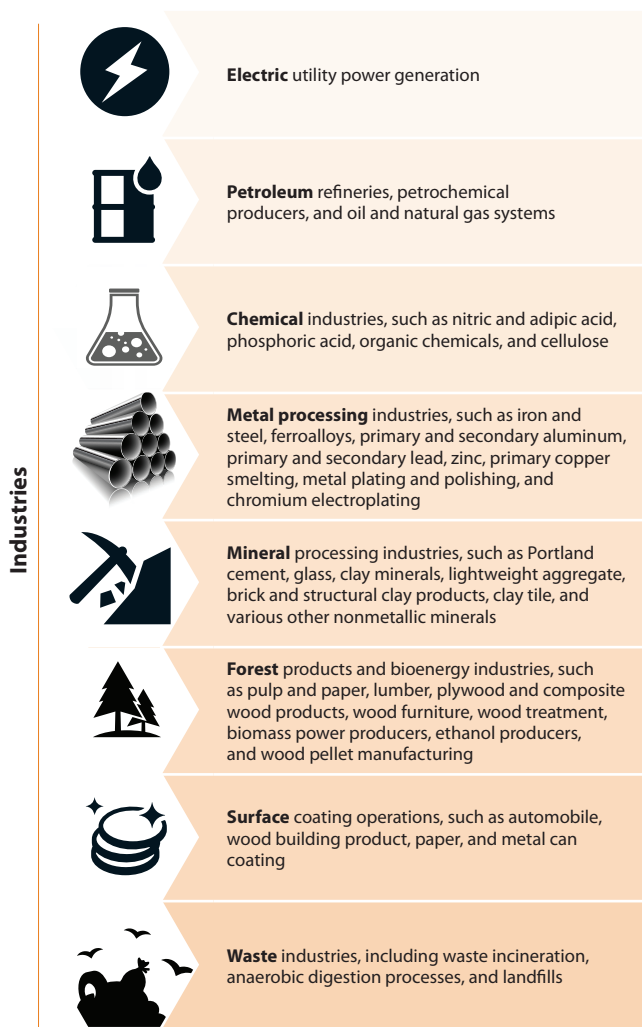
Our strong history of regulatory development support is complemented by our industry sector experts' extensive knowledge of the processes, air pollutants, emissions measurement methods, and control technologies in key industry sectors known for potential air pollution problems.

Our industry sector-specialized teams of engineers and scientists possess a deep working knowledge of the industrial sectors of interest to clients. Each team's knowledge has been developed through years of research dedicated to studying air pollution issues in specific industries.

RTI technical staff members collaborate with quality assurance specialists, economists, and statisticians to ensure that data used to support the standards meet data quality requirements and that cost and economic impacts of regulations are addressed in addition to health effects.

Industry Sectors

RTI's air quality engineers and scientists have researched air emissions, prepared nationwide inventories of equipment-specific emissions, and identified cost-effective control technologies for dozens of industries, including the following:



Project Highlights

Clean Power Plan and Carbon Pollution Standards for New, Modified, and Reconstructed Power Plants. Under President Obama's Climate Action Plan, the U.S. EPA proposed the Clean Power Plan in June 2014 to cut carbon emissions from existing power plants. RTI used our internally developed proprietary software, RTI-CHARM (Comment Handling and Response Manager), to quickly process more than 24,000 unique and substantive public comments on the proposed Clean Power Plan. Our team members summarized comments pertaining to a diverse array of issues such as state goal computation, state plan development, carbon capture and storage, and other GHG abatement measures. Our electric utility team also provided information gathering, analytical, and public comment processing support to the U.S. EPA in setting carbon pollution standards to reduce CO₂ emissions from new, modified, and reconstructed power plants.

Emission Estimation Protocol for Petroleum Refineries. RTI developed the *Emission Estimation Protocol for Petroleum Refineries* document to provide refineries as well as state and local agencies with guidance in developing more comprehensive and more accurate emissions inventories, particularly for emissions of specific hazardous air pollutants that do not have emission factors in the U.S. EPA's AP-42 (*Compilation of Air Pollutant Emission Factors*). We used emissions test data gathered through an extensive information collection request to revise the refinery protocol document and update default emission factors in AP-42. Both documents were finalized following public review. The protocol was one work product of a related project for which RTI provided technical support to the U.S. EPA to perform the Clean Air Act–required residual risk and technology reviews of multiple federal air emission standards affecting petroleum refineries.

More Information

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