

October 3, 1996

The Honorable Warren Christopher Secretary of State U.S. Department of State 2201 C Street NW Washington, DC 20520

## Dear Secretary Christopher:

On behalf of a working group of public-interest organizations on plutonium disposition issues, I am pleased to transmit the attached letter to express the deep concerns of these organizations about the apparent absence of a concrete U.S. proposal for the forthcoming G-7 technical summit to be held in Paris later this month.

As noted at the end of the letter, we would appreciate the opportunity to meet with you to discuss this important matter further.

Sincerely,

(signed)
Paul Leventhal

Greenpeace International \* Institute for Energy & Environmental Research \* Institute for Science & International Security \* Natural Resources Defense Council \* Nuclear Control Institute \* Nuclear Information & Resource Service \* Nuclear Waste Citizens' Coalition \* Physicians for Social Responsibility \* Public Citizen \* Safe Energy Communication Council \* Union of Concerned Scientists \* U.S. Public Interest Research Group

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## U.S. Position at Upcoming G-7 Technical Summit on Disposition of Military Plutonium

Dear Secretary Christopher:

We are writing with regard to the forthcoming G-7 technical summit on the disposition of plutonium from dismantled nuclear warheads, to be held in Paris, October 28-30.

We are concerned that without a proposal of its own, the United States may find itself isolated in this multilateral forum in the face of the strong bias in Europe, Japan and Russia toward Russian use of mixed-oxide (MOX) fuel for disposition of warhead and other military plutonium in power reactors. Given the recommendation by the National Academy of Sciences (NAS) that a "dual track" approach be followed in developing plutonium-disposition options, we believe it