

US EPA ARCHIVE DOCUMENT

Office of Solid Waste



# ENVIRONMENTAL FACT SHEET

## REGULATIONS TO BE REVISED FOR ZINC FERTILIZER RECYCLING

*The Environmental Protection Agency (EPA)'s proposal to modify existing regulations for zinc fertilizers made from recycled industrial wastes will conserve natural resources, prevent pollution, and save money. These provisions are expected to improve and increase legitimate zinc recycling, and reduce contaminant levels in these types of fertilizers. While ensuring that recycled zinc fertilizers are good, clean fertilizers, regulatory restrictions on this industry will be streamlined. As a result of this action, industry should save around seven million dollars.*

### Background

In 1997, the public and press—particularly in the Pacific Northwest—raised concerns about the use of hazardous wastes to manufacture agricultural fertilizers and soil amendments. As a result, EPA launched a major effort to assess hazardous contaminants in fertilizers, and to reassess existing Agency regulations governing these recycling practices. The Agency found that:

- With a few exceptions, fertilizers generally do not appear to contain contaminants (such as lead, cadmium, or arsenic) at levels that present public health concerns.
- Most fertilizers are relatively “clean,” so there is not an apparent need for EPA to develop comprehensive new federal regulations for fertilizer products.
- The majority of fertilizers made from recycled hazardous wastes are zinc micronutrient fertilizers, which are applied sparingly to farmlands (typically, a few pounds per acre a year), and are used to fertilize crops such as corn, potatoes, and fruit trees.
- About half of all zinc fertilizers are made from hazardous industrial wastes (a practice regulated by EPA), which can include the use of emission control dusts from electric arc steel furnaces and brass foundries, as well as ash from energy recovery facilities that burn tires. Zinc fertilizers can also be made from nonhazardous wastes and “virgin” materials, such as ore concentrates.

EPA's studies of fertilizer contaminants also found that the current regulations covering this kind of recycling need to be revised, for three main reasons: (1) the current EPA standards for contaminants in these types of fertilizer products are applied inconsistently, allowing exemptions for certain recycled zinc fertilizers with relatively high contaminant levels; (2) legitimate recycling of hazardous waste into fertilizers is currently hampered by unnecessary regulatory restrictions; and (3) existing standards for

contaminants in hazardous waste-derived fertilizers can and should be tightened to reflect levels that industry can achieve through demonstrated, affordable, sound manufacturing practices.

## Action

The Agency is proposing to make zinc-bearing industrial waste recycling simpler and more consistent by using a common-sense regulatory approach. In summary, this proposal will:

- ! Make current regulations stronger and more consistent by making all hazardous waste derived fertilizers meet stringent contaminant standards (including fertilizers made from electric-arc furnace dust, or K061, which are now exempt from the standards).
- ! Limit hazardous metals in recycled zinc fertilizers by setting standards based on demonstrated good manufacturing practices, and by setting a standard for dioxins based on “background” levels in soils. The overall result will be to reduce the volumes of contaminants—particularly heavy metals—that are applied to the nation’s farmlands from hazardous waste-derived zinc fertilizers.
- ! Impose more appropriate management controls on waste materials used in zinc fertilizer recycling. The proposal will better define “legitimate recycling” for zinc fertilizers, and will streamline and strengthen existing regulatory controls over the management of hazardous wastes used as feedstocks in zinc fertilizer manufacturing.

The proposal also discusses the prospect of removing the current exemption for certain mining wastes that exhibit a hazardous waste characteristic and that are used to make fertilizer products.

### **State vs. Federal Role**

Virtually all states have regulatory programs for fertilizers, which are administered by state agricultural agencies primarily to ensure that fertilizers meet the manufacturers’ plant nutrient claims, and that they are accurately classified and labeled. Some states, such as the state of Washington, have recently begun to regulate contaminant levels in nearly all fertilizers and soil amendment products. Since EPA regulates contaminants in only a very small percentage of the fertilizers currently on the market (perhaps as little as one percent or less), the Agency supports and encourages these state efforts.

### **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/hazwaste/recycle/fertiliz/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](mailto:rcra-docket@epa.gov) or RCRA Information Center (5305W), US EPA, Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0002.