

Plutonium Shipment to Depart Japan for United States – Exposes Failure Of Global Reprocessing Programs

*March 22nd 2016, Tokyo...*The shipment of weapons-grade plutonium departing the port of Tokai, Ibaraki prefecture as soon as later today, exposes the failure of global plutonium reprocessing programs and the threat from current Japanese nuclear policy, five non-governmental organizations charged today.(1) The cargo of 331kg of plutonium was loaded on to the Pacific Egret, an armed British nuclear transport ship, after it arrived at Tokai at 08.00 March 21st. Armed Japanese coastguard vessels, including the Shikishima, are outside the port and are expected to escort the plutonium shipment while inside Japanese coastal waters. The shipment is being undertaken in a failed U.S. policy attempt to reduce the threat from nuclear weapons materials worldwide.

The plutonium cargo to Charleston, South Carolina, in the United States, is sufficient to make over 110 nuclear weapons. However, the plutonium stockpile remaining in Japan is sufficient for over 1800 nuclear weapons, and the nation's total plutonium stocks of over 47,000kg– including material stored in France and the UK - is sufficient for over 9400 nuclear weapons.

For more than five decades, Japanese nuclear policy has been based on the production and use of plutonium as a nuclear fuel. However, the failure of both its breeder program and plans to use plutonium as mixed oxide (MOX) fuel in light water reactors, has led to Japan acquiring the largest stockpile of weapons usable plutonium of any non nuclear weapon state. Operation of the 2.1 trillion yen Rokkasho-mura reprocessing plant in Aomori prefecture was recently postponed for the 23rd time. The Japanese government is aiming to pass legislation in the Japanese Diet to try and secure continued financing for Rokkasho from power companies that are facing a deeply uncertain future. Plans to operate Rokkasho from 2018 mean that Japan's plutonium stocks could rise to as much as 93,000kg of plutonium by 2025.

As a result of reprocessing at the Sellafield nuclear complex in England, including from Japanese reactor spent fuel, over 126 tons of plutonium is stored at the site with no plans for its use. Total global stocks of so-called commercial reactor-grade plutonium was 271 tons at the end of 2014. This amount far exceeds the total amount in all military programs of 140 (+/-10) tons.(2)

“The global reprocessing of spent fuel has created a plutonium nightmare that threatens nuclear weapons proliferation. The UK, France and Japan have led this disastrous program, for which there is no economic rationale,” said Martin Forwood of CORE in the UK. “The clear warning to Japan from here in the UK, which has accumulated over 120 tons of plutonium and with no ability or plans to use it commercially, is, don't start up the Rokkasho-mura reprocessing plant - it does not solve your nuclear waste problem but makes it far worse and produces vast amounts of weapons material that is only a security and proliferation threat. It's time to scrap Japan's plans for further plutonium production,” said Forwood.

Two reactors, Takahama 3 and 4, owned by Kansai Electric, began operation in January and February 2016 loaded with plutonium MOX fuel, with unit 3 operating with 24 assemblies containing 1,088kg of plutonium and unit 4 with 4 assemblies containing 184kg of plutonium. Unit 4 shut down due to an electrical failure three days after start up, while unit 3 was forced to shut down on March 10th following a court order. Both reactors remain shut down and are subject of a court injunction preventing operation

issued by the Otsu district court, Shiga prefecture on March 9th. They are expected to be non operational for many months. Of the 26 reactors both approved and still under review by the Nuclear Regulation Authority (NRA), Ikata-3, Genkai-3 and Tomari-3 are all intended to operate with plutonium MOX fuel.

*“The United States has helped create the global plutonium crisis by approving Japan’s program over decades. Dumping hundreds of kilograms of plutonium in the United States only creates the illusion that something is being done – in reality it solves nothing. With the nuclear reactor program in Japan in disarray, with no credible program for either restarting most reactors or using large amounts of this plutonium, if ever there was a time to abandon its current doomed nuclear energy policy, it is now. The U.S.-Japan Nuclear Cooperation Agreement, the basis for Japan accumulating vast stocks of weapons material, is up for re-negotiation in 2018 - approval for Japan to continue acquiring plutonium must be terminated,”*said Tom Clements of Savannah River Site Watch.

The Department of Energy has no plans for final disposal of the Japanese plutonium, which will be added to the existing stockpile of 13 tons at the Savannah River Site, demonstrating that the shipment is largely a commercial dumping operation to secure funds for the beleaguered weapons material production site near Aiken, South Carolina, as pointed out by Savannah River Site Watch.

For more detailed analysis of Japan’s plutonium program and future prospects see Nuclear Proliferation in Plain Sight: Japan’s Plutonium Fuel Cycle—A Technical and Economic Failure But a Strategic Success, Japan Focus, March 2016 - <http://apjff.org/-shaun-burnie--frank-barnaby--tom-clements--aileen-mioko-smith--kendra-ulrich/4860/article.pdf>

For further information:

Hideyuki Ban, Co-Director CNIC —+81-3-3357-3800 -<http://www.cnjc.jp/english/?p=3182>

Aileen Mioko Smith – Executive Director Green Action —+81 90 3620 9251 —<http://greenaction-japan.org/en/>

Tom Clements – Director Savannah River Site Watch —+1 803 240 7268 -<http://www.srswatch.org>

Martin Forwood – CORE —+44 1229 716523 -<http://corecumbria.co.uk>

Shaun Burnie – Greenpeace Germany —+81 80 5088 3351 - <http://www.greenpeace.org/japan/ja/campaign/energy-en/>

Notes

1 – The five organizations are: Citizens Nuclear Information Center, Japan, Green Action, Kyoto, Savannah River Site Watch, CORE, UK, and Greenpeace. The Pacific Egret and its escort ship, Pacific Heron, lightly armed UK flagged vessels arrived in Kobe port from Barrow-in-Furness, England on March 4th. The Egret and Heron after departing Japan today will sail together most likely through the South Pacific to the east coast of the United States, with arrival expected in early May. The U.S. National Nuclear Security Administration’s Office of Material Management and Minimization (M3), formerly known as the Global Threat Reduction Initiative (GTRI), describes itself as a part of the U.S. national security strategy of preventing the acquisition of nuclear materials for use in weapons of mass destruction (WMDs) and other acts of terrorism. The M3 mission is to reduce vulnerable nuclear materials located primarily at civilian sites worldwide, and in the case of Japan the NNSA identified gap nuclear material (plutonium), which presents a potential threat to nonproliferation goals and may not have adequately safe and secure management options – see Environmental Assessment For Gap Material Plutonium – Transport, Receipt,

And Processing, DOE/EA-2024 December 2015, <http://energy.gov/sites/prod/files/2015/12/f27/EA-2024-FEA-2015.pdf>

2 - Global Fissile Material Report 2015 - Nuclear Weapon and Fissile Material Stockpiles and Production

Eighth annual report of the International Panel on Fissile Materials, see <http://fissilematerials.org/library/gfmr15.pdf>

3 - During the March 2014 Hague Nuclear Security Summit, Prime Minister Abe and President Obama “pledged to remove and dispose of all highly-enriched uranium (HEU) and separated plutonium from the Fast Critical Assembly (FCA) at the Japan Atomic Energy Agency (JAEA) in Japan”. Their pledge involved 331kg of plutonium. The 2016 summit from March 31st – April 2nd 2016 in Washington DC, will be the last.

See <http://nis2016.orgm/articles/SB10001424052970203658804576638392537430156>