

## **South Carolina Says No to Country's Radioactive Wastes**

A major blow to new nuclear reactors in the U.S. was dealt last month when determined activists in South Carolina (SC), including the state chapter of the Sierra Club, successfully campaigned to block the Barnwell dump from continuing to accept “low” level radioactive wastes from across the country. In April, the SC House of Representatives Committee on Agriculture and Environmental Affairs voted unanimously, 16 to 0 (with 2 abstentions, including the bill sponsor), against a bill that would have allowed the dump to remain open to waste from all 50 states beyond the 2008 deadline that will close the site to all waste that does not originate in the “Atlantic Interstate Compact” of SC, New Jersey (NJ) and Connecticut (CT). Barnwell County officials, nuclear utilities, and dump owner EnergySolutions of Utah had pushed to keep the dump open to the entire country. This hard-won grassroots victory is a “barrel in the path” of new nuclear power plants being built, because it means that there is no dumpsite for Class B, Class C, and Greater-Than-Class-C “low” level radioactive wastes from atomic reactors in most states.

Barnwell has already accepted over 27 million cubic feet (765,000 cubic meters) of radioactive waste from across the U.S., mostly from nuclear power plants. Barnwell has been the "path of least resistance" for such wastes for 36 years. When SC considered closing or limiting access to the dump -- in 1986, 1992 and 1995 -- state politicians relented and kept nationwide access open. The dump employs only 50 workers, but provides about \$2 million a year for economically-depressed Barnwell County, and about \$10 million a year for SC schools, according to the State Budget and Control Board.(1) The local population is also largely African American, raising environmental justice concerns with the Barnwell dump.

When SC entered into its compact with NJ and CT in 2000, it agreed to reduce the volume of nuclear waste accepted at Barnwell each year, and to close the site to waste from outside the three-state region on July 1, 2008.

The quantity of waste accepted in 2005 was 43,000 cubic feet (over 1,200 cubic meters), down from 167,000 cubic feet (over 4,700 cubic meters) in 1999. The annual projection for 2009, after the compact is in force, is 10,000 cubic feet (over 283 cubic meters), with half coming from nuclear plants within SC itself.

In 2006, a new conglomerate, EnergySolutions, acquired Chem-Nuclear, operator of the Barnwell site, along with Barnwell's main competitor (Envirocare of Utah, a national dump for Class A wastes). EnergySolutions, which also absorbed the U.S. division of British Nuclear Fuels, Ltd. (BNFL), has also applied to the U.S. Department of Energy to establish a high-level radioactive waste reprocessing facility in Barnwell. A reprocessing facility in Barnwell built in the early 1970s was never operated due to “inordinately high operation and maintenance risks,” and a federal ban on commercial waste reprocessing for nuclear weapons non-proliferation reasons.(2) However, the U.S. Dept. of Energy's Savannah River Site, near Barnwell, reprocessed military irradiated fuel for nuclear weapons plutonium production for decades on end, leaving behind a legacy of

contamination and liquid and sludge high-level radioactive wastes that threaten the Savannah River, groundwater, and Tuscaloosa Aquifer below.(3)

Barnwell accepts Class “B and C” radioactive wastes, which are more akin to “intermediate level” radioactive wastes under European classification systems, as opposed to their designation as “low” level wastes in the U.S. Wastes dumped at Barnwell include intensely radioactive nuclear reactor filter resins, as well decommissioned reactor vessels. In 2003, Big Rock nuclear plant in Michigan shipped what BNFL has called the most radioactive reactor vessel ever dumped to Barnwell for disposal.(4) Yankee Rowe and Connecticut Yankee’s reactor vessels were also dumped there in recent years. But a collaboration between NIRS and Argentine activists resulted in an Argentine state judge’s injunction against barge shipment along South America’s coastline, effectively blocking California’s intensely radioactive San Onofre Unit 1 reactor vessel from being dumped at Barnwell in 2004.

Radioactive wastes have not been safely contained at Barnwell, but rather placed in un-lined, open pits, which often collect rain water before they are filled and closed. There is already a documented underground plume of radioactive tritium flowing over a half mile towards Mary’s Branch Creek, a tributary of the Savannah River. Thousands of cubic yards (thousands of cubic meters) of contaminated soil have been excavated from an adjacent church property.

[This article is dedicated to James Brown (May 3, 1928 to Dec. 25, 2006), “The Godfather of Soul,” Barnwell’s most famous native son]

(1) Sammy Fretwell, “Nuclear waste site might not be closed: Legislation would keep landfill open to all states beyond scheduled closing in 2008,” *The State* (Columbia, SC), Feb. 16, 2007.

(2) David A. Lochbaum, Nuclear Waste Disposal Crisis, PennWell Publishing Company, Tulsa, OK, 1996, pages 72-3.

(3) “*Nuclear Dumps by the Riverside: Threats to the Savannah River from Radioactive Contamination at the Savannah River Site (SRS)*,” by Arjun Makhijani, Ph.D. and Michele Boyd, IEER, March 11, 2004, at <http://www.ieer.org/reports/srs/index.html>

(4) See <http://www.nirs.org/radwaste/hlwtransport/nukewatch122003.htm> for more information.

For more information, see <http://www.dontwastesc.com/content/blogcategory/0/42/>

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