

**Press Release - for immediate publication*****WISE-Paris and Large & Associates challenge  
the official assessment of the risk of plutonium transports***

Paris, 28 September 2004.

The report on "*Plutonium Transports in France*",<sup>1</sup> that was attacked by AREVA in a press release today, is a **joint assessment** published by the independant agency **WISE-Paris** and the British consulting engineers **Large & Associates**, directed by John H. Large, an international expert who was responsible for the team of experts assessing the nuclear risk involved in the salvage of the submarine *Kursk*.

The press release issued by COGEMA Logistics / AREVA does not bring any scientific element to refute this 18 pages technical paper. The study is a response to the criticism addressed by the Institut de radioprotection et de sûreté nucléaire (IRSN)<sup>2</sup> to two reports, published respectively by WISE-Paris in February 2003,<sup>3</sup> and by Large & Associates in March 2004,<sup>4</sup> on the risks associated to the plutonium transports in France. This experts' debate is now focusing on the assessment on the FS47 cask behaviour, that is key for the containment of plutonium during its transport. The main conclusions of WISE-Paris and Large & Associates are as follows:

- In the field of **safety** (accidents during transport), the described tests do not form a sufficient basis to conclude with so much certainty, as the IRSN did, that the FS47 cask can not breach in accidental conditions, and therefore the maximum fraction release to consider is 0.07 g of plutonium (out of a consignment up to 150 kg per truck).
- In the context of the upcoming weapon-grade U.S. plutonium transport, the IRSN is thus not well-founded to deny the hypothesis of the U.S. authorities, which in their assessment consider for similar scenarios a fraction release of 595 g per cask, or 8,500 times more than IRSN.
- In the field of **security** (malevolent acts), contrary to international recommendations, there is no definition in the French regulatory framework of the malevolent actions that the transports should be able to defeat ; instead a policy of **secrecy** over transports is considered protective.
- The IRSN has nevertheless developed in recent years a programme of tests on the FS47 resistance to explosive.<sup>5</sup> These tests, notably, demonstrate that the integrity of the cask would not resist when hit by a rocket propelled grenade of moderate efficiency, leading to a significant release of plutonium. Such results go against the French doctrine, that the radiological consequences of malevolent actions should not be superior to those expected from accident conditions.

According to Yves Marignac, Director of WISE-Paris, "*considering the stakes, it is time for AREVA to adopt international standards of technical debate instead of opposing the detailed and referenced analysis of independent experts with quite defamatory comments without scientific substance.*"

The publication of this joint assessment is in line with the statutory objectives of the WISE-Paris agency, which are to "*promote information to populations in France, in Europe and in the World about the various sources and forms of energy (...)*", to "*develop the understanding of energy issues, notably the impact of renewable energies and the consequences of the civilian and military use of nuclear power (...)*", to "*make the citizens more involved in these problems (...)*", and to "*distribute any juridical, economic, scientific or other information in relation with energy issues.*"

WISE-Paris' expertise on the various aspects of the plutonium industry is internationally recognized. For instance, WISE-Paris prepared in September 2001 a report, on the impacts of the La Hague and Sellafield reprocessing plants discharges,<sup>6</sup> for the European Parliament – which, as is the general rule, published it but did not endorse it – that was the subject of an exceptional hearing, in April 2002, where notably the European Commissioner for the environment declared: “*the Commission shares the opinion (...) that the information in the WISE report is comprehensive and neutral.*”<sup>7</sup>

The stir created by this report led to unprecedented attacks on the credibility of WISE-Paris, resulting in a filing of a formal complaint by WISE-Paris against X for falsification. This complaint lies in the hands of the state prosecutor.

Finally, WISE-Paris is an organism fully independent of any other organization bearing the name of “Wise”, with its correct designation being, in full and to the exclusion of any other form: “WISE-Paris”.

Contact: **Yves Marignac**, Director of WISE-Paris.  
Tel. +33.(0)1.45.65.47.93, Fax. +33.(0)1.45.80.48.58  
e-mail: [yves.marignac@wise-paris.org](mailto:yves.marignac@wise-paris.org)

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<sup>1</sup> Y. Marignac, X. Coeytaux, J. H. Large, *Plutonium Transports in France – Safety and Security Concerns over the FS47 Transportation Cask*, Joint Assessment, WISE-Paris / Large & Associates, 21 September 2004.  
<http://www.wise-paris.org/english/reports/040921JointAssessmentFS47.pdf>

<sup>2</sup> IRSN, *Risques de rejet radioactif lors du transport routier de poudre d'oxyde de plutonium en colis FS47*, not dated (March/April 2004).  
[http://www.irsn.fr/vf/05\\_inf/05\\_inf\\_1dossiers/05\\_inf\\_35\\_pu/05\\_inf\\_35\\_pu.shtml](http://www.irsn.fr/vf/05_inf/05_inf_1dossiers/05_inf_35_pu/05_inf_35_pu.shtml)

<sup>3</sup> Y. Marignac (Dir.), X. Coeytaux, M. Schneider & al., *Les transports de l'industrie du plutonium en France : une activité à haut risque*, WISE-Paris, February 2003.  
Executive Summary (English): <http://www.wise-paris.org/english/reports/030219TransPuMAJ-Summary.pdf>  
Full Report (French): <http://www.wise-paris.org/francais/rapports/transportpu/030219TransPuRapport.pdf>  
Appendices: [http://www.wise-paris.org/francais/rapports/transportpu/030219TransPuRapport\\_Annexes.pdf](http://www.wise-paris.org/francais/rapports/transportpu/030219TransPuRapport_Annexes.pdf)

<sup>4</sup> Large & Associates, *Potential Radiological Impact and Consequences Arising from Incidents Involving a Consignment of Plutonium Dioxide under Transit from COGEMA La Hague to Marcoule/Cadarache*, R3108-A6, 2 March 2004.  
[http://www.greenpeace.org/international\\_en/multimedia/download/1/424600/0/Large\\_report.pdf](http://www.greenpeace.org/international_en/multimedia/download/1/424600/0/Large_report.pdf)

<sup>5</sup> B. Atrusson, D. Brochard, “The French approach concerning the protection of shipping casks against terrorism”, paper from a presentation given in *ASME Pressure Vessels and piping*, Cleveland (USA), 21-24 July 2003  
[http://www.irsn.fr/net-science/liblocal/docs/docs\\_DEND/frenchapproach.pdf](http://www.irsn.fr/net-science/liblocal/docs/docs_DEND/frenchapproach.pdf)

<sup>6</sup> WISE-Paris, *Possible Toxic Effects from the Nuclear Reprocessing Plants at Sellafield (UK) and Cap de La Hague (France)*, Report to STOA, Direction of Research, European Parliament, November 2001.  
<http://www.wise-paris.org/english/reports/STOAFinalStudyEN.pdf>

<sup>7</sup> Introductory remarks by Commissioner M. Wallström, Petitions Committee, Public Hearing, 18 April 2002: “*The Commission shares the opinion of the Petitions Committee's independent reviewers that the information in the WISE report is comprehensive and neutral. To a large extent, the information in the report is the same as used in assessments made on behalf of the Commission, in particular the latest assessment of discharges from EU nuclear sites between 1987 and 1996. However, the consultant seems to have focussed on such information which aims to bring into question the justification of reprocessing.*”