NUCLEAR SHORTS

Another Uranium Truck Crashes in Canada

In at least the second Canadian highway accident involving uranium in 2016, a truck hauling uranium trioxide collided with a car on northern Ontario's Highway 17 on the morning of April 17. The truck was hauling uranium from the Cameco refinery in Blind River to southern Ontario when it struck the car just outside of Massey.

An investigation by the Canadian Nuclear Safety Commission found no damage to the packages and no uranium spill. The material was transferred to another truck and delivered to another Cameco facility in Port Hope for further processing. A Cameco spokesperson told the Canadian Broadcasting Corporation (CBC) that the Blind River facility turns out several truckloads of yellow uranium powder every week.

In January, a truck hauling 63 drums of uranium spilled part of its load on a Saskatchewan highway while en route to the Blind River refinery. Officials declared the site uncontaminated after two days of clean-up. —Nukewatch *Quarterly*, Spring 2016; CBC News, Apr. 18, 2016

Study Shows Effects of Radiation Exposure to Healthcare Workers

A new study published April 9 further documents the radiation health risks to healthcare workers, particularly those working in a "cath lab," in which X-rays guide heart procedures. The study compared the rates of cataracts, skin lesions, bone disorders and cancer in interventional cardiologists, electrophysiologists, nurses, and technicians to the rates in other healthcare workers who are not regularly exposed to these X-rays.

The rate of cancer in cath lab workers (almost 3 percent) is over 3 times higher than other healthcare workers (less than 1 percent). According to Reuters, the study authored by Maria Grazia Andreassi of the CNR Institute of Clinical Physiology concluded that "eight percent of lab workers had experienced skin lesions, 30 percent had an orthopedic illness and five percent had cataracts, compared to two percent, five percent and less than one percent of the unexposed group, respectively."

While protective measures such as leaded aprons and radiation shields are available, they are not required, they do not provide complete protection and they can cause orthopedic problems. Effects of radiation on radiologists have been observed as far back as 1902 when they were associated with high rates of radiation-induced skin cancer. In the 1940s and '50s high mortality rates due to leukemia were found among radiologists. Many more studies have affirmed the high rates of radiation-induced disorders in exposed healthcare workers; however, there is currently no alternative to X-rays available on a mass scale.

—Reuters, April 12, 2016; Radiological Society of North America Radiology, Nov. 2004

Marshall Islands Makes Case for Disarmament

In March, representatives from the Marshall Islands argued in front of 16 International Court of Justice judges at The Hague, making the case that the nuclear-armed states of the United Kingdom, India, and Pakistan are in flagrant violation of international law for failing to pursue the negotiations required by the 1968 Nuclear Non-Proliferation Treaty.

The Marshall Islands initiated lawsuits in 2014 against nine states, including declared nuclear powers China, France, Russia, and the United States, as well as Israel and North Korea. Britain, India, and Pakistan were the only nations that made a commitment to respond. The Pacific island nation, which was the site of 67 US nuclear weapons tests from 1946 and 1958, is pursuing a separate case against the United States—which only recognizes the United-Nations-affiliated International Court of Justice on a case-by-case basis—and is currently appealing a 2015 Federal District Court dismissal of the lawsuit.

Phon van den Biesen, who is leading the legal team for the Marshall Islands, described their goal: "We are, basically, asking the Court to tell the respondent states to live up to their obligations under international law and to conduct negotiations leading to the required result: nuclear disarmament in all its aspects."

Former Marshall Islands foreign minister Tony de Brum testified before the Court. "Several islands in my country were vaporized and others are estimated to remain uninhabitable for thousands of years. Many, many Marshallese died, suffered birth defects never before seen, and battled cancers resulting from contamination."

Van den Biesen expects the Court will deliberate for three to six months before deciding whether it will allow the cases against the United Kingdom, India, and Pakistan to move forward. —Radio New Zealand, Mar. 8 & 22, 2016

Koch Brothers Rainbow Ends at the Grand Canyon

David and Charles Koch placed a uranium-tainted pot of gold at the gates of the Grand Canyon, and a few lucky politicians found it. The origin of this radioactive rainbow was traced in an article published by Think Progress News Site in March.

A broad coalition has been working to declare the area around the Grand Canyon a National Monument which would prevent any new uranium mines in the 1.7 million acres surrounding it. Several Native American tribes including Havasupai, Hualapai, Hopi, Navajo, Zuni, Paiute, and Yavapai, along with businesses and environmental groups, make up the coalition that is working both through Congress and direct petition to President Obama to promote this designation, an authority the president has already used three times this year. Among the people of Arizona, 80 percent are in favor of such protection, including 65 percent of Republicans. Surprisingly, several politicians representing them differ in opinion.

