United States
Environmental Protection
Agency

Solid Waste and
Emergency Response
(5305)

EPA530-F-94-027
November 1994

Office of Solid Waste

EPA

Environmental Fact Sheet

EPA ANNOUNCES STRATEGY FOR HAZARDOUS WASTE MINIMIZATION AND COMBUSTION

The Environmental Protection Agency (EPA) is announcing its Strategy for Hazardous Waste Minimization and Combustion. The Strategy contains EPA's goals and vision, and also outlines a series of actions for the Agency's hazardous waste program. The Strategy represents a major milestone in the Agency's ongoing commitment to determine how best to integrate source reduction and environmentally sound recycling into the national hazardous waste program and also how best to assure the public of safe operation of hazardous waste combustion facilities. This document culminates 18 months of intensive effort by EPA and other interested parties under the Draft Strategy on Hazardous Waste Minimization and Combustion, announced by Administrator Carol M. Browner in May 1993.

Background

EPA's May 1993 Draft Strategy on Hazardous Waste Minimization and Combustion announced an initial set of goals and launched a series of steps to maximize reduction of the amount of hazardous waste generated and to ensure safety and reliability of hazardous waste combustion in incinerators, boilers, and industrial furnaces. The Draft Strategy enabled EPA to take a leadership role in the broad national dialogue seeking a balanced resolution of difficult and controversial waste issues. The Draft Strategy also served as the focal point for all interested parties to take a fresh look at how to achieve a fully integrated waste management program -- one that has the proper emphasis on source reduction and environmentally sound recycling and one that defines an appropriate role for hazardous waste combustion.

These wide-ranging but sharply focused discussions have provided significant input on many key issues, including: the need for increased waste minimization, EPA's approach for upgrading regulatory controls on combustion units, flexible means to enhance public participation in permitting and to address environmental justice concerns, and the importance of aggressive,

credible compliance and enforcement at combustion facilities.

In addition to the broad national dialogue, EPA has taken a multitude of significant actions over the last 18 months in pursuit of the strategic goals (see Attachment for a list of major actions).

EPA's Strategy

GOALS: The backbone of EPA's Strategy are eight goals. These goals provide the framework for EPA's future actions and for reaching the best possible solutions to the issues that have arisen and will undoubtedly continue to arise over the management of hazardous waste in the United States. These goals are:

- **Public Outreach and EPA-State Coordination:** Continue to facilitate an open and broad national dialogue among all stakeholders on significant hazardous waste issues. Give top priority to working with states as co-regulators of hazardous waste.

- **Waste Minimization:** Under the Hazardous Waste Minimization National Plan, reinforce strong preference for source reduction over hazardous waste management in order to reduce both the long-term demand for treatment, storage, and disposal capacity and the quantities of persistent, bioaccumulative, and toxic constituents that need to be managed. In partnership with states, industry, and local communities, pursue aggressive use of waste minimization measures with primary emphasis on voluntary actions. Afford members of the public a greater opportunity to become aware of waste minimization activities in their communities.

- **Role of Combustion and Alternative Technologies:** Maintain appropriate role for combustion, and continue to ensure that combustion and other treatment facilities reduce toxicity, volume, and/or mobility of hazardous wastes in a manner that is protective of public health. Foster the commercial development and use of alternative treatment and other innovative technologies that are safe and effective in reducing the toxicity, volume, and/or mobility of RCRA industrial process and remediation wastes.

- **Emission Standards and Controls:** Develop and impose more rigorous controls on combustion facilities based on an assessment of available technologies and current science. Develop these controls as a coordinated effort to implement both RCRA and the Clean Air Act authorities for hazardous waste combustion facilities. Ensure that hazardous waste combustion facilities do not pose an unacceptable risk to human health or the environment.

• **Enforcement and Compliance Assistance:** Continue aggressive compliance and enforcement efforts against hazardous-waste burning incinerators and boilers and industrial furnaces (BIFs) while working with industry to ensure that EPA's regulations are understood and followed. Enhance public confidence in Agency oversight activities and facility compliance by promoting public understanding of these activities and increased opportunities for public involvement in the enforcement process.

• **Public Involvement in Permit Process:** Enhance public involvement opportunities in the process for considering permit applications for combustion facilities. Take appropriate actions to ensure that local communities are fully informed about the RCRA decision-making process (including waste minimization opportunities) and have an opportunity to participate in that process.

• **Facility Permitting Priority:** Give higher priority to those facilities for which a final permit decision would result in the greatest environmental benefit or the greatest reduction in overall risk to the public. Give lower priority to permit decisions on new combustion facilities that are not replacing older facilities.

• **Risk Assessment:** Advance scientific understanding on combustion issues and risk assessment, and ensure that permits are issued at facilities in a manner that protects against unacceptable risks to human health and the environment. Use sound science in technical decision-making.

