## Nuclear waste threatens metal supply in US and South Africa

From the Nuclear Monitor April 2, 2013 | No. 759

Groups in the US and South Africa are joining forces to challenge the threats to radioactive waste entering the metal supply in both countries. In the US, the Department of Energy (DOE) is poised to lift its bans which have stopped radioactive metal going into the commercial metal supply since the year 2000. In South Africa, the National Nuclear Regulator is considering licensing three radioactive waste metal smelter plants at the Pelindaba nuclear complex near Pretoria.

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The agencies in both countries are proceeding despite clear public opposition and without concern for the health effects of chronic low dose radiation exposures on large populations that would result from their actions. Since metal is one of the most successfully recycled commodities on the planet, radioactive contamination from the US and South Africa could impact people around the globe, without their knowledge or consent. The US Nuclear Information and Resource Service and Coalition Against Nuclear Energy South Africa are jointly calling on both their governments to stop and prevent radioactive contamination of the world metal supply.

The US Department of Energy (DOE) and its sister agency the National Nuclear Security Administration have received over 90,000 comments and petition signatures opposing its plan to send radioactive metal into the marketplace to make everyday household and personal use items. (You can still sign on at signon.org/sign/will-the-zipper-on-your). The DOE is ignoring requests from the public to review the comments submitted during the brief comment period from December 2012 to February 2013, and it is failing to respond to requests on the status of the decision.

DOE's preferred option was to do a scanty Programmatic Environmental Assessment (EA-1919, 12/12/12) then begin releasing 14,000 tonnes of metal stored in radiological areas of the DOE weapons complex and laboratories. The steel, iron, aluminum and copper would be sent into the commercial recycling supply to make zippers, frying pans, beverage containers, cars, baby toys, dental braces, earrings, tableware, keys, belt buckles, anything made from recycled metal. Neither the metal industry nor the general public wants any radioactive contamination in the metal supply. Secretary Chu has resigned as head of the DOE but will stay until replaced. President Obama nominated Ernest Moniz, a strong nuclear advocate. It is not clear who will make the final decision on whether to contaminate the metal supply or not and whether to do a full Environmental Impact Statement.

DOE stopped providing information requested under the Freedom of Information Act on other radioactive materials that it allows out of control into the marketplace because it was too burdensome to make the records public.

The US does not have a legal "clearance" or "radioactive release" level, but DOE makes its own "authorized limits". The US Nuclear Regulatory Commission, Environmental Protection Agency and DOE have all tried numerous times to adopt a standard but technical concerns and public opposition have prevented setting a national level for radioactive waste materials, property and practices. The State of Tennessee allows private companies that it licenses to process and deregulate nuclear waste. The state adoption of this program was done in secrecy with deliberate intent to keep the public in the dark, using misleading acronyms such as BSFR (Bulk Survey For Release) to conceal the fact that the waste is

radioactive. German nuclear waste is being sent to Tennessee to be incinerated by one of the processors, EnergySolutions.

In the absence of a legal "clearance or release" standard, the US agencies use an old 1974 Atomic Energy Commission guidance document originally intended for releasing contaminated rooms or buildings at the lowest levels detectable by instruments of that era. This Regulatory Guide 1.86, never intended to allow radioactive personal items, has been misused to justify release of surface-contaminated materials. In 1999, a committee of nuclear advocates convened under the auspices of the Health Physics Society and American National Standards Institute (ANSI) to select "allowable" contamination levels for materials radioactive throughout (volumetrically radioactive). A review by the National Academy of Sciences found that the work done to develop the ANSI standard was not traceable and could not be relied upon. Despite this the DOE is using these levels in the Environmental Assessment EA-1919 suggesting allowable release levels for radioactive metal from DOE sites.

## **South Africa**

South Africa is moving to allow radioactive scrap metal waste out into unregulated commerce, considering it as a "resource" rather than material that should remain under radioactive controls. Already, a legacy of mining waste, known as acid mine drainage, is almost unstoppably seeping its radiotoxic pollution into the main water sources for potable water in the Johannesburg region's cities and surrounds. Despite several years of campaigning, the country's National Nuclear Regulator (NNR) remains largely in denial, and shielded by claiming the releases are ALARA (As Low As Reasonably Achievable) rather than enforcing honest precautionary principles.

To smelt down 14,000 tonnes of radioactive apartheid-era atomic bomb metal scrap, the South African Nuclear Energy Corporation (NECSA) has applied to the NNR to license three radioactive waste metal smelter plants at the Pelindaba nuclear complex near Pretoria. This is despite what was described as flawed environmental impact analysis approval processes and a public outcry during the public hearings of the NNR in October 2012.

If 14,000 tonnes are to be smelted, then three smelters are overkill, and one alone would handle the current waste inside of three years. So one suspects the real plan is to be an importer of radioactive waste from the world, and turn South Africa into a dumping ground.

By smelting and releasing radioactive metal scrap, NECSA will be absolved from responsibility, liability and costs of storing radioactive material on site. Instead, it will rake in profits from selling radioactive metal into the common market, into household goods, and export vehicles to over 70 countries. So-called "recycling" of radioactive metals is unacceptable and irresponsible. Apart from the above, and airborne radioactive pollution, and fallible filter systems, explosions causing spewed radioactive metal at smelter plants are known to have occurred, and killed workers.

South Africa has ratified the African Nuclear-Weapon-Free Zone Treaty – known as the Pelindaba Treaty – and agreed "not to take any action to assist or encourage the dumping of radioactive wastes and other radioactive matter anywhere within the African Nuclear-Weapon-Free Zone." Treating radioactive waste as a "resource" calls into question South Africa's commitment to the Treaty, and to internationally-agreed Principles of Radioactive Waste Management set out to protect human health, the environment and future generations. It must therefore denounce any notion of allowing radioactive waste to contaminate metal recycling.

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