

To the attention of Mr XXX
Minister of XXX

04th March 2009

Dear Minister,

We are writing to provide you advance warning of a secret plutonium shipment that is due to leave France bound for Japan this week. On March 6th 2009 a shipment of approximately 1.8 metric tons of plutonium contained in 65 assemblies of MOX fuel is scheduled to depart the port of Cherbourg bound for Japan.¹ We believe that this will be the largest transport of plutonium in history.

This MOX transport, planned by the French nuclear industry (AREVA), Japanese nuclear utilities and UK transport authorities without consultation or notification of en-route states, poses a serious risk to your country's population and environment. We urge you to call for a moratorium on all shipments of nuclear fuel and nuclear waste, at least until a regime is in place which ensures the protection of the marine environment and the environment, economy and population of coastal states. Such a system should include prior notification and consultation, environmental impact assessments, a satisfactory liability regime and protection from terrorism attacks.

This unnecessary and unjustifiable shipment is yet another example of the unacceptable risks that nuclear energy creates. Still, nuclear states such as France and Japan are desperately trying to have nuclear energy included in the post-2012 climate framework, as a potential climate change solution. However, they are ignoring the very real dangers associated with nuclear power, such as the upcoming plutonium MOX transport. Nuclear proliferation threats in general, and the number of plutonium and other nuclear transports specifically, will increase significantly if nuclear energy is adopted as a means to combat climate change.

The shipment

According to statements from Japanese, French and UK authorities, the date of departure and route will be announced after the shipment has left Cherbourg, France. There are three potential routes for the shipment:

- i) France - west coast of Africa, via Cape of Good Hope, Indian Ocean/Southern Ocean, Tasman Sea, South Western Pacific, to Japan;
- ii) France - Caribbean Sea, via Panama Canal, central/northern Pacific to Japan;
- iii) France - South America/Atlantic, via Cape Horn, South Eastern and Central Pacific to Japan.

The plutonium MOX fuel has been manufactured at the French state-owned Melox plant operated by AREVA. A total of 65 fuel assemblies of plutonium and uranium oxides will be shipped to the reactor sites operated by the Japanese utilities Chubu, Kyushu and Shikoku.

¹ Greenpeace understands that the 65 assemblies of plutonium MOX fuel contained in TN12 flasks will be transported during the nights of March 3rd/4th and 4th/5th. The Pacific Heron and Pacific Pintail will then proceed to load the plutonium MOX during the night of March 5th/6th, with departure expected during the evening of Friday 6th.

Our principle issues of concern for this shipment are the following:

Safety – the sea shipment of plutonium MOX fuel exposes the environment of en-route nations to the risk of accident and resultant radiological contamination. The MOX shipment's transport casks are only required to withstand emersion underwater at 15 meters for 8 hours (or 200 meters for 30 minutes). Shipboard fires can last much longer (days or even weeks) than the fire duration the containers are tested for. Once the plutonium in the MOX fuel disperses it poses serious public health and environmental risks. The commercial factors that determine the safety standards set by the nuclear industry, were recently revealed by Section Chief Masato Mori at the Japanese Ministry of Transport (MLIT), the official in charge of the MOX shipment's transport cask safety stated on 13 February 2009,

“The Japanese transport ministry is not the party which is fully in charge of this transport. The primary party responsible is the [Japanese] electric utilities. We've told them time and time again that they should put more effort into the safety of sea transports, just like [the effort] they put into the safety of their nuclear power plants. As far as we are concerned, they can put much, much more effort into the safety of the sea transports.”²

Security – The plutonium MOX to be shipped to Japan is classified as Category 1 direct-use nuclear material by the International Atomic Energy Agency (IAEA), which means that the plutonium in the MOX fuel can be used to construct nuclear weapons and requires the highest possible security.³ States or terrorists could extract the plutonium from the fuel and use it as weapons material.

The upcoming plutonium MOX fuel transport will be conducted by two British nuclear cargo ships (Pacific Heron and Pacific Pintail), armed with five 30mm naval canon, and 42 armed police from the UK Office of Civil Nuclear Security. A U.S. Department of Energy study concluded that the risk of attack on the shipment required the need for, *“providing continuous backup support for the vessel by military security assets.”⁴* The 1992 shipment of 1.7 tons of plutonium from France to Japan on board the Akatsuki-maru, was escorted by a Japanese coastguard vessel. However, in an attempt to reduce the financial burden of shipping plutonium fuel from Europe to Japan, the planned shipment will not have a dedicated armed escort vessel.

Even so, the U.S. Pentagon concluded in its assessment of sea shipments of plutonium that, *“even if the most careful precautions are observed (for sea shipment) no one could guarantee the safety of the cargo from a security incident, such as an attack on the vessel by small, fast craft, especially armed with modern anti-ship missiles.”⁵*

Proliferation – Reprocessing and the use of MOX fuel increase risks of nuclear proliferation. Plutonium in spent nuclear fuel is harder to extract for use in nuclear weapons than separated plutonium and plutonium in MOX fuel. Since the 1970's when Japan, France and others were warned about the proliferation dangers inherent within commercial plutonium, the global stockpile of commercial plutonium has risen to in excess of 250 metric tons, sufficient for tens of thousands of nuclear weapons.

