Southwestern U.S. state orders chambers of underground nuclear waste facility to be sealed off due to radiation leak

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The New Mexico state government in the southwestern region of United States has ordered the U.S. Department of Energy to seal off two underground chambers at a nuclear waste facility containing 368 barrels of the type that burst in February.

The New Mexico Environment Department said the U.S. Department of Energy had determined that two nitrate salt-bearing, transuranic waste containers were the source of the incident in February that produced a radiation leak at the Waste Isolation Pilot Plant in Carlsbad, New Mexico. The leak contaminated 22 employees of the facility.

The environment department ordered the U.S. Department of Energy to prepare by May 30 a plan to irreversibly close the two chambers of the underground facility, all of which has been closed pending resolution of the problem in the chambers. Ryan Flynn, the state environment secretary, said the waste plant would remain closed until “it is safe” to be reopened.

The waste plant, which is used to store low-level radioactive waste deep underground, has been receiving waste containers from Los Alamos National Laboratory in New Mexico as part of a program to remove all above-ground waste from its premises by June 30.

Transuranic waste consists of clothing, tools, rags, debris, soil and other items contaminated with radioactive material, mostly plutonium. About 90 percent of the current transuranic waste...
inventory is a result of decades of nuclear research and weapons production at the laboratory.

Prior reports said at least one of the containers at the Carlsbad plant had burst apparently as the result of a reaction between an organic kitty litter that had been used to pack the barrels and the nitrate salt. The reports said the Department of Energy recently adopted use of the organic kitty litter as a packing material, having switched from an inorganic litter used previously.

Environment personnel said over 100 similarly packed barrels are at a holding location in Andrews, Texas, and 57 more are in storage at Los Alamos National Laboratory in New Mexico.

Flynn said the environment department continues to require the department of energy “to take every step necessary to protect the public, workers and the environment from the threat of any potential future releases." It added that it was waiting for more specific information to determine how the situation would impact the plan to store all waste underground by June 30.