

Open Letter to Director General Dr. Mohamed ElBaradei
International Atomic Energy Agency

2 March 2009

Dear Dr. ElBaradei,

We are writing to warn you that the French state nuclear company, Areva, is actively denying the proliferation risks posed by reactor-grade plutonium contained in Mixed Oxide Fuel. The matter is an urgent one, as 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

Our specific concerns are Areva's misrepresentation of the proliferation threat posed by commercial plutonium contained in this and other MOX fuel. They appear dangerously confused or deliberately denying the inherent proliferation risks of the Japanese plutonium MOX fuel. Specifically they went on record March 1st,

"It is impossible to make a nuclear weapon as suggested by Greenpeace. Here you must be clear, this MOX does not have any interest for any people to make a nuclear weapon from it. There is no interest in the diversion of this material. We have this level of protection, because the MOX fuel contains plutonium. Everything that contains plutonium must have a protective measure," Henri Jacques Neau, Director of Transport, Areva.²

Late last week following an interview with French news agency, AFP, an industrial source³ was cited in the article stating that,

"To make a bomb" out of MOX, "you would first need an installation in order to separate the plutonium from the uranium. And still, the result would only be plutonium of "civil" quality and not military quality," affirmed this source.⁴

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.

² Translated from an interview on France Inter, available at www.france-info.com/spip.php?article259152&theme=29&sous_theme=31. Original text: "On ne peut pas en faire d'armes nucléaires contrairement à ce qu'affirme Greenpeace, hein, et la faut être très clair, ce MOX n'intéresse absolument pas qui que ce soit pour fabriquer des armes nucléaires. (...) c'est que ces matières nucléaires n'ont aucun intérêt pour le détournement. On applique ces mesures de protection parce que le combustible MOX contient du plutonium, et qu'au titre de la réglementation internationale, tout ce qui contient du plutonium doit faire l'objet de mesures particulières de protection."

³ This quote is possibly from Areva, since it is the key player in the industry, most directly involved in this MOX-transport

These statements are clearly misleading, stating as it does there is a distinction between civil and military grade plutonium. This, as you are aware is not the formal position of the IAEA, which classifies commercial plutonium MOX fuel as Category 1 nuclear material, requiring the highest level of security protection. As the IAEA safeguards glossary states, conversion of MOX fuel or powder to finished plutonium (metal) is of the order of 1-3 weeks.⁵

Greenpeace is long used to Japanese nuclear industry denials that reactor-grade plutonium is a proliferation threat, and that it cannot be used to make nuclear weapons. However, you will be aware that as long ago as 1990 your predecessor Hans Blix confirmed to the Nuclear Control Institute that the IAEA does not dispute that reactor-grade plutonium can be used to manufacture nuclear weapons.⁶ Both you and your predecessor would surely agree that,

“The proliferation activities required to obtain weapon-usable plutonium from fabricated [mixed oxide] fuel assemblies would be essentially the same, (as for oxide) with addition of a simple sawing operation.”⁷ U.S. Department of Energy, 1980.

After decades of being aware of the reality of plutonium Japan’s denial neither impresses us, nor the governments in North-east Asia which view its growing plutonium stockpile program with increasing suspicion.

Now we have denials by the nuclear industry including an explicit denial by Areva, which we believe is in defiance of both the IAEA classification of reactor grade plutonium and MOX fuel, as well as senior nuclear weapons scientists and U.S. government departments, including the Department of Energy. We have attached a list of key statements made by leading U.S. nuclear agencies and weapons designers.

You will be aware that the U.S. Department of Energy first briefed Japan and other states on the proliferation risks from commercial reprocessing, reactor grade plutonium and MOX fuel more than 30 years ago.

“When we decided a couple of years ago to convince the world community that it (the construction of nuclear explosives out of low-grade plutonium) could be done, we did not bother to explain how we knew. But we knew from calculations from this (test...) When it

⁴ Translated from “Areva prépare le départ d'un important convoi radioactif pour le Japon” AFP, Cherbourg, February 26th 2009. Original text: “Pour fabriquer une bombe” à partir du MOX, “il faudrait d'abord avoir une installation pour séparer le plutonium de l'uranium. Et encore il n'en résulterait que du plutonium de qualité civile et non pas militaire”, a affirmé cette source.

