



## Radiation and Colonialism Leave a Permanent Stamp on New Mexico—Part II

July 16—New Mexico's Day of Infamy

By Leona Morgan

July 16th is a day of infamy for New Mexico, as it is the anniversary of the world's largest uranium spill near Churchrock in 1979, and of the Trinity test, the first atomic weapon detonation in 1945.

### Hibakusha & Internationals Commemorate July 16

In 2016, organizers in uranium-impacted communities called for an international day of action every July 16, to spotlight the unaddressed consequences of the Churchrock Spill and the ongoing global genocide of indigenous peoples from nuclear colonialism. The first to respond were organizers [Nukewatch and Nonviolent Action for Abolition of Nuclear Weapons, Germany] protesting the deployment of US weapons at the German military base in Büchel in 2017. In 2018, solidarity events took place in the US, Germany, Spain, England, and France. This year, the local group Red Water Pond Road Community Association held its 11th annual

day of remembrance of Churchrock. More than 200 folks attended from as far away as Japan.

The Tularosa Basin Downwinders Consortium (TBDC) hosted a town hall meeting and its 10th annual candlelight vigil to remember the lives lost due to the Trinity Test. Participants called out the names of all those lost to cancer, and read statements of support from Congressional offices and allies. Tina Cordova of TBDC reported that they “called out around 800 names. The list grows every year. We also held a tribute in memory of all the children that were lost as a result of the Trinity Test or were still-born. This is such a horrible legacy! Children died and the government still lied.”

Toshiya Morita, a second generation Hibakusha (people affected by the 1945 atomic bombings of Hiroshima and Nagasaki), traveled from Kyoto, Japan to take part in both the Churchrock and Tularosa events. Morita recalls, “When I went to New Mexico I saw a lot of Hibakusha. Most of them are

Indigenous people by uranium mines... [and] other Hibakusha by nuclear tests. I feel all of Hibakusha in the United States are one of my family... I want to walk with all of you to the no nuclear world!”

### Exposed Communities Demand Compensation

Also on July 16, Representative Ben Ray Lujan, D-NM, introduced the Radiation Exposure Compensation Act Amendments of 2019 (H.R. 3783). The bill would extend much-deserved compensation to all who have been impacted by the US military's use of uranium weapons. The bill includes an apology, an extension of the fund until 2045 (beyond the current 2022 sunset date), and expansion of compensation to uranium mill and mine workers who worked after 1971 (up to 1990) and to nuclear weapons test downwinders in additional locations—including Tularosa Basin and Guam. A similar bill was introduced in the Senate on March 28, 2019 by Senator Mike Crapo of Idaho (S. 947).

### Opposition to Centralized Waste Dump Continues

Today, the same region of Trinity's radioactive fallout is being threatened by two proposals for consolidation of high-level waste nuclear fuel from reactors. Although New Mexico does not have any commercial nuclear power reactors, and such a waste dump would not be legal, the Nuclear Regulatory Commission (NRC) is proceeding with the National Environmental Policy Act process for license applications from both Holtec International and Interim Storage Partners' (ISP). ISP is a partnership between Waste Control Specialists and Orano—formerly Areva Corp. Scoping for both dumps was completed in 2018, and the Draft Environmental Impact Statement for Holtec is expected in March 2020, while ISP's is expected in May 2020. Both proposals are being legally challenged within the NRC's Atomic Safety and Licensing Board (ASLB). The ASLB hearing for ISP took place in Midland, Texas, on July 10 and was well attended by community folks opposing the so-called “Consolidated Interim Storage” facility.

—Leona Morgan works with the Nuclear Issues Study Group in New Mexico.

## Nuclear Governance in Canada: A Corporate Coup?

By Gordon Edwards

In November 2018, Canada's Ministry of Natural Resources (NRCan) released a “Road Map” signaling its support for a group of multinational corporations, headed by SNC-Lavalin Corporation, to build, test, and deploy a new generation of nuclear reactors. [SNC-Lavalin is a \$10 billion engineering, mining and nuclear conglomerate based in Montreal.]