Greg Zimmerman, one of the authors of the Think Progress article, was able to explain some of the discrepancy when he dug into the 990 tax forms of the beneficiaries. The pot of gold has its origin in American Encore (formerly known as the Center to Protect Patient Rights), a dark money organization partly funded by the Koch brothers. The funds are then passed to the anti-park efforts being run by Prosper, Inc. and Prosper Foundation, Inc. According to tax filings discovered by Zimmerman, "American Encore has funded 83 percent of Prosper Inc.'s total budget since its creation, donating over $1.5 million to the organization in 2013 and 2014." They have worked to lobby politicians and do anti-park publicity. Senator John McCain is known to have benefitted from Koch-backed dark money. In addition to dark money, which cannot be traced to its origin, several Arizona Representatives received donations directly from Koch Industries. Here are the amounts given during the 2014 cycle according to the Center for Responsive Politics: Representatives Paul Gosar ($5,000), David Schweikert ($10,000), Trent Franks ($2,500), Matt Salmon ($3,500) and Senator Jeff Flake ($2,000 in 2012). They have all opposed protecting tribal sacred cultural sites and favored continued pollution of this national treasure in order to return favors.

—Think Progress, Mar. 2, 2016; Center for Responsive Politics, Nov. 30, 2015; *Navajo-Hopi Observer*, Sept. 20, 2015

Military Video Shows New US Nuclear Bomb Burrows Underground

According to the National Nuclear Security Administration, the so-called "life extension program" for the US Air Forcce's B61 thermonuclear gravity bomb—its new name is B61-12—is not building a new nuclear bomb, but merely altering existing versions known as the B61-3, -4, -7, -10, and -11.

Now undergoing what's called the "development engineering" phase, the B61-12s are scheduled to be put to use at six NATO air bases in Europe as early as 2020.

In spite of widespread and repeated calls for the permanent removal of these Cold War-era bombs (from the peace movement, from parliamentarians in NATO countries, and even from the governments of Belgium and Germany), 180-200 of the new bombs—out of a total of 400-500 planned by the US Air Force—are scheduled to replace the older B61versions now deployed in Belgium, Germany, The Netherlands, Turkey and two bases in Italy.

Critics of deployment of US nuclear weapons in Europe point out that similar US weapons have already been removed from US bases in South Korea and from England.

Although the United States has promised not to build or deploy new nuclear weapons, Hans M. Kristensen, a Fellow with the Federation of American Scientists, and Matthew McKinzie, the nuclear program director at the Natural Resources Defense Council, report that "The capability of the new B61-12 nuclear bomb seems to continue to expand, from a simple life-extension of an existing bomb, to the first US guided nuclear gravity bomb, to a nuclear earth-penetrator with increased accuracy."

Last January, Kristensen and McKinzie wrote that a Sandia National Laboratories video made available by the *New York Times* "shows the new B61-12 penetrating completely underground." (See: https://fas.org/blogs/security/2016/01/b61-12_earth-penetration; a longer version of the video is available at the Los Alamos Study Group web site, lasg.org.)

"Given that the length of the B61-12 is about three-and-a-half meters, and that the Sandia video shows the bomb disappearing completely beneath the surface of the Nevada desert, it appears the B61-12 will be able to achieve enhanced ground-shock coupling against underground targets in soil...."

Kristensen warned two years ago that "the upgrades to the B61 may be in violation of the 2010 Nuclear Posture Review that states the life extension programs for nuclear munitions can 'not support new military missions or provide for new military capabilities,'" according to Michael Hoffman, writing for DefenseTech.org.

In January 2014, Hoffman wrote that Kristensen asked former Air Force Chief of Staff Gen. Norton Schwartz "if the B61-12 upgrade would allow the Air Force to use it against new target sets and offer new capabilities."

"It would have both effects," Schwartz told Kristensen at the January conference.

International legal scholars also argue that the deployment of US nuclear warheads outside US territory (as well as any future replacement of current B61s) violates the 1968 Nuclear Nonproliferation Treaty which forbids transfer of nuclear weapons to other states. ***—JL***

Lake Superior Barrels: Red Cliff Will Seek Funds for Repeat of Knife River Survey

Between 1957 and 1962 at least 1,458 barrels of toxic and radioactively contaminated military waste, from Honeywell's Twin Cities Army Ammunition Plant in Arden Hills, Minnesota, was secretly dumped by the Army Corps of Engineers into Lake Superior along Minnesota's North Shore. Almost all the barrels are still in the water.

