

What is the EPA's Mission?

The U.S. Environmental Protection Agency (EPA) is the primary federal agency responsible for safeguarding the environment and protecting human health from pollution. Since 1970, the agency has used three guiding principles to govern its work: results and accountability; innovation and collaboration; and best available science. Each year, the agency publishes its Regulatory Plan, most recently on Dec. 10, 2007 (*Federal Register*, Vol. 72, No. 236, pp. 69922-69956).

What is the EPA doing about air quality?

The EPA's Office of Air and Radiation (OAR) continues to assess new scientific information supporting the National Ambient Air Quality Standards (NAAQS). In July 2007, the EPA proposed a rule revising the existing NAAQS for ozone and will publish a final rule early in 2008. A regulation addressing standards for lead particulate is also underway.

Toxic air pollutants are also on the EPA's radar. The Maximum Achievable Control Technology (MACT) program is now in its second phase — the EPA is evaluating the effectiveness of the work already completed, as well as assessing advances in control technology and the need for additional controls. In this phase, the EPA will combine the remaining MACT source categories requiring residual risk and technology reviews into several groups to meet statutory requirement dates, raise and resolve program issues more effectively, minimize resources by using available data and focusing on high-risk sources, and provide consistent review and analysis. New rules are being written for 21 source categories, including oil and natural gas production, and production of polymers and resins.

The EPA is attempting to improve the New Source Review (NSR) permitting program as well. The challenge here is to clarify the circumstances under which companies must obtain construction permits before building new facilities or before significantly modifying existing facilities.

Congress established the NSR program as part of the 1977 Clean Air Act Amendments. This preconstruction permitting program serves two purposes. First, it ensures that air quality is not significantly degraded by the addition of new or modified plants. In areas with unhealthy air, NSR ensures that new emissions do not slow progress toward cleaner air. In areas with clean air, especially pristine areas like national parks, NSR ensures that new emissions do not significantly worsen air quality. Second, NSR requires any large new or modified industrial source to be as clean as possible, and that advances in pollution control occur concurrently with expansion.

NSR permits legally bind facility owners and operators to specific regulations of plant construction and limits on emissions. Also referred to as construction permitting or preconstruction permitting, NSR requires stationary sources of air pollution to get permits before starting construction.

There are three types of NSR permitting requirements: Prevention of Significant Deterioration (PSD) permits, which are



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required for new major sources or those making major modifications in an attainment area (one that meets area-wide air-quality standards); nonattainment NSR permits, which are required for new major sources or major sources making major modifications in a nonattainment area; and minor source permits.

NSR permits are usually issued by state or local air-pollution control agencies, but they can also be issued by the EPA. State and local agencies may have their permit programs approved by the EPA in the State Implementation Plan (SIP) or they may be delegated the authority to issue permits on behalf of EPA.

How does the EPA guard against man-made chemicals?

The EPA Office of Prevention, Pesticides, and Toxic Substances (OPPTS) has a primary goal of preventing and reducing pesticide and industrial chemical risks to humans, communities and ecosystems. OPPTS employs a mix of regulatory and non-regulatory methods to achieve this goal. During the past fiscal year, OPPTS proposed and finalized a number of significant regulatory actions, and in the coming year expects to issue several more.

In working to meet the goal of OPPTS, the EPA evaluates pesticides to ensure that they will meet federal safety standards before they can be marketed and used in the U.S. The EPA uses data submitted by pesticide producers as the bases for the pesticide risk assessments and decisions as to whether pesticides meet safety standards. The Agency requires the submission of the data needed on a case-by-case basis and OPPTS updated its registration data requirements for conventional, biochemical and microbial pesticides in 2007.

As part of this continuing effort to update and/or establish pesticide data requirements, OPPTS expects to issue two proposed rules in 2008: One would update the data requirements for antimicrobial pesticides in 40 CFR Part 158; the other would establish data requirements for plant incorporated protectant (PIP) pesticides in 40 CFR Part 174.

To better protect human health and the environment, and to update and strengthen the pesticide worker safety programs, OPPTS expects to propose in late 2008 changes to the Code of Federal Regulations (CFR) that deal with certifying the competency of pesticide applicators to apply pesticides safely. Many changes in state programs have occurred since the initial applicator certification regulations were promulgated in the 1970s. Today, many states' programs go beyond the current federal requirements for training and certifying pesticide applicators. The EPA anticipates revisions that will broaden the scope of the certification program for occupational pesticide applicators, and strengthen the demonstration-of-competency requirement for certification. Together with the applicator certification regulation enhancements, OPPTS will propose enhancements to the agricultural worker protection regulation in a separate but related regulatory action, strengthen the elements of hazard communication and pesticide worker safety training.

How does the EPA treat endocrine-disruptive chemicals?

