

Radioactive Waste Shipments Shunned

By Bonnie Urfer

Shipments of radioactive waste in the U.S. look like a shell game in a carnival run by the clowns, or the Abbot and Costello routine, "Who's on first?" Only no one's having fun with the radiation because the DOE and the nuclear industry are facing a crisis.

According to the Transportation Department, "U.S. highways carry an average of 7,000 loads of radioactive material each day, 2.8 million shipments per year," consisting of medical isotopes, X-ray sources for hospitals, food irradiators and industrial welders and all sorts of radioactive waste. Most waste travels by truck but there's a strong industry push for more rail transport based on economic and safety reasons. For the moment, fewer than 100 shipments per year include highly radioactive irradiated fuel rods (HLW) from U.S. and foreign reactors. This will change if a temporary or permanent HLW storage site opens.

Most radwaste shipments include contaminated items such as gloves, clothes, tools, medical waste, etc. Almost every waste production site has a Low-Level Radioactive Waste (LLRW) dump. But the majority of waste shipments for disposal travel to four locations: the federal Nevada Test Site; Barnwell, South Carolina; Hanford in Washington State; and a private mixed-waste dump operated by Envirocare Corp. near Clive, Utah.

The nuclear waste shell game is illustrated by the bizarre mix of shipments from or through New York State in just one year, 1997. The Low-level Radioactive Waste (LLRW) disposal facility in Barnwell, South Carolina received 20%, by volume, of the waste sent from or through New York. The Scientific Ecology Group's LLRW treatment facility in Oak Ridge, Tennessee, received about 16.5% of the waste. Another 12% of the LLRW was transported to treatment facilities in Gainesville, Florida (Perma-Fix) and in Wampum, Pennsylvania (Alaron). About 51% of the waste went to the Envirocare site in Clive, Utah. The remaining 0.5% of the waste was transported to ADCOM Express in Tinley Park, Illinois and Teledyne Brown Engineering in Westwood, New Jersey. In the end, the majority of this waste is transported to Barnwell.

Radioactive dilemmas

Deadly radwaste is the Achilles Heel of the nuclear age. Problems with the industry's complex plans for shipping, storing and dumping nuclear garbage should bring the industry to a halt. A short list looks like this:

- The contractor for Fernald, Ohio's million-dollar-a-day clean-up project, is ready to ship rad waste to Nevada, but Nevada doesn't want it and has threatened to sue the DOE. But Ohio wants it out and has also threatened to sue the DOE. The DOE is putting transport on hold until it can find a sacrifice zone.
- New Mexico has halted shipments from the Idaho National Engineering Laboratory to the Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico. Workers at WIPP discovered drums of waste that should not have been onboard a truck — they'd been added after the shipment had already

been inspected. New Mexico officials say as many as 108 illegal containers may have already been disposed of this way at the WIPP site.

- In 1980, Congress encouraged the creation of multi-state radwaste compacts. By agreement one state is chosen to be the first recipient for all the waste produced by the other states in the compact. Nebraska originally agreed to accept waste from Kansas, Arkansas, Louisiana and Oklahoma but has now pulled out of the Central Interstate Low-Level Radioactive Waste Compact, deciding it doesn't want to be the fall guy. The compact states sued Nebraska and in a legal battle that lasted six years, U.S. District Judge Richard Kopf said in 2002 that Nebraska acted in bad faith by refusing to license a rad waste facility. Nebraska settled the lawsuit by agreeing to pay \$141 million to the multi-state consortium. In turn, Nebraska was relieved of its obligation to license a dump. In 24 years of compact work, not one low-level radioactive waste dump has yet been licensed.

- The 235-acre Barnwell site announced that it will begin limiting shipments, and that starting in 2008 it will no longer accept waste from outside its region. The amount of radioactivity in the garbage being delivered to Barnwell is steadily increasing. In the past six years Barnwell has begun taking parts from decommissioned atomic power reactors and even retired reactors. South Carolina Sierra Club member Susan Corbett says, "We are becoming a graveyard for whole nuclear vessels."

