



Savannah River Site Watch

Savannah River Site Watch

<https://srswatch.org/>

Columbia, South Carolina

Nuclear News Update

November 17, 2020

Contact: Tom Clements, director, SRS Watch, tel. 803-834-3084, srswatch@gmail.com

**Ship Carrying Radioactive Waste (Strontium-90) from France to Soon Arrive in Charleston, SC;
Three U.S.-Supplied Strontium-Bearing Electricity Generators to be Trucked to Nevada to DOE Nuclear
Waste Dump; No Explanation Given as to Why France Wasn't Required to Deal with the Waste**

Columbia, SC – A ship from France carrying highly radioactive strontium waste is soon to arrive in the port of Charleston, South Carolina, where the containers with the material would be offloaded at a military dock and trucked to Nevada for disposal. The transport and disposal are being coordinated by the U.S. Department of Energy.

The nuclear waste cargo on the UK-flagged [Pacific Heron](#), which departed Cherbourg on November 5 and whose arrival is imminent, consists of “radioisotope thermoelectric generators” (RTGs) containing highly radioactive strontium-90, which were used to power buoys in France. The RTGs are believed to have been fabricated by the U.S. Department of Energy. After offloading in the military port north of the commercial port in Charleston, the RTGs would be trucked across the U.S. and dumped in a ground-level trench in Area 5 at the Nevada National Security Site (NNSS) north of Las Vegas, Nevada.

Similar RTGs from Alaska, used as a power source to detect seismic activity, were flown to Nevada and disposed of in a trench in Area 5 in 2015. A presentation (linked below) by the Air Force describes the 10 RTGs: “Each of the thermoelectric generators contains from 1 to 3 pounds of a radioactive material called strontium-90. The material is about the size of a hockey puck and is securely contained in a vessel with an inner shield made of tungsten and a cast iron protective housing, weighing approximately 4,000 pounds.” The Las Vegas Review-Journal reported on the disposal of the RTGs from Alaska and that 3 RTGs from Mexico also went to the NNSS. (article linked below)

It is believed that the U.S. Department of Energy learned a hard lesson from the uproar over a secret transport of one-half ton of weapon-grade plutonium from the DOE’s Savannah River Site in South Carolina to the NNSS in 2018. The State of Nevada was not informed in advance of that shipment, which spurred a legal challenge. It is thus believed that DOE has alerted the State of Nevada about the RTG shipment. It is also assumed that the shipment meets the NNSS “Waste Acceptance Criteria.” The radioactive strontium in the RTGs has a radioactive decay “half-life” of about 30 years, meaning they would be harmless in about 300 years (10 half-lives).

“While DOE may still own the RTGs, which may have been leased to France, it is unknown why these was no requirement in the US-France contract that the beneficiary of the RTG use, France, domestically

dispose of the waste,” said Tom Clements, director of the public interest group Savannah River Site Watch. “DOE must pledge to be diligent in coordinating in advance with states about any shipments of nuclear materials, including plutonium, highly enriched uranium and various forms of nuclear waste such as RTGs,” added Clements. “States must determine if such shipments comply with state regulations and applicable waste acceptance criteria before allowing them to be accepted for disposal or storage,” said Clements, who has toured the Area 5 and seen where DOE disposes of nuclear waste and classified materials. When in Area 5, the wind picked up and swirled dust around, causing his Geiger counter to tick noticeably upward.

###

Notes:

SRS Watch initial news release on Pacific Heron and strontium-90 RTGs, November 11, 2020: *Ship Carrying Radioactive Waste (Strontium-90) from France to Arrive in Charleston, SC around Nov. 16; Three U.S.-Supplied Strontium-Bearing Electricity Generators to be Trucked to Nevada to DOE Nuclear Waste Dump; No Explanation Given as to Why France Won't Deal with the Waste:* <https://srswatch.org/wp-content/uploads/2020/11/SRS-Watch-on-strontium-to-US-on-Pacific-Heron-Nov-11-2020.pdf>

Photo of Pacific Heron at dock in home port of Barrow-in-Furness, England, by Martin Forwood, Cumbrians Opposed to a Radioactive Environment (CORE), Feb. 1, 2016 – special to SRS Watch: <https://srswatch.org/wp-content/uploads/2020/11/Pacific-Heron-Barrow-in-Furness-by-Martin-Forwood-CORE-Feb.-2016.jpg>

News release, “Orano retourne des matières nucléaires vers les Etats-Unis,” 5 November 2020: <https://www.orano.group/fr/actus/actualites-du-groupe/2020/novembre/orano-retourne-des-matieres-nucleaires-vers-les-etats-unis>

NNSS website on disposal of radioactive waste in Area 5: <https://www.nnss.gov/pages/programs/RWM/WasteManagement.html>

RTGs removed from Alaska to Nevada via plane, *Removing excess nuclear waste from Alaska*, Sandia LabNews, Sandia National Lab, October 16, 2015, with photos of RTGs in the trench in Area 5: https://www.sandia.gov/news/publications/labnews/articles/2015/16-10/rtg_removal.html

NNSS/Air Force presentation on removal of RTGs from Alaska, with photos of casks and placement in trench in Area 5 at NNSS: https://www.nnss.gov/NSSAB/docs/Meeting-Minutes/MM_FY16/RTG%20Brief%20NSSAB%20Las%20Vegas%20March%202016%20RED.pdf and <https://www.osti.gov/servlets/purl/1332883>

Article *Air Force sweeps up, buries dirty bomb material in Nevada*, Las Vegas Review-Journal, August 23, 2015 - 10 RTGs from Alaska and 3 from Mexico, buried at the NNSS: <https://www.reviewjournal.com/news/military/air-force-sweeps-up-buries-dirty-bomb-material-in-nevada/>

Information by DOE's Pacific Northwest National Lab on use of strontium-90 in RTGs: <https://radioisotopes.pnnl.gov/isotopes/strontium-90.stm>