⁵ IAEA Safeguards Glossary, IAEA/SG/INF/1, Vienna, IAEA 1990.

⁶ The confirmation from Hans Blix came after challenged by Paul Leventhal, President of the Nuclear Control Institute (NCI), and the analysis of J Carson Mark, Explosive Properties of Reactor Grade Plutonium, commissioned by NCI. J. Carson Mark was a member of the U.S. Nuclear Regulatory Commission’s Advisory Committee on Reactor Safeguards, and former division leader of Los Alamos National Laboratories Theoretical Division, see www.NCI.org and “Blix says IAEA does not dispute utility of reactor grade plutonium for weapons,” Nuclear Fuel, November, 12th 1990.

⁷ U.S. Department of Energy, NASAP, Vol: Nuclear Proliferation and Civilian Nuclear Power, Report of the Non-Proliferation Alternative Systems Assessment Program, Vol 2, Proliferation resistance, DOE/NE-0001/2 June 1980.

became clear that we had to convince the international community that we knew what the hell we were talking about – that plutonium is plutonium – we just decided to classify it”⁸

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. In the case of Japan, its stockpile of plutonium has increased from 6 metric tons in 1993 to over 43 tons today. This is despite warnings from former Deputy Director of the IAEA William Dircks made in 1992 that there was a growing threat from commercial plutonium stocks and there was an ***“urgent need to review once again our policies regarding plutonium and its use.”⁹***

Ten years ago, on the eve of the first plutonium MOX shipment to Japan, the Nuclear Control Institute, Green Action Japan, the Citizens Nuclear Information Centre, Tokyo and ourselves wrote to you calling for IAEA support for ***“an immediate cessation of weapons-usable plutonium separation, whether for stated military or civil use, and its stockpiling will help to reduce the threat that this material poses.”¹⁰***

Tragically no such cessation has occurred. 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.

Beyond this, 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 for these programs 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.

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. 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 overdue. This treaty

⁸ See, Gillete, R. Impure plutonium used in the 1962 A-test” Los Angeles Times, September 16th 1977.

⁹ See, William J. Dircks, addressed the 1992 Japan Atomic Industrial Forum Annual Meeting on the matter of "Nuclear Fuel Recycling - the IAEA Perspective".

¹⁰ Letter from Paul Leventhal, NCI, Aileen Mioko Smith, Green Action, Hideyuki Ban, CNIC and Shaun Burnie, Greenpeace International, April 13, 1999.

must not make the same mistake as current international norms whereby distinction is made between good plutonium and bad plutonium¹¹.

On the eve of the largest plutonium MOX shipment in history, we urge you once again to accept that commercial plutonium programs are unacceptable and must be terminated. We call on the IAEA to recognize the dangers in such programs and to make every effort to secure all weapons-usable fissile materials and end commercial programs utilising these materials.

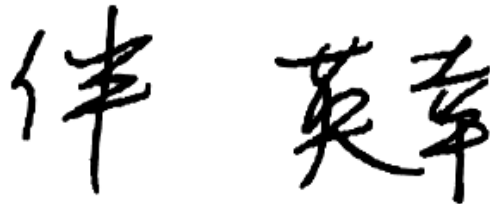
In view of the inherent proliferation and security threats of this plutonium MOX transport and Areva's misrepresentation of it, we urge you to prevent this dangerous cargo from leaving France and remind Areva and the governments involved of the security risks their nuclear programs pose to the world.

Yours sincerely,

Dr. Rianne Teule
Nuclear Campaigner
Greenpeace International
Ottho Heldringstraat 5
1066 AZ Amsterdam
The Netherlands
Tel. +316 5064 0961
rianne.teule@greenpeace.org



Hideyuki Ban
Co-Director
Citizens Nuclear Information Center
3F Kotobuki Building, 1-58-15 Higashi-nakano
Nakano-ku, Tokyo 164-0003
Japan
cnic-jp@po.ijnet.or.jp



Aileen Mioko Smith
Director
Green Action
Suite 103, 22-75 Tanaka Sekiden-cho
Sakyo-ku, Kyoto 606-8203
Japan
Tel. 81-75-701-7223
amsmith@gol.com



¹¹ 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>