



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001**

June 12, 2009

FOR THE RECORD

**NRC STATEMENT ON CONTAMINATED
SCRAP METAL AND CONSUMER PRODUCTS**

A recent series of articles published by the Scripps Howard News Service purports to expose an alarming trend of radioactively contaminated metal in consumer products. Although the series claimed that “thousands of everyday products and materials” have been contaminated, only a few examples were provided. Most of the events cited in the series are several years old, and involved small amounts of radiation and correspondingly small risk to public health and safety. In most cases the consumer products involved never reached the market or were quickly recalled once the contamination was discovered. In other words, the public was protected.

The articles also charged that the U.S. Nuclear Regulatory Commission and other Federal and State agencies are powerless to protect the public from contaminated metal in consumer products. To the contrary:

- The NRC coordinates with other Federal and State agencies to maintain the accountability of radioactive materials and prevent their accidental recycling as scrap metal.
- The U.S. Department of Energy (DOE) and the Conference of Radiation Control Program Directors (CRCPD) run programs to recover lost or abandoned sources before they can find their way into landfills or scrap yards.
- The NRC is working with the International Atomic Energy Agency (IAEA) and the International Nuclear Regulators Association (INRA) to improve detection and prevention efforts overseas to reduce the chance that contaminated metals or products may be imported into the United States.

The scrap metal recycling industry has economic incentives to prevent the accidental incorporation of radioactive materials in scrap metal. Melting a radiation source can contaminate an entire batch of metal, causing a loss of income. Contaminated facilities would need a costly cleanup. Accidental exposure to radiation puts employees at risk. Many U.S. scrap yards have implemented prevention efforts by installing radiation detection equipment or training workers in how to recognize radioactive materials before they are melted as scrap.

In addition to this perspective, the Scripps Howard articles contain several major errors of fact and logic that should be corrected.

Error #1: “No one ... is in charge of protecting Americans from products made from radioactively tainted metal.”

In fact, many Federal and State agencies have important responsibilities in protecting the public and the environment from unnecessary exposure to radiation. The Nuclear Regulatory Commission and its Agreement State partners regulate the commercial uses of radioactive materials, including their proper disposal.

There is a network of programs in place since the early 1990s to deal with so-called “orphan sources” or lost, abandoned or stolen radioactive materials. The NRC coordinates with the DOE, which administers the Off-site Source Recovery Program, and the CRCPD, which runs the National Orphan Radioactive Material Disposition Program. The DOE program has removed more than 17,000 radioactive sealed sources from more than 600 industrial, educational, health care and government facilities across the United States since 1999.

The U.S. Environmental Protection Agency (EPA) developed training programs that have increased the capability of the recycling industry to detect, identify, and remove abandoned radiation sources when they are encountered in scrap metal. The EPA is also working with the United Nations Economic Commission for Europe to develop an international radiation monitoring protocol for lost and abandoned radiation sources.

Market incentives have prompted most scrap recyclers in the United States to install radiation monitors to spot potential radiation sources before they get recycled as scrap. That is why most recent instances of contaminated scrap have originated overseas, where monitoring is less common. The United States is working with other countries through the IAEA and INRA to raise awareness of this problem. The international community is taking steps to detect radioactive materials in scrap metal before they are recycled into consumer products.

Error #2: “Since last summer, 36 states have had nowhere to dump the radioactively tainted metal, material and products that have come to light within their borders.”

The articles refer to the July 1, 2008, closure of the Barnwell, S.C., low-level radioactive waste facility to most states. However, the conclusion that this affects the ability of scrap yards to dispose of mildly contaminated metal, or manufacturers to dispose of mildly contaminated consumer products, is simply false. The closure of the Barnwell facility has nothing to do with the issue of radioactively contaminated consumer products.

Barnwell no longer receives the most radioactive types of low-level radioactive waste from 36 states that used to have access to its disposal capacity. However, these wastes represent only about 4 percent by volume of all low-level waste generated in the United States, and the vast majority of this waste is generated by nuclear power plants, not industrial users of radioactive material and certainly not scrap metal facilities.

Contaminated products such as those sensationalized in the Scripps series contain only mild radiation and there is disposal space available to the entire nation for such waste at the EnergySolutions facility in Clive, Utah.

Error #3: “The NRC … allowed the 250 tons of tainted waste to be disposed of without agency oversight.”

In fact, the article provides proof of NRC oversight.

LeTourneau, Inc., a steel mill in Texas, inadvertently melted a cesium-137 radiation source in 2006. As a result, the facility had 250 tons of emission control dust (waste material routinely captured to prevent ash from polluting the environment) that was mildly contaminated. The company hired a licensed radioactive waste broker to dispose of the material. The broker applied to the NRC for a waiver of NRC regulations that would have required disposal of the ash as low-level radioactive waste, seeking instead to dispose of it at a RCRA subtitle C hazardous waste facility in Idaho. Before granting the exemption, the NRC conducted a safety evaluation and environmental assessment and determined that the ash could be safely disposed of at the proposed facility. The NRC study concluded that leaving the contaminated ash in place would pose a greater risk to public health than disposing of it.

The NRC carefully examined the proposed disposition of this material before concluding that public health and safety and the environment would be protected. The Texas Department of State Health Services also studied the proposal. These reports were mentioned in the Scripps story. Rather than demonstrating lack of oversight, the story demonstrates the commitment of the NRC and its Agreement States to their mission to protect the public and the environment and actively provide oversight of radioactive waste disposal.