

Out of Control – On Purpose: DOE’s Dispersal of Radioactive Waste into Landfills and Consumer Products

EXECUTIVE SUMMARY

Background

Are the byproducts of building nuclear weapons— and generating atomic electric power—getting out-of-control—on purpose? Are they winding up in unregulated landfills and unrestricted re-uses, including consumer products? These questions inspired this study by Nuclear Information and Resource Service on the policies and practices for releasing radioactively contaminated wastes, properties and materials belonging to the U.S. Department of Energy in its vast nuclear weapons production complex.

The purpose of this project was to understand how much nuclear weapons-generated radioactive waste, material and property the Department of Energy (DOE) releases into the marketplace. We sought to identify how the radioactivity gets out, legally and practically, and to the extent possible, where it goes. Since the production of atomic power and weapons involves many of the same radioactive-waste generating facilities throughout the nuclear fuel chain, we also sought to understand the larger context in which this man-made radioactivity is managed and released into general commerce.

We reviewed DOE’s national and site-specific policies, guidance, rules and procedures which allow some radioactive contamination out of the weapons complex. This DOE-generated radioactivity can go directly to hazardous and solid waste facilities, to recyclers of scrap, concrete, plastics, soil, asphalt, rubble, paper, equipment and other media--none of which are intended to take Atomic Energy Act regulated radioactivity.

Since much basic information about ionizing radiation is written by those who seek to minimize concern about its impact, NIRS offers extensive

framing of these issues including the difficulties of detecting radioactivity and concerns about bias and inadequacy of even the fundamental units of radiation. NIRS is mandated to work in the public interest, not the nuclear waste generators’ interest. Therefore, we emphasize the effects of small doses on the public and point to inadequacies of the “updated” radiation “protection standards.” The standards do not protect all phases of human development and instead assume that the recipient of radiation doses is an adult male, and do not consider all of the known, potential health effects from ionizing radiation.

A timeline of several decades of efforts by U.S. and international governmental and nuclear advocacy organizations to release and “justify” release of radioactive materials from control is presented. The key governance on continued control vs. release is reviewed. It is clear from this enumeration that there is, and has been for some time, a concerted and deliberate effort on the part of the Department of Energy to reduce and relieve the burden of radioactive waste that must be under institutional control.

The report is illustrated with a special focus on Tennessee, which leads the nation in nuclear waste processors, incinerators, radioactive “recycling” and release from control. It gives new meaning to the state’s chosen motto, “The Volunteer State,” since residents and downwinders are certainly at elevated risk for undisclosed, unmonitored and ongoing radiation exposure.

Key Findings and Recommendations

The key findings and recommendations of this report: *Out of Control – On Purpose: DOE’s Dispersal of Radioactive Waste into Landfills and Consumer Products* are:

The US Department of Energy (DOE) on its own and in conjunction with other federal, state and international agencies is directly and indirectly releasing nuclear waste, materials and property from radioactive controls within the vast Department of Energy weapons complex, into the public realm.

DOE is allowing some radioactivity generated by its activities to go to unregulated disposal, recycling and reuse using its internal orders and guidance. By permitting radioactivity to go directly to unregulated destinations and to licensed processors who subsequently release it, DOE is enabling manmade radioactivity to get out into the open marketplace, landfills, commercial recycling and into everyday consumer products, construction supplies and equipment, roads, piping, buildings, vehicles, playgrounds, basements, furniture, toys, zippers, personal items, without warning, notification or consent.

This dispersal of supposedly small amounts is being done without comprehensive complex-wide tracking, without routine public reporting of the releases from each site and processor and usually without independent verification that it is within the self-imposed limits.

The DOE has failed to “improve record keeping or reporting” as required in the Secretarial memo which announced the ban on recycling radioactive metal. No records were found “related to a Headquarters tracking system developed by the Office of Management and Administration” as promised in the 2000 Secretarial Memo. Thus, the answers to the public’s main questions about where contamination is going remain largely unanswered.

DOE should immediately implement clear, understandable reporting of all radioactive releases including amounts and types of radioactivity and the destinations, including those since the 2000 memo committing to doing so.

NIRS is submitting a new Freedom of Information Act request to the Department of Energy and National Nuclear Security Administration to identify and quantify how much nuclear weapons-

generated radioactivity has been released, is being released and may be released and its destinations. Our previous efforts have only begun to answer these questions. We encourage the public to make efforts to track DOE’s releases from sites near them. We encourage the public to comment on the DOE’s current proposal for “restricted” recycling of radioactive metal.

Ideally, DOE should shift its policies to conform with the precautionary principle and work to prevent deliberate radioactive releases to uncontrolled destinations.

The federal policies that allow radioactive waste out of control, with the important exception of the ban on recycling radioactive metal, are resulting in increased potential for proliferation of radioactive releases into general commerce, unregulated disposal sites, reuse and recycle. The **Timeline of Efforts to Let Nuclear Waste Out-of-Control** reports on decades of the DOE and other nuclear establishment attempts to legalize releasing and dispersing nuclear waste into commerce and uncontrolled disposal. It also includes the successful prevention of those efforts by the concerned public, workers, local and state governments and affected industries.

Some state governments are not working to prevent releases however. The State of Tennessee is licensing processors that can make the determination to free release radioactive materials and wastes for reuse, recycling or regular landfills. The report reviews this and identifies some of the landfills that are receiving this waste. The report points out the need for residents of Tennessee and other states to investigate these practices. Other states could be doing the same.

The Department of Energy ban on radioactive metal recycling, in conjunction with active monitoring by the metal industries, appears to be successful in preventing radioactive metal from the weapons complex from getting into commerce in the United States. Most DOE sites we interviewed reported respecting the ban even if the requirements were not incorporated into the written procedural manuals, which is of concern. There are pathways that the commercial nuclear industry could be taking to release radioactive

metal since it is not bound by the DOE ban. There are releases of radioactive metal from international sources that must be confronted. There are also loopholes and efforts to bypass the ban that require public vigilance and assertiveness to stop.

The public call has been for the radioactive metal recycling ban to be expanded to cover all nuclear wastes and contaminated materials, not only metals, and the loopholes plugged.

DOE has internal orders and guidance that provide a complicated roadmap to justify releasing radioactively contaminated waste, materials and property in violation of Congressional intent, public will and DOE Secretarial statements made to the public in 2000. The processes used to release radioactively contaminated materials from regulatory control are far from comprehensive, consistent, or protective. DOE provides itself varying release levels and methods of compliance including reliance on institutional memory about whether an object might have been exposed to radiation. The responsible action for DOE here is to use precaution and halt release of any potentially contaminated materials and wastes.

From the public perspective, more work needs to be done to track, identify, demand accountability and stop DOE's radioactive releases. Public interest and environmental organizations along with affected industries especially recyclers and landfill associations, unions and local governments must also continue to track the Nuclear Regulatory Commission and the Environmental Protection Agency pathways for letting DOE and commercial nuclear waste out of control—on purpose. Public health, public interest, environmental organizations and the general public should join international allies in rejecting international recommendations that could lead to increased release of radioactive materials in the U.S. and around the world.

May 14, 2007

The full report can be found at:

<http://www.nirs.org/radwaste/outofcontrol/outofcontrol.htm>

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Produced thanks to a grant from the Citizens'
Monitoring and Technical Assessment Fund

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