Activities

The Strategy builds upon the dialogue and actions taken over the last 18 months. A broad range of activities (many of which are already under way) will be undertaken to implement the Strategy. Among these are:

• Implementation of the Hazardous Waste Minimization National Plan. Under the National Plan, EPA will promote source reduction and environmentally sound recycling for the waste constituents that present the greatest potential hazard to human health and the environment -- i.e., persistent, toxic, and bioaccumulative waste constituents. EPA's goals are to reduce the most persistent, bioaccumulative, and/or toxic constituents in hazardous waste by 25% nationally by the year 2000, and by 50% nationally by the year 2005.

• EPA will continue to emphasize the "public right to know," particularly with respect to waste minimization activities at generating facilities and at combustion facilities. To that end, EPA will provide enhanced level of information to the public and stakeholder groups through

newsletter and electronic media. EPA will also explore use of information outreach programs and technical assistance.

- EPA will continue its commitment to working closely with States as partners and co-regulators. To that end, the EPA-State Steering Committee will be involved on significant policy and technical issues, and state representatives will continue to be brought into EPA planning efforts and work groups early in these processes.

- The Strategy recognizes that combustion of hazardous waste is a process that substantially and permanently reduces the toxicity and volume of virtually all organic-bearing waste streams. However, EPA also recognizes the controversy that has arisen over the use of combustion for hazardous waste, both with respect to ensuring proper treatment/destruction and more fully characterizing the risks from combustion emissions. As a result, EPA is making a commitment in the Strategy to identify and address barriers that stand in the way of commercial development and use of safe and effective innovative technologies.

- EPA will develop and promulgate rules that impose more rigorous controls on combustion facilities based on an assessment of available technologies and most current science. The proposed rule is scheduled for September 1995, with a final rule scheduled for December 1996. The intent is to develop this rule in a coordinated manner under both RCRA and the Clean Air Act authorities. EPA will encourage all combustion facilities to implement the proposed standards to reduce emissions as quickly as possible, and will itself examine how to implement the final rule in a manner that achieves the greatest possible immediate reduction in dioxin, furan, and metal emissions at all hazardous waste combustion facilities, including consideration of whether and how to reopen and modify existing permits as appropriate.

- Current efforts will be vigorously pursued, both inside and outside EPA, to test continuous emission monitors (CEMs) for toxic organics and metals and to stimulate their commercial availability and use as soon as possible. The goal is to have these CEMs installed at hazardous waste combustion facilities as soon as possible in a manner that affords public access to the monitoring results.

- By summer 1995, EPA is scheduled to finalize the rule to enhance general public involvement opportunities in the process for considering permit applications for combustion and other RCRA facilities, and to better address limiting operations at facilities that fail trial burns during interim status.

- EPA's strong and aggressive program of inspections and enforcement actions at hazardous waste handling and combustion facilities will continue. Emphasis will be placed on policies and procedures that maximize facility compliance, that increase public confidence in Agency oversight activities and in facility compliance, and that enhance public understanding of and involvement in the enforcement process.

- Avenues to be explored in pursuing these enforcement-related objectives are: (1) including provisions in hazardous waste settlement agreements to establish citizen advisory committees or to create publicly accessible, real-time "on-line" compliance monitoring systems; and (2) expanding the use of pollution prevention and waste minimization strategies in consent agreements through compliance requirements and Supplemental Environmental Projects (SEPs).

- Higher workload priority will be given to those facilities for which a final permit decision would result in the greatest environmental benefits to the surrounding community or the greatest reduction in overall risk to the public. Permit renewals can be included in the high priority category. The Agency will maintain its current policy of lower priority for work on applications involving new, non-replacement combustion facilities.

- The Strategy also maintains the current policy that risk assessments, including indirect exposure pathways, should be performed prior to final permit determinations. The Agency will continue availability of HQ-Regional Risk Assessment Review Team in scoping, performing, and/or reviewing risk assessments.

The Strategy reaffirms EPA's commitment to the principle that the best approaches to hazardous waste minimization and management will be most easily found and implemented in a spirit of cooperation and partnership among the interested parties. To that end, the Strategy signals that EPA will continue to serve as a chief catalyst for broad and open discussions among all interested parties and, in particular, to foster a full and open relationship between RCRA facilities and their surrounding communities.

FACT SHEET ATTACHMENT

Major actions implementing the Draft Strategy on Hazardous Waste Minimization and Combustion since May 1993 include:

• Over the past 18 months, members of the public (especially citizens from the local communities affected by hazardous waste activities), industry, public interest groups, and state officials have engaged in an essential, broad national dialogue on hazardous waste. This dialogue has occurred at a 4-day National Roundtable on waste minimization and combustion held in Washington, D.C. in November 1993, at four Regional Roundtables held in April-May 1994 in San Francisco, Houston, Chicago, and Atlanta, as well as in hundreds of informal meetings with individuals or stakeholder groups.

• In response to citizen requests for greater availability of information on the Draft Strategy, EPA has made key documents available on electronic networks and has begun a Strategy Update newsletter. The Newsletter is currently mailed to over 3000 individuals, companies, and organizations.

• In November 1993, Administrator Browner sent letters to approximately 22,000 large quantity generators of hazardous waste that were required to certify that they had a waste minimization program in place in 1991. Letters were also sent to approximately 12,000 chief executive officers of the parent corporations of those generators. The letters referenced current requirements on having waste minimization programs and encouraged the companies to make those programs available to the public.

• EPA provided for broad public input into and review of its Draft National Hazardous Waste Minimization Plan, released in May 1994. This dialogue has resulted in significant advancements during development of the final National Plan, which is being released in concert with this Strategy.

• Also released in 1994 for public comment was EPA's Draft Methodology Document for Setting Priorities for Hazardous Waste Minimization. This methodology is a key component of EPA's National Plan.

• A four-day focus group meeting in September 1994 was held in Washington, D.C. to discuss the framework of and issues associated with developing the RCRA Hazardous Waste Minimization National Plan. Results of the discussions were integrated into the final National Plan.

• EPA's Office of Solid Waste (OSW) distributed to the Regions and States an Addendum to the RCRA Implementation Plan (RIP) for FY '95 discussing how source reduction and recycling can be integrated into the existing program (e.g., permits, enforcement agreements) and can be pursued in non-regulatory initiatives, such as technical assistance, training, and outreach.

• EPA initiated development of a rulemaking to upgrade the technical emission standards and control for hazardous waste incinerators and BIFs. EPA's initial technical analysis of the performance of existing combustion units was released for full public review in May 1994 in the Combustion Emissions Technical Resource Document (CETRED). EPA's Office of Solid Waste (OSW) and the Office of Air Quality Planning and Standards (OAQPS) have coordinated efforts to develop proposed rules to set emission standards for sources that burn hazardous waste, such as incinerators, cement kilns, light-weight aggregate kilns, boilers, halogen acid furnaces, and other types of industrial furnaces.

• EPA and the States have undertaken three major enforcement initiatives. The initiatives involved 93 complaints and settlements, all of which addressed hazardous waste combustion violations. The enforcement actions proposed over $31 million in new civil penalties, while collecting nearly $6 million in settlement of ongoing actions.

• EPA and the States inspected over 200 facilities between May 1993 and March 1994, and made another 255 inspections at combustion facilities between March 1994 and September 1994. Of the 255 inspections since March 1994, 115 were at BIFs and 140 at incinerators. Many facilities have been inspected a number of times.

• To improve compliance and enforcement efforts, EPA has held several compliance training sessions with Regional and state personnel, and has also held compliance workshops with industry groups. EPA is also preparing documents to better inform the public how EPA's administrative enforcement process works, such as a "Plain Language Guide to EPA Penalty Policies," scheduled for release this year. In addition, to increase understanding of the hazardous waste regulations and the enforcement process, EPA released an OSW memorandum in October 1994 explaining the regulatory requirements for intermediate waste treatment/fuel blending operations that handle combustible and other wastes.

• EPA published a major proposal in May 1994 to revise the RCRA rules to ensure that the public has a greater opportunity to participate in the permitting process. The proposal also included provisions to limit operations at facilities that fail trial burns during interim status. EPA directed Regions and States to begin implementation of appropriate portions of this proposal right away without waiting for it to be finalized.

• EPA's Office of Solid Waste and Emergency Response convened a task force in 1994 to explore avenues to address a number of environmental justice and facility siting concerns raised, among other places, at the national and regional roundtables on the Draft Strategy. The Task Force recommendations complemented the Agency-wide efforts, and have led to the initiation of a project to upgrade RCRA facility location standards.

• The Regions and States have called in all permit applications for commercial BIFs that are currently operating under interim states. These permit applications have received higher priority in terms of review and processing. Permit applications and actions for new facilities and for expanded capacity at existing facilities have been given lower priority over the last 18 months.

• In connection with its current policy of requiring risk assessments to be completed prior to making final permit determinations, 10 risk assessments have been reviewed by EPA headquarters and regional experts and about another 20-30 are under way at individual combustion facilities. To assist in this effort, EPA published two significant technical documents -- a draft Addendum to the 1991 ORD indirect risk guidance and a draft OSW combustion facility risk assessment guidance (including a risk screening protocol). These documents incorporate the latest information on performing risk assessments, particularly with respect to indirect exposure pathways, which have proven to be very significant in connection with combustion facilities.