- The Clive, Utah company "Envirocare" has the capacity to accept a lot of waste but cannot take more highly contaminated garbage. The site in Texas targeted as a potential dump is the sparsely populated Andrews County, but the plan has been met with fierce opposition. Nebraska has offered to pay Texas a flat fee of \$25 million to accept the Central Interstate Compact's waste, but opponents fear that if Texas takes waste from a state outside its compact, the Andrews County site could become the *de facto* dump site for the entire nation.

- Elsewhere, radioactive waste is being delivered from California, Idaho, New Mexico, Texas, Colorado, Ohio, Kentucky, South Carolina and Tennessee to open pits at the Nevada Test Site near Las Vegas, which is not a licensed dump.



Photo by Bonnie Urfer

These barely-placarded canisters of plutonium-contaminated waste were being trucked to the Waste Isolation Pilot Plant near Carlsbad, New Mexico. The trucks carrying the radioactive garbage are required to stop at the New Mexico border or "Port of Entry" for radiation monitoring before proceeding into the state.

Plutonium shuffle

The U.S. is shipping 300 pounds of plutonium to France for processing into MOX (plutonium and uranium) fuel for tests as potential power reactor fuel. Armed trucks will transport the bomb-grade material from Los Alamos, New Mexico to the Charleston Naval Weapons Station in South Carolina. It is then to be loaded onto two heavily-armed British-flagged ships, sail to Cherbourg, France, and finally be moved onto trucks for a 1,000-kilometer trip to the reprocessing facility. From the French MOX fuel production site, the fuel will return to the U.S. and be transported to Duke Energy's Catawba reactor in South Carolina. The movement of plutonium is part of a U.S.-Russian agreement to reduce weapons-grade plutonium stockpiles by 34 metric tons. The federal government wants to build a plutonium reprocessing facility at the Savannah River Site near Aiken, South Carolina, but has slowed the plans because of delays on Russia's end.

Alaron, a Swiss-owned corporation with a facility in Pennsylvania, is allowed to take waste, for "treatment," from anywhere in the world. Fuel rods, always heavily contaminated with plutonium, may arrive in San Francisco from overseas then be taken cross-country by rail to Alaron. When Alaron is done with the rods the nuclear waste is shipped via tractor-trailer and/or rail to its final dumping facility.

The Goshute Reservation in Skull Valley, Utah could become the dry-cask storage

site for Private Fuel Storage (PFS), a consortium of reactor utilities looking for above-ground high-level waste storage space. Goshute Tribal leaders entered into a deal with PFS for an undisclosed amount of cash. Now, even before the site has been licensed, PFS has begun advertising "rental space" for irradiated fuel rods in trade magazines. Fuel rods have been accumulating at more than 60 sites around the country. The Goshute site would be big enough to hold up to 4,000 casks — about 10 million rods — on concrete pads sprawling across 100 acres. Shundahai Network (Shundahai.org) is leading a nationwide campaign to halt this proposal.

The great negligence surrounding radioactive waste is that none of the producers have begun to talk about shutting down. Reactor operators and bomb makers — knowing there is no answer to the problem of their deadly refuse — continue on a course headed straight toward disaster.

Sources: *Pahrump Valley Times*, Aug. 13, *the Lawrence Journal-World*, Aug. 16, *Greenpeace*, Aug. 26, *the Post and Courier*, June 22, & *the Salt Lake Tribune*, Aug. 16, 2004.

Food Irradiation Increasingly Unpopular

California lunch irradiation bill calls for parental notification

In California, Assembly Bill 1988, which has passed the legislature, is awaiting Governor Schwarzenegger's approval. This bill requires school board approval, public disclosure and parental notification before irradiated foods can be purchased for school lunch programs.

The U.S. Department of Agriculture (USDA) included irradiated foods in the National School Lunch Program in May 2003, despite overwhelming opposition from parents and the public. Under federal law, schools have no obligation to inform parents that their children are eating irradiated foods. This lack of accountability to parents is particularly egregious because the National School Lunch Program serves 27 million children annually nationwide, most of whom are from low-income families and may be undernourished at home.