Based on available evidence, the EPA asserts that environmental exposure to man-made chemicals that mimic hormones, known as endocrine disruptors, might adversely affect human and wildlife populations. The Food Quality Protection Act directed the EPA to develop the Endocrine Disruptor Screening Program (EDSP), which uses validated test systems and other scientifically relevant information to determine whether certain substances may have hormonal effects in humans. As part of the program, the EPA is also developing a draft framework for procedures and processes to use when implementing the screening and testing phase of the EDSP, and has developed an initial list of chemicals for which testing will be required. The screening and testing phase of the program is expected to start in 2008.

What is the HPV Challenge program?

The EPA will continue the voluntary High Production Volume (HPV) Challenge Program — a collaborative partnership between the EPA and industry stakeholders to develop health and safety screening information on chemicals produced in high volumes. To complement this voluntary effort, OPPTS expects to propose a second test rule under the Toxic Substances Control Act (TSCA). This will require testing for a number of HPV chemicals that are not part of the voluntary program, and to develop information about the environmental fate (the ultimate destination of a chemical or biological pollutant after release into the environment) and potential hazards of those chemicals. When combined with exposure and use information obtained under the Inventory Update Rule (IUR), the Agency will evaluate potential health and environmental risks.

In 2007, the EPA began to evaluate the HPV data and develop hazard screenings and risk characterizations on the HPV chemicals. The results will be posted to the HPV Information System (HPVIS) website (www.epa.gov/hpvis). The EPA will also begin to assess lower-volume chemicals. These activities will help the EPA to identify needed next steps to obtain more detailed toxicity or exposure information, identify safer substitutes, or identify other risk mitigation steps. The EPA intends to consider any relevant data generated by corresponding foreign agencies, *e.g.*, Canada's Chemical Management Plan or the EU's REACH legislation.

How does the EPA encourage recycling?

Many hazardous secondary materials that are or could be reclaimed as part of the recycling process are regulated as hazardous wastes by the Resource Conservation and Recovery Act (RCRA) Subtitle C. Since requirements for permits can trigger corrective actions, the regulations can discourage recycling. The EPA is seeking approaches that will increase the safe recycling of hazardous waste, while ensuring their proper handling. If implemented correctly, a proposal to remove unnecessary regulatory controls over certain recycling practices stands to save \$107 million in average annual costs. Because these proposed regulations would encourage hazardous-waste recycling and be less restrictive of the treatment of hazardous wastes, some states might decide to retain the more restrictive regulations. Non-uniform compliance will reduce the estimated savings.

The EPA is considering revising the RCRA hazardous waste

regulations to exclude from the definition of a solid waste any oil-bearing hazardous secondary materials that are generated by the petroleum refining industry, if such materials are to be processed in a gasification system at the petroleum refinery and used in the manufacture of synthesis gas. The EPA believes that this rule will promote increased energy efficiency by allowing oil-bearing hazardous secondary materials to be used as a source of energy, while reducing the volume of hazardous waste that would otherwise be treated and sent to disposal facilities. The EPA estimates the regulation will save between \$46.4 million and \$48.7 million per year.

The comparable fuels program currently allows specific industrial wastes to be excluded from RCRA hazardous-waste requirements when they are used as a fuel and do not contain hazardous constituents at levels exceeding those in a typical benchmark fuel that facilities could otherwise use. The EPA is considering promulgating a rule that would expand those hazardous wastes that could be used safely for their energy value without the expense of an RCRA permit, to promote the use of these wastes as a renewable domestic source of energy.

How does the EPA address nano-scale materials?

In July 2007, the EPA requested public comment on draft documents proposing the launch of a voluntary Nanoscale Materials Stewardship Program (NMSP) under TSCA. The EPA believes it will complement the TSCA programs with a firmer scientific foundation for regulatory decisions. The EPA held a public meeting on this during August 2007 and, in September 2007, the agency held a public scientific peer consultation on the characterization of nanoscale materials as well as a conference on the pollution prevention benefits of nanotechnology. If available data indicate potential new uses of existing chemicals that may result in new exposures, or if they identify additional information gaps, the EPA may issue a significant new use rule or a reporting rule under TSCA.

How is the EPA preparing for emergencies?

The EPA Office of Solid Waste and Emergency Response (OSWER) focuses on: the safe management of wastes; preparing for, preventing and responding to chemical and oil spills, accidents and emergencies; enhancing homeland security; and cleaning up contaminated property and making it available for reuse. To further its mission, OSWER has identified several regulatory priorities for the upcoming fiscal year that will promote stewardship and resource conservation, and focus regulatory efforts on risk reduction and statutory compliance.

On Oct. 1, 2007, the EPA proposed amendments to the Spill Prevention, Control, and Countermeasure (SPCC) rule (40 CFR part 112) to clarify, tailor and streamline requirements to encourage greater compliance. They exempt certain containers from the SPCC requirements, clarify the general secondary containment requirements, and provide streamlined requirements for certain facilities. Further, they will increase flexibility in the security requirements and in the use of industry standards to comply with integrity testing requirements, provide additional flexibility in meeting the facility diagram requirements, clarify the flexibility provided by the definition of facility, and streamline requirements for oil production facilities.