Nukewatch has long demanded the identification, recovery and proper disposal of the barrels that remain intact. (See our special report, "Drinking Water at Risk: Toxic Military Waste Haunts Lake Superior," January 2013.) Our work has helped keep this scandal in the public eye and has earned some hard-won success.

It appears that Nukewatch's insistence has resulted in an important expansion of the ongoing investigation being conducted by the Red Cliff Band of Lake Superior Chippewa. The Band's Lake Superior barrels study has been funded by major grants from a Pentagon program for remediation of Formerly Used Defense Sites.

The breakthrough regards the Knife Island/Knife River dump site 10 miles north of Duluth, Minnesota (one of at least seven barrel dumping areas) and was revealed last November in a public presentation by Frank Koehn, a spokesperson for the Band. Since 2012, the Band has reported that only a "debris field" and no identifiable barrels could be seen in its underwater sonar pictures of the Knife Island site.

But in four detailed letters, Nukewatch provided the Band with official documentation of over 700 barrels having been dumped at Knife Island. In particular, Nukewatch provided the Band's study committee with copies of the Army Corps' own records including tug boat logs indicating the exact dates, times, numbers, and even weights of the barrels discarded at Knife Island/River.

The documentary record of dumping at Knife Island/Knife River is well established: 206 barrels on the night of June 26, 1962 and 500 barrels September 26, 1962.

The Band didn't respond to the letters, seemed unmoved, and its committee staff said that the ongoing recovery plan would not pursue anything at the Knife River site. One staff member suggested to Nukewatch, "The tug boat logs may not be reliable."

Then, late last year, Red Cliff reversed its position. The Band will now seek funds to redo its lake bottom sonar survey of the Knife Island/Knife River site. Koehn said in his presentation, "The bulk of this stuff was put off Knife Island," and the Band's new informational materials now state, as Nukewatch and others reported earlier, that 706 of the 1,458 barrels were dumped there.

When asked by Nukewatch if the acknowledgement of the need to more thoroughly study Knife River was a reversal of the Band's earlier position, Koehn admitted it was. The Band now believes that its sonar scan was "done too fast, about nine square miles per day, and that it will return to the area and scan at two square miles per day," if funding can be secured, according to Koehn. ***—JL***

Additional Resources

***Alliance for Nuclear Accountability,** 903 W. Alameda #325, Santa Fe, NM 87501; (202) 681-8401; jay@nukewatch.org; ananuclear.org
***Atomwaffenfrei Büchel,** Stuttgart, Germany; (49) 711-51885601; info@atomwaffenfrei.de; atomwaffenfrei.de
***Beyond Nuclear**, 6930 Carroll Ave., #400, Takoma Park, MD 20912; (301) 270-2209, info@beyondnuclear.org; beyondnuclear.org
***Campaign for Nuclear Disarmament**, London, England; (020) 7700-2393; enquiries@cnduk.org; cnduk.org
***Canadian Coalition for Nuclear Responsibility**, 53 Dufferin Road, Hampstead, Quebec, H3X 2X8 Canada; (514) 489-5118; ccnr@web; ccnr.org
***Citizens for a Non-Nuclear South Dakota**, www.facebook.com/NODRILLSD/
***Food and Water Watch**, 1616 P St., NW, Washington, DC 20036, (202) 683-2500; info@)fwwatch.org; foodandwaterwatch.org
***GAAA, Nonviolent Action to Abolish Nuclear Weapons**, Hamburg, Germany; gaaa.org; mariongaaa@gmx.de
***Great Lakes and St. Lawrence Cities Initiative**, 20 North Wacker Drive, Suite 2700, Chicago, IL 60606; (312) 201-4518; glslcities.org
***Ground Zero Center for Nonviolence**,16159 Clear Creek Rd., Poulsbo, WA 98370; (360) 930-8697; info@gzcenter.org; gzcenter.org
***International Campaign to Abolish Nuclear Weapons**, Genève, Switzerland; +41 (0) 227 882 063; info@icanw.org; icanw.org
***NIRS**, 6930 Carroll Av. #340, Takoma Park, MD 20912; (301) 270-6477; nirsnet@nirs.org; nirs.org
***PAX,** The Netherlands; +31 30 233 33 46; info@paxforpeace.nl; paxforpeace.nl
***Physicians for Social Responsility**, 1111 14th St, NW, #700, Washington, DC 20005, (202) 667-4260; psr.org;
***Stop Fennovoima!**, (358) 465-98-1080; stopfennovoima@protonmail.com; fennovoima.no.com/en/
***Trident Ploughshares**, Norwich, England, tridentploughshares.org; info@tridentploughshares.org
***Union of Concerned Scientists,** Two Brattle Sq., Cambridge, MA 02138-3780; (617) 547-5552; Web: ucsusa.org