

# FERTILIZER

## Hazardous Wastes In Fertilizer Threaten Farmers, Gardeners & Our Food Supply



- **The Fertilizer Market for Hazardous Waste.** For the last twenty five years, fertilizer manufacturers have been purchasing industrial waste as a cheap source of raw materials containing plant nutrients such as nitrogen and lime. The problem is that these wastes often contain toxic ‘stowaways’—such as dioxin and heavy metals like arsenic, lead, and mercury—that are disposed on our farms and gardens under the guise of recycling. Industries must abide by strict federal guidelines for tracking hazardous wastes disposed at landfills, but if they sell their waste to fertilizer companies, both parties can circumvent these laws and make money. In other words, one day it is considered a hazardous waste, and the next day it is being dumped on farmland or home gardens as a “fertilizer.” More than six hundred companies from 44 states mix over 270 million pounds of hazardous waste with fertilizer as a cheap and unregulated means of disposal [OTA].
- **Recycling Exemptions Put Public at Risk.** Federal law regulates the transport, disposal, recycling or reuse of hazardous waste. The same disposal standards that regulate hazardous waste going into specially lined landfills are applied to industrial wastes used to make fertilizer. This is because the Environmental Protection Agency (EPA) defines the application of fertilizer derived from hazardous waste as a form of “land disposal.” Thus, farmlands, golf courses, lawns, and gardens are being contaminated with hazardous industrial wastes. These disposal regulations fail to protect people, food crops, and farmland from exposures to dioxin and heavy metals. The loopholes also allow toxic waste streams to bypass costly disposal requirements and be “recycled” for use in fertilizer. According to the EPA, about half of all zinc fertilizers are made with ash from steel mills and tire incinerators. Federal regulations permit waste streams with levels of dioxin as high as 800 parts per trillion and lead at as much as one percent to be used to make fertilizer. Such exemptions allow persistent toxins in fertilizers at levels that the EPA would require a cleanup if dumped on a residential property!
- **Toxic Fertilizers Threaten the Integrity of Food Supplies.** Heavy metals and dioxins in fertilizers accumulate in agricultural soils, are taken up by plants, and erode into surface waters. Repeated applications of contaminated fertilizers put the integrity of our farmland and food supply in question—lettuce, corn and wheat absorb cadmium; root crops such as potatoes absorb arsenic; and fruits and grains take up lead. Consumers, including farmers and home gardeners, are kept in the dark because companies are not required to provide any information about toxic ingredients or their source. A few states have required fertilizer companies to report some of the heavy metal levels in their products on a website. This level of disclosure is woefully insufficient and should be available at the point of purchase. Few fertilizer buyers have any idea that they could be bringing home hazardous substances.

**BE SAFE: Take Precautionary Action To Protect Our Farmlands & Homes from Contaminated Fertilizer**

# BE SAFE's FOUR PRINCIPLES

## 1. HEED EARLY WARNING SIGNS

Very little research has been done to determine how heavy metals and other contaminants react with soil, are taken up by plants, or migrate to ground and surface waters. Exposure to these chemicals when handling fertilizer through direct contact, breathing airborne particles, or eating food grown with them could increase the risk of serious health problems. Risks to the environment are also a concern, as early warning signs such as mysterious fish deformities have turned up in sections of rivers that receive heavy doses of agricultural runoff across the country.

A common sense, precautionary approach would prevent any toxic wastes from being used as fertilizer. Until we understand more about the toxicity and persistence of these chemicals in the environment, fertilizer companies should be required to ratchet down the levels of heavy metals and other known toxins in their products on an annual basis until they are completely phased out.