Six California school districts have banned irradiated food from their cafeterias, including Los Angeles and San Francisco. While no school in the state will serve irradiated meat in the upcoming school year, doing so will remain an option for California school districts for the foreseeable future. By passing this bill, lawmakers have ensured that California remains accountable to both parents and disadvantaged schoolchildren.

Irradiation exposes food to high doses of ionizing radiation to kill bacteria. In the process, nutrients and vitamins are destroyed and new toxic chemicals are formed. Recent research has shown that one class of these chemicals, cyclobutanones, promotes cancer development and causes genetic damage to human cells. No long-term studies have been conducted on how children's health is affected by eating irradiated food. Additionally, irradiation exacerbates the problems faced by family farms because it opens the floodgates to imported food, as well as contributes to the consolidation of the food industry by extending shelf life. (Visit <www.safelunch.org> for more information.)

Californians can urge Gov. Schwarzenegger to sign the bill by faxing his office. Fax: 916-445-4633; Website: govmail.ca.gov — **Audrey Hill, Public Citizen**

Federal Child Nutrition Act amendment requires notice of irradiation in school lunches

Congress has passed the Child Nutrition Act reauthorization complete with language on irradiated food in the school lunch program. The bill was passed by the Senate June 26, and June 27 by the House. The measures on irradiation require:

- * Irradiated food can only be made available at the request of state and local school systems — it cannot be mandated by USDA;

- * Irradiated food cannot be subsidized by the federal government (this means that USDA cannot offset the increased costs of irradiated foods to encourage their use);

- * Irradiated foods distributed to federal meal programs must be labeled as irradiated. (This measure ensures that school food service employees know that the food is irradiated. It does not require the school to pass the labeling on to students.)

- * Irradiated and non-irradiated foods cannot be mingled.

- * Schools using irradiated foods are encouraged to offer a non-irradiated alternative.

USDA Still Lying About Irradiation

On Aug. 16, Public Citizen again urged the U.S. Department of Agriculture to correct misinformation regarding food irradiation on its web site. Chief among Public Citizen's concerns is that USDA's "Irradiated Commodity Beef: Frequently Asked Questions" Web page notes that "Nearly two dozen supermarket chains now provide irradiated meat for their customers in some 30 states across the country." However, when Public Citizen recently called 15 major national

supermarket chains that previously sold irradiated beef, all of them said they had stopped carrying the product.

- * The site also notes that "Two major restaurant chains offer irradiated meat products in 145 establishments in the Upper Midwestern States." Public Citizen assumes this refers to Dairy Queen and Embers America, the two chains that advertised using it last year. On Aug. 5, 2004, Public Citizen called the corporate headquarters for both companies and was informed by their officials that they no longer offer irradiated meat products in their restaurants.

- * According to the "Public Relations Tool Kit" for schools that is linked to the USDA site, "The most common irradiation procedure in use today involves electronic beams using ordinary electricity, not radioactive materials."

However, the company that used the e-beam technology to irradiate food, SureBeam, went bankrupt in January and is no longer in business. Instead, the USDA has selected Qualipaq Meats to be the sole vendor of irradiated meat to the National School Lunch Program. Qualipaq Meats is using an irradiation firm that treats its meat with the radioactive isotope cobalt-60 — not electronic beams.

These errors also may lull readers into a false security about irradiation because they gloss over the controversy surrounding irradiated food and don't provide concerns about the long-term health effects of consuming it." We urge the USDA to correct its materials and provide the truth, not marketing gimmicks designed to trick consumers into believing that irradiated food is a widespread and common consumer product," said Winona Hauter, director of Public Citizen's food program.

Public Citizen has written the USDA three times previously, requesting that their materials present a fair and accurate overview of irradiation. So far none of their input has been included in the materials.

— **Tracy Lerman, Public Citizen**