There are no customers yet for these “Small Modular Nuclear Reactors” (SMRs), and the Union of Ontario Indians opposes them altogether. But NRCan wants them installed widely, mainly in the north, to accelerate resource extraction ... and to replace diesel in isolated settlements including indigenous communities.

This is the brainchild of SNC-Lavalin and its partners, Fluor, Inc. and Jacobs Corp.

In 2015, Canada's government under Joseph Harper put the consortium of the three corporations in charge of federally-owned nuclear facilities and Canada's \$8 billion radioactive waste liability. Billions of tax dollars have been pouring into its coffers via Atomic Energy of Canada, Limited, a government corporation.... Tasked with reducing Ottawa's radioactive liability quickly and cheaply, the consortium—operating as Canadian Nuclear Laboratories (CNL)—launched a series of alarming initiatives:

- CNL proposes to pile on the surface one million cubic meters of mixed radioactive waste in a huge earthen mound 5 to 7 stories high, covering 11 hectares [27+ acres] at Chalk River, less than a kilometer from the Ottawa River. This scheme, a drastic departure from previous plans, flies in the face of international guidelines. It is opposed by 140 municipal resolutions including 82 from the Montreal region.

- CNL plans to “entomb” the radioactive remains of two reactors beside the Ottawa and Winnipeg Rivers—dumping the reactors' contaminated insides into the sub-basement, then flooding it with grout, creating permanent radioactive waste “mausoleums.” This approach violates promises that decommissioned reactor sites would be returned to “green field” status, and defies warnings against “entombment” by the International Atomic Energy Agency.

- CNL is moving federally owned radioactive waste from Pinawa (Manitoba), Douglas Point (Ontario), Bécancour (Quebec), and Port Hope (Ontario) to Chalk River. Of the 2000 planned shipments, 500 are so radioactive that shipping containers must be shielded to protect drivers and the public from excess gamma radiation exposure. Fifty truckloads will carry the most highly radioactive material on Earth, irradiated nuclear fuel, from Pinawa, Douglas Point and Bécancour.

- CNL is putting Canada's federal nuclear sites at the disposal of the global nuclear industry, as testing grounds for an experimental Small Modular Reactor.

In effect, Canadian nuclear policy is being written by these private multinational corporations as a *fait accompli*, and Ottawa is complaisant.

“Canada does not yet have a federal policy for the long-term management of non-fuel radioactive wastes,” said Jim Carr, then NRCan Minister, in July 2018. We need one. Future generations require our diligence; other countries look to Canada for examples of responsible radioactive waste handling, transport, and long-term management. Government needs to take charge. Such decisions should not be left to corporate contractors.

The era of large nuclear reactors is over. Fewer reactors are operating today than 10 years ago. Projects for new reactors have ruined giant companies like Areva and Westinghouse. Nuclear energy's share of global electricity production has plummeted from 17 percent in 1997 to 10 percent today. The “Nuclear Renaissance,” ballyhooed since 2001, is a flop.

So how to keep the industry afloat? Maybe try manufacturing smaller reactors? But small reactors are more expensive per unit of energy; one has to sell hundreds or thousands of them to break even. Mass-production may partly overcome bad economics—but this brings its own difficulties. There are over 150 different designs for SMRs, each utilizing different fuels, different coolants, different moderators. The chance that any one design will corner the market and secure the sales volume needed to turn a profit is almost nil.

In July 2019, the Canadian Nuclear Safety Commission invited public comments on the first of several SMRs to be built at Chalk River—a high-temperature gas-cooled molten salt reactor with a graphite moderator, and pebble-like enriched fuel.

The age of nuclear power is winding down, but the age of nuclear waste is just beginning. Public consultations with First Nations and other Canadians are needed to formulate acceptable policies regarding the characterization, segregation, packaging, labelling, transport and long-term management of radioactive wastes. Meanwhile, CNL's plans and SMRs should be put on hold, and the consortium's contract should be cancelled.

—Gordon Edwards, PhD, is a Canadian scientist, nuclear consultant, and co-founder of the Canadian Coalition for Nuclear Responsibility.