## 2. PUT SAFETY FIRST

Mixing hazardous waste in fertilizer is dangerous and unnecessary. It contaminates our water, land and food supply and threatens human and environmental health. This practice is permitted and even encouraged by the federal government under the guise of recycling and yet has no other justification than to provide an inexpensive means of waste disposal. All the essential minerals sought from these wastes are available from other non-toxic sources. We must put safety first and phase out the federal policies that permit industries to play this shell game with their hazardous wastes. Until such time, farmers and gardeners should investigate the fertilizer products they intend to purchase. For instance, using the Internet consumers can access information about heavy metal content in fertilizer products sold in Washington, Oregon and California. Although much of the fertilizer market is regional, many national brands are sold throughout the country.

## 3. EXERCISE DEMOCRACY

Using gardens and farmlands as disposal sites for industrial hazardous waste is unacceptable. We must call on our government to ban contaminated fertilizers and hold EPA accountable for failing to safely regulate this form of hazardous waste. When hazardous waste is used as fertilizer, it allows industries to transfer their liability onto the landowner or farmer using the product. Our government needs to adopt "zero tolerance" policies to keep toxins off our agricultural lands, rather than providing a cheap disposal method for these industries. We need to form coalitions among state groups to amplify pressure on federal and state departments of agriculture. Consumers should let their garden and hardware stores know that they will not purchase products derived from hazardous industrial waste.

## 4. CHOOSE THE SAFEST SOLUTIONS

Support campaigns to ban hazardous industrial waste from being “recycled” into fertilizer. Testing your own soil is the first step in determining whether you need fertilizer, and if so, which nutrients your soil might need. Avoid products that indicate the product is waste-derived or high in heavy metals. Caring for the health of soil is the best means to support healthy plant growth using composts and natural soil amendments.

### ■ Use Compost and Organic Fertilizers

Let your hardware and garden store owners know you will not purchase products derived from hazardous industrial waste. Find out more about composting by visiting [www.oldgrowth.org/compost](http://www.oldgrowth.org/compost) and [www.compostingcouncil.org](http://www.compostingcouncil.org). Hundreds of companies that sell organic fertilizers and soil amendments can be found in your local yellow pages or on the Internet.

### ■ Join the Safe Fertilizer Campaign

Local activists in Oregon are working to improve laws and enforcement, document health impacts, and increase information access. Support their efforts and talk with groups in your state about starting a campaign. To find out more, visit [www.oregontoxics.org](http://www.oregontoxics.org).

### ■ BE SAFE

Take precautionary action to prevent hazardous waste from being used in fertilizers. Be counted when we deliver this national Platform to the White House in 2005. Endorse the BE SAFE Platform today at [www.besafenet.com](http://www.besafenet.com).

### ■ Your Vote Counts

The next election will set the country’s course on hazardous waste and fertilizer policies. For information on environmental voting records, contact [www.sierraclub.org](http://www.sierraclub.org) and [www.lcv.org](http://www.lcv.org). To register to vote, contact [www.earthdaynet](http://www.earthdaynet)

## TOXIC FERTILIZER PULLED FROM STORE SHELVES

### STATE TESTING FINDS IRONITE FERTILIZER IS HAZARDOUS WASTE

In 2002, 23 health and environmental groups called on Home Depot, Lowe’s and Target retail stores to stop selling a brand-name fertilizer called Ironite because it contains dangerous levels of lead and arsenic. This popular fertilizer used by homeowners and on golf courses and athletic fields, is made from mining waste from the Iron King Mine in Arizona. Data from the Environmental Protection Agency (EPA) shows Ironite contains the highest levels of arsenic of all fertilizer products tested. Companies can spread mine tailings on land without the restriction of federal hazardous waste laws under a 1980 Congressional exemption.

Testing by a Minnesota state agency found Ironite contained up to 6,020 parts per million (ppm) arsenic and 3,400 ppm lead. An Oregon state agency found arsenic levels in Ironite classifies it as a *hazardous waste*. Arsenic is a known carcinogen and even small amounts of lead can harm a child’s ability to learn. Children can be exposed to lead and arsenic through contact with the soil after lawns, gardens, and playing fields are fertilized. Accidental ingestion of less than ½ teaspoon of this fertilizer may be toxic to small children. [WSHD]

Although Ironite Products claims the lead and arsenic in its product are not “biologically available” to plants, testing by the state of Washington determined 36% of the arsenic and up to 81% of the lead is bioavailable to humans. Because of public pressure, Lowe’s Department Stores and the state of Maine pulled Ironite off their shelves, and California has filed a lawsuit against the company.

## References:

Oregon Toxic Alliance Website, 2003, [OTA]; *Holding the Bag: How Toxic Waste in Fertilizer Fails Farmers and Gardeners*, Washington Toxics Coalition, 2001 (WTC); *Regulations to be Revised for Zinc Fertilizer Recycling*, EPA, November 2000; *Waste Lands: The Threat of Toxic Fertilizer*, California Public Interest Research Group Charitable Trust, 2001 (CALPIRG); *Hazardous Waste with Your Fertilizer?*, OTA, 2002; *Critique of the California Dept. of Food & Agriculture’s Proposed “Risk-Based” Standards for Regulating Toxic Materials in Inorganic Fertilizer*, CALPIRG, undated; *The Complete Guide to the Hazardous Waste Regulations, 2nd Edition*. Wagner, Travis; Van Nostrand Reinhold, NY; 1991; p. 31; and Washington State Health Department, May 1998 [WSHD].

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# ***BE SAFE Platform***

*In the 21st century, we envision a world in which our food, water and air are clean, and our children grow up healthy and thrive. Everyone needs a protected, safe community and workplace, and natural environment to enjoy. We can make this world vision a reality. The tools we bring to this work are prevention, safety, responsibility and democracy.*

*Our goal is to prevent pollution and environmental destruction before it happens. We support this precautionary approach because it is preventive medicine for our environment and health. It makes sense to:*

- *Prevent pollution and make polluters, not taxpayers, pay and assume responsibility for the damage they cause;*
- *Protect our children from chemical and radioactive exposures to avoid illness and suffering;*
- *Promote use of safe, renewable, non-toxic technologies;*
- *Provide a natural environment we can all enjoy with clean air, swimmable, fishable water and stewardship for our national forests.*

*We choose a “better safe than sorry” approach motivated by caution and prevention.  
We endorse the common-sense approach outlined in the BE SAFE’s four principles listed below.*

## ***Platform Principles***

### **HEED EARLY WARNINGS**

Government and industry have a duty to prevent harm, when there is credible evidence that harm is occurring or is likely to occur—even when the exact nature and full magnitude of harm is not yet proven.

### **PUT SAFETY FIRST**

Industry and government have a responsibility to thoroughly study the potential for harm from a new chemical or technology before it is used—rather than assume it is harmless until proven otherwise. We need to ensure it is safe now, or we will be sorry later. Research on impacts to workers and the public needs to be confirmed by independent third parties.

### **EXERCISE DEMOCRACY**

Precautionary decisions place the highest priority on protecting health and the environment, and help develop cleaner technologies and industries with effective safeguards and enforcement. Government and industry decisions should be based on meaningful citizen input and mutual respect (the golden rule), with the highest regard for those whose health may be affected and for our irreplaceable natural resources—not for those with financial interests. Uncompromised science should inform public policy.

### **CHOOSE THE SAFEST SOLUTION**

Decision-making by government, industry and individuals must include an evaluation of alternatives, and the choice of the safest, technically feasible solutions. We support innovation and promotion of technologies and solutions that create a healthy environment and economy, and protect our natural resources.

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**Take precautionary action to prevent toxic waste from being used in fertilizers. Sign onto the BE SAFE Platform.**

Be counted when we deliver this national platform to the White House in 2005.  
Endorse the platform today at [www.besafenet.com](http://www.besafenet.com)

BE SAFE is coordinated by the Center for Health, Environment & Justice. To sign the platform or for more information, contact us at CHEJ, P.O. Box 6806, Falls Church, VA 22040, 703-237-2249, or 518-732-4538, or visit [www.besafenet.com](http://www.besafenet.com)

