

## Court urges Chem-Nuclear safety

By [Sarita Chourey](#) Morris News Service [Thursday, July 31, 2014 1:44 PM](#) Last updated Friday, Aug 1, 2014 8:07 AM

COLUMBIA -- The South Carolina Court of Appeals is ordering Chem-Nuclear to better protect the groundwater from contamination at Barnwell County's low-level radioactive waste disposal site.

Under the order, the site operator and the S.C. Department of Health and Environmental Control have 90 days to turn in a plan to reach compliance.

The Sierra Club, represented by the South Carolina Environmental Law Project, had not asked for Chem-Nuclear's license to be revoked, but rather that it improve waste-handling procedures at the 235-acre site near the town of Snelling.

In its ruling Wednesday, the three-person court said DHEC had not enforced the law on several parts of the regulation, and that the Administrative Law Court was wrong when it found Chem-Nuclear to be in compliance.

In one part of Wednesday's decision, the court said the trenches at the site have no system to collect liquids that have drained or percolated through radioactive materials.

"DHEC and Chem-Nuclear argue Chem-Nuclear is justified in not having a ... collection system due to 'concerns regarding the radioactive exposure to workers handling and processing (it),' " wrote the court. "We fail to see how the danger of radioactive contamination to workers actually justifies releasing it into the groundwater without testing and remediation. Rather, it seems the danger to health and safety requires testing and remediation."

The environmentalists had argued that the landfill operator had fallen short in shielding the groundwater from the radioactive waste housed at the site, particularly since the concrete vaults

that hold radioactive waste are not sealed to keep water out.

“The (disposal) vaults have holes in the bottoms, are not grouted and sealed at the top, have no cover or roof, and thus rain can fall directly into the vault during the (waste) loading period,” they wrote in 2012.

“The design allows rainfall that accumulates in the trenches to percolate into the soil, and drive the groundwater movement that is carrying tritium and other radioactive materials into Mary’s Branch Creek.”

The creek is a tributary to the Savannah River, which is about 20 miles from the Barnwell facility.

Asked if Chem-Nuclear would appeal the decision, Mark Walker, vice president of marketing and media relations for Chem-Nuclear’s parent company EnergySolutions, said in an e-mail: “We are reviewing the ruling and will formally respond at the appropriate time to the courts. Our commitment remains firm that we are committed to safety and compliance at the Barnwell facility, like all facilities we operate.”

On Thursday evening, DHEC also issued a statement: “The Court of Appeals based yesterday’s opinion on findings from a 2005 order of the Administrative Law Court. As a result, the court did not have the benefit of all information related to its concerns.”

The agency statement continued: “DHEC diligently enforces the regulations to ensure the facility is operated in a safe manner and closely monitors compliance at the facility ... .”

The agency stated that tritium in groundwater from the Barnwell site does not present a health risk to the residents of Barnwell County or the state, and that sampling of nearby private wells shows no impact from the site.

Meanwhile, the South Carolina Chapter of the Sierra Club, claimed Wednesday's court decision as a victory.

"Sierra Club leaders welcome the decision, although they are cautious about whether changes will fully remedy the basic flaws inherent in shallow-land burial of nuclear waste," said the group in a news release Thursday.

"It's very difficult, using the shallow land burial method, to keep nuclear waste from getting into the groundwater," said chapter chair Susan Corbett.

"This is not benign or short-lived material. It includes highly radioactive nuclear power plant component wastes that include uranium and plutonium which may well follow the tritium into the groundwater in years to come."

Tritium results from the manufacture of nuclear power, and is found in radioactive waste generated by nuclear power plants.

In 1999 a nearby church property was contaminated by radioactive material due to Chem-Nuclear's disposal practice of pumping contaminated water out of a trench into lined ponds. DHEC first issued the license in 1971. In 2000, Chem-Nuclear submitted an application to renew its license, which DHEC did in 2004, following public hearing and comment period.

For the last six years, the Chem-Nuclear Site has only taken waste from the three member states of the Atlantic Compact: South Carolina, Connecticut and New Jersey.