

US EPA ARCHIVE DOCUMENT

Office of Solid Waste



# Environmental Fact Sheet

## MANAGEMENT STANDARDS PROPOSED FOR CEMENT KILN DUST WASTE

*The Environmental Protection Agency (EPA) is promoting pollution prevention, recycling, and safer disposal of cement kiln dust (CKD) by proposing management standards for this waste. The Agency believes that these management standards are a creative, affordable, and common sense approach that can protect human health and the environment without imposing unnecessary regulatory burdens on the cement kiln industry. These standards provide a new, tailored framework that safeguards ground water and limits risk from releases of dust to air.*

### Background

Since 1980, cement kiln dust and certain other wastes have been excluded from otherwise applicable hazardous waste regulations under Subtitle C of the Resource Conservation and Recovery Act (RCRA). As required by RCRA, EPA studied the adverse effects on human health and the environment from the disposal of cement kiln dust. The Agency found that some environmental harm results from CKD waste, and in 1993, reported these and other findings to Congress. Subsequently, Congress required EPA to determine the appropriate regulatory framework for managing cement kiln dust waste.

In 1995, EPA determined that some additional control of cement kiln dust was needed. Although current disposal practices cause some environmental damage, the Agency found that regulating cement kiln dust as a hazardous waste was not appropriate. Since some controls are needed, EPA is proposing a tailored set of standards for managing cement kiln dust waste.

### Action

EPA is proposing options to mitigate risk from the mismanagement of cement kiln dust waste. The Agency's preferred option is to provide management standards whereby CKD remains a nonhazardous waste so long as the waste is managed according to the requirements. Cement kiln dust becomes a regulated hazardous waste only if significant violations of the management standards occur.

Under EPA's proposed standards, cement kiln dust is to be managed in landfills designed to meet specific performance requirements that protect ground water from toxic metals. In addition to performance criteria, the Agency is proposing technology-based standards that meet the performance criteria, such as using composite liners in landfills. Requirements for ground-water monitoring, corrective action, closure, and post-closure

care also are included.

To control releases of cement kiln dust to air, EPA is proposing a performance standard that requires facility owners and operators to take measures to prevent releases from landfills, handling conveyances, or storage areas. As an alternative to the performance-based standard, the Agency is proposing technology-based standards that require: (1) compacting and periodic wetting of CKD managed in landfills; (2) on-site handling of CKD in closed, covered vehicles and conveyance devices; and (3) keeping cement kiln dust in enclosed tanks, containers, and buildings when temporarily stored for disposal or sale.

Cement kiln dust frequently is used for beneficial agricultural applications. When used for these purposes, the Agency proposes concentration limits for arsenic, cadmium, lead, thallium, and chlorinated dibenzodioxins and dibenzofurans.

Other options discussed for managing cement kiln dust include:

- ! The development of CKD waste management regulations by individual states. EPA would develop regulations governing cement kiln dust in states without regulatory controls.
- ! The adoption of EPA's proposed management standards by individual states. If enough states adopt the proposed standards, the Agency would take no further action on cement kiln dust.
- ! A two-tiered approach in which cement kilns burning hazardous waste are regulated as hazardous waste generators. Kilns that do not burn hazardous waste would only follow the proposed management standards.
- ! A voluntary operating agreement between the cement kiln industry and EPA in which CKD remains nonhazardous and the industry ensures the safe management of CKD.

## Impact

In 1990, the cement industry generated an estimated 12.7 million metric tons of cement kiln dust from 111 plants in 38 states, 4 million metric tons of which were disposed of in piles, quarries, and landfills. In 1995, the industry disposed of an estimated 3.3 million metric tons of cement kiln dust. Currently, 110 Portland cement plants operate in the United States and Puerto Rico. The chief cement-producing states are California, Texas, Pennsylvania, and Michigan.

## For More Information

The *Federal Register* notice, this fact sheet, and other documents related to this action are available in electronic format on the Internet at <<http://www.epa.gov/epaoswer/other/ckd/index.htm>>. For additional information or to order paper copies of any documents, call the RCRA Hotline. Callers within the Washington Metropolitan Area must dial 703-412-9810 or TDD 703-412-3323 (hearing impaired). Long-distance callers may call 1-800-424-9346 or TDD 1-800-553-7672. The RCRA Hotline operates weekdays, 9:00 a.m. to 6:00 p.m. Address written requests to: RCRA-Docket@epa.gov or RCRA Information Center (5305W), US EPA, 401 M Street, SW, Washington, DC 20460.