² As quoted by Green Action Japan, International Press Release February 24th 2009. <http://www.greenaction-japan.org/modules/wordpress0/index.php?p=62>

³ As the IAEA safeguards glossary states, conversion of MOX fuel or powder to finished plutonium (metal) is of the order of 1-3 weeks. IAEA Safeguards Glossary, IAEA/SG/INF/1, Vienna, IAEA 1990.

⁴ See the U.S. Japan Peaceful Nuclear Cooperation Agreement, 1988. Citations are by Paul Leventhal, President Nuclear Control Institute, Gentsu Seminar, Tokyo April 17th 1990.

⁵ Ibid.

While plutonium MOX programs have failed to reduce stocks of the fissile material, new facilities in Japan (Rokkasho-mura reprocessing plant) and in the UK (Sellafield MOX plant) have been

commissioned. As warned by Greenpeace and others both have failed to operate as intended – and yet vested interests – political and commercial – continue to seek to sustain these and other facilities.

Nuclear proliferation regime in crisis

Discriminatory application of the non-proliferation regime, whereby certain states get full access to weapons usable materials under the guise of peaceful use, is clearly failing. Japan and France are now actively supporting the further development of global trade in bomb material through the President George W. Bush initiated Global Nuclear Energy Partnership (GNEP). The justification given is that due to finite uranium resources, the operation of breeder reactors and reprocessing, are essential for combating climate change. In reality they will not make any significant contribution to greenhouse gas mitigation and will dramatically increase proliferation dangers.

New programs, such as GNEP and the IAEA led International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO), will only further destroy the international non-proliferation regime. The negotiation of a comprehensive fissile material treaty by the parties to the Conference on Disarmament in Geneva is both urgent and long overdue⁶.

Opposition

Our conclusion is that the risks from this and any future plutonium shipment are wholly unjustified. It is therefore all the more important that the Japan, France and the UK are challenged over this unjustified shipment.

Since the 1990's tens of en-route states have made important statements of opposition and launched initiatives to challenge Japan, France and the UK over sea shipments of nuclear material.⁷ In the aftermath of the last European/Japan plutonium MOX shipment in 2002 concerted action was launched by threatened en-route nations. One of the most significant initiatives was taken at the 2005 UN International Meeting on Small Island Developing States (SIDS).⁸ The SIDS, including the Caribbean, the Pacific, and the AIMS (Atlantic, Indian Ocean, and Mediterranean and South China Seas) regions, were united in their opposition to the transport of radioactive material through their regions. Further opposition took place at the 2005 Review Conference of the NPT⁹.

⁶ A model Comprehensive Fissile Materials Treaty as proposed by Greenpeace can be found at <http://www.greenpeace.org/raw/content/international/press/reports/comprehensive-fissile-material.pdf>

⁷ These have included: the African, Caribbean Pacific Summit (ACP); Pacific Islands Forum; Caribbean Community (CARICOM); and Association of American States (AOS).

⁸ See, International Meeting to Review the Implementation of the Programme of Action for the Sustainable Development of Small Island States, Mauritius Declaration, A/Conf.207/L.6 (Port Louis, 14 January 2005), found at <http://www.un.org/special-rep/ohrlls/sid/MIM/A-conf.207-L.6-Mauritius%20Declaration.pdf>.

⁸ The Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island States (Port Louis, 13 January 2005), at found at http://www.un.org/smallislands2005/pdf/sids_strategy.pdf.

⁹ Article IV – Peaceful Uses of Nuclear Energy Transport of Nuclear Material at Sea, 20 May 2005, NPT/CONF.2005/MC.III/CRP.1 20 May 2005. Bahamas, for CARICOM, also made a statement to the Plenary on 4 May, citing the SIDS strategy and citing the potentially catastrophic impact of an accident.

On the eve of the largest plutonium MOX shipment in history, we urge you once again to oppose these dangerous shipments and confirm that commercial plutonium programs are unacceptable and must be terminated.

Greenpeace includes the following suggested measures for your consideration:

In the first instance,

- demanding an immediate cessation to all shipments of plutonium (MOX) fuel.
- requesting allied countries to join you in demanding an immediate cessation to all shipments of plutonium (MOX) fuel.

If this shipment goes ahead.

- demanding prior notification of the intended route as well as contingent routes, including the expected dates of passage;
- demanding details of emergency contingency plans and full consultation with the maritime authorities of *en route* States to develop and facilitate emergency contingency plans; demanding an assurance and/or securing an agreement that the shipping states will not transit the Economic Exclusion Zones (EEZ) of coastal states;
- demanding full security from attacks and protesting the lack of suitable security in the form of a military armed escort particularly following the events of 11 September 2001;
- insisting on a fully adequate liability and compensation regime that includes a fund for providing compensation that covers all types of damages, including those that may result from incidents.

France, Japan and other nuclear states are seeking to have nuclear power accepted as a sustainable energy source, and for it to be eligible for carbon credits under the post-2012 climate framework. The negotiations leading up to and including the Copenhagen climate summit in December 2009 could help determine whether nuclear threats increase dramatically, or whether they are ended. We urge your nation to oppose the inclusion of nuclear power in the future climate framework.

Thank you for your consideration of this important issue. If you require further information please do not hesitate to contact me.

Yours sincerely

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