

meetings and public hearing, as well as those submitted in writing.

To supplement the information included in the CKD RTC, the Agency analyzed the public comments and undertook several additional data collection and analysis efforts. The new data generated by EPA were placed into the RCRA docket for public inspection and comment and a Notice of Data Availability (NODA) was published in the September 14, 1994, **Federal Register** (59 FR 47133). The Agency provided a 30-day comment period for review of the new data and analyses. The principal new documents placed in the docket addressed the following issues: Additional CKD damage cases; environmental justice; analysis of CKD generation and characteristics data; costs of CKD management alternatives; and human health and environmental risks posed by CKD management.

Subsequent to issuing the NODA, EPA identified certain errors and, in a supplemental errata document, corrected certain portions of the new data pertinent to additional assessments of potential risk from CKD waste. EPA published a correction Notice on October 11, 1994 (59 FR 51440) that identified the corrections and provided a public comment period on the corrected materials until November 10, 1994.

In preparing both of these Notices, the Agency made a special effort to make the data accessible to the public. In addition to placing this information in the RCRA docket, the Agency posted data files in electronic format on EPA's Superfund electronic bulletin board (CLU-IN) and made these data available on disk upon request.

Today's decision is based on the RTC and the data and analyses that underlie the report, as well as on public comments received during the public hearing and public meetings, or in written form submitted during the comment periods, and EPA analyses of these comments.

C. Stakeholder Comments

The Agency received over 1,100 public comments on the RTC on Cement Kiln Dust and subsequent Technical Background Documents from individual companies and trade organizations representing the cement industry and their affiliated consultants, suppliers, and waste fuel blenders; individual companies and trade groups representing the hazardous waste incineration industry, and their associated consultants; other companies that handle CKD; public interest groups; and private citizens.

Comments were received on a wide variety of topics discussed in the RTC and NODA including cement production and CKD generation and characteristics; current and alternative CKD management practices; documented damage and potential danger to human health and the environment; existing regulatory controls on CKD management; and cost and economic impacts of alternatives to current CKD disposal practices. The following is a brief summary of the major positions presented in the public comments. (A detailed response to all of the comments is included in two background documents that are identified below.)

Companies and groups representing the cement manufacturing industry generally stated that CKD exhibits low inherent toxicity and poses minimal risk to human health and the environment. They argued for continued management of CKD using existing Federal and State authorities, and urged the Agency to work with the cement industry to develop voluntary standards for the management of all CKD.

Commenters from companies that handle CKD stated that CKD has numerous beneficial uses (e.g., as a liming agent or sewage sludge stabilizer) which would be detrimentally affected by regulation of CKD as a hazardous waste.

Companies and groups representing the hazardous waste treatment industry generally argued for an aggressive regulatory determination for CKD. These commenters generally favored removing the exemption and immediately imposing hazardous waste regulations for the management of CKD, especially dust from kilns that burn hazardous waste.

Public interest groups generally stated that current industry management of CKD from kilns that burn hazardous waste causes chronic human health problems and extensive environmental damages, including degraded water and air quality, affecting local residents around cement manufacturing facilities. These commenters generally argued for immediate adoption of hazardous waste regulations for CKD generated from hazardous waste-burning kilns.

Most of the comments from public citizens were from residents living around cement manufacturing facilities, and the commenters were divided in their position on CKD. Some commenters expressed concern over potential loss of jobs at plants in their communities if CKD is regulated as a hazardous waste. Others commenters, generally residents who live around cement plants that burn hazardous

waste, stated that releases of CKD from plants in their communities are a visual nuisance, degrade the air and vegetation, and cause health problems for themselves and their neighbors.

EPA has carefully reviewed all comments in arriving at today's final determination. The Agency has prepared a detailed summary of comments received, along with responses, in two background documents that are available for viewing in the RCRA docket. The first document, titled *Summary of and Responses to Comments on the Report to Congress*, presents the public comments and the Agency's response to these comments on the *Report to Congress on Cement Kiln Dust*; the second document, titled *Summary of and Responses to Comments on the Notice of Data Availability*, presents the public comments and the Agency's response to the material announced in the NODA.

II. Major Findings of the RTC and NODA

In this section, EPA briefly restates some of the basic technical findings presented in the RTC, as well as new insights presented in the technical background documents announced in the NODA. These findings are generally presented in categories that correspond to the study factors listed in RCRA section 8002(o).

A. Sources and Volumes of Waste

Information received by the Agency since publication of the RTC (in comments and from additional research) suggests that, as of 1992, the domestic cement industry consisted of 111 plants operated by 46 companies. The five largest cement clinker producing states are California, Texas, Pennsylvania, Missouri, and Michigan. The cement industry burns large amounts of high Btu fuels, primarily coal and other fossil fuels, during the manufacturing process. In 1990 and in 1992, 23 facilities also burned hazardous waste as fuels.

Based on an analysis of existing data, including data collected by the Portland Cement Association and separately by EPA under RCRA section 3007 authority from operators of cement manufacturing facilities, the Agency has determined that, nationally, cement plants generate large quantities of CKD. In particular, EPA has estimated that in 1990, the generation of gross CKD (i.e., CKD that is collected by air-pollution control devices) was 12.7 million metric tons. There are, however, wide variations among kilns and plants in the amount of gross CKD generated per ton of clinker.