

US says leaking nuclear waste dome is safe; Marshall Islands leaders don't believe it

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In response to a directive from Congress, the Department of Energy

released a report this week assessing the risks of a 50-year-old cracking and crumbling concrete nuclear waste repository in the Marshall Islands, but the findings did little to ease the concerns of Marshallese leaders in the Central Pacific.

The DOE report found that Runit Dome, a repository for atomic waste the United States produced during Cold War weapons testing, is sound and that radioactive leakage into the nearby lagoon is not significant.

After Congress grew concerned last year about the leaking [dome](#), it ordered the Department of Energy to produce a report on the dome's structural integrity amid climate change and rising sea levels.

The report noted that while sea level rise could increase storm surge, swells, and "lead to wave-induced over-wash of lower sections of the dome," there is not enough definitive data to determine "how these events might impact on the environment."

One Marshallese leader was disappointed the Department of Energy again downplayed the risks and declined to take responsibility for Runit Dome and its leaking contents.

"We don't expect the Enewetak community to feel any safer based on this report as it doesn't contain any new information from what they've seen ... and don't trust," said Rhea Christian-Moss, the chairperson of the Marshall Islands' National Nuclear Commission, a government-operated nuclear waste and radiation oversight panel.

"The report offers nothing new and is more or less what we expected to see," she said, lamenting the Senate's redaction of a critical line in the House's mandate, which stipulated that the Department of Energy provide a plan detailing the removal of the radioactive waste into a "safer and more stable location."

The Department of Energy report is signed by Dan Brouillette, the agency's secretary.

Terry Hamilton, the department's lead contractor on the project, said the report shows that "under the hard facts of radiation science, existing data and information show that the risks posed by Runit Dome are unlikely to impact on the health status of the people" living near the dome.

In November last year, the Los Angeles Times published an investigation of the lingering radiation legacy in the Marshall Islands, and the refusal of U.S. authorities to take ownership for the hazards posed by Runit Dome.

In December, Congress signed the National Defense Authorization Act for 2020, which required the Department of Energy to provide a plan to repair the dome, evaluate the environmental effects of the dome on the lagoon over the next 20 years, and assess its structure and the potential risk to the people who live near it.

The department was also required to assess how rising sea levels could affect the dome.

Christian-Moss noted data gaps in the report, as well, including the level of radiation in groundwater leaking from the dome into the lagoon.

In 2019, at a presentation delivered in the Marshall Islands to Marshallese and U.S. officials, the DOE's contractor, Hamilton, mentioned elevated levels of radioactivity in giant clams living near the dome.

The new report does not mention the clams but states that not enough information is available to understand how leakage from the dome is affecting marine life. However, according to the Department of Energy,

studies of people living nearby show normal levels of radiation—suggesting they are not being adversely affected.

"The absence of data to show any risk does not mean that there is no risk," she said. "So my main takeaway from the report is that many risks are still 'unknown.'"

Between 1946 and 1958, the United States detonated 67 nuclear weapons on, in and above the Marshall Islands. Forty-four of those bombs were detonated in Enewetak Atoll, where Runit Dome is located.

Nowhere else has the United States saddled another country with so much of its nuclear waste, a product of its Cold War atomic testing program.

The waste site, known alternatively as the Tomb, holds more than 3.1 million cubic feet—or 35 Olympic-size swimming pools—of U.S.-produced radioactive soil and debris, including lethal amounts of plutonium.

The radioactive material was collected, moved and contained by U.S. soldiers during the late 1970s. Many of those veterans say they were unaware of the contents and did not wear protective equipment.

The new report does not include a plan to repair the dome, which was required by Congress. Instead, the report's authors state that "no further maintenance of the dome is required at this time" beyond conducting occasional maintenance to the dome's cracking exterior, including the removal of vegetation. The report claims the visible cracking and spalling do not provide a hazard.

"All in all the message seems to be that we should be concerned but not alarmed," said Michael Gerrard, a legal scholar at Columbia University's

law school. "It is as if Runit is like a radioactive sore in the middle of the Pacific, but one that can get by with Band-Aids for the foreseeable future unless they find more bleeding."

The Department of Energy authors also maintain that the lagoon's sediments are so contaminated with radioactive elements that any additional spillage from the dome would be undetectable.

"It remains to be seen whether the Marshallese will accept this report by the Americans, given how poorly the U.S. has treated the Marshallese in so many ways since 1945," said Gerrard.

The report also notes that in May 2019, Marshallese officials requested that the Department of Energy build a fence around the island where the dome is located, to keep people off.

In July 2019, Department of Energy officials responded claiming they didn't have the funding to build a fence and installation of a perimeter would be logistically too complex.

In 1981, the U.S. government declared in a report that the island should be quarantined indefinitely and that the "possibility would always exist that high levels of plutonium-contaminated subsurface soil could be exposed by wave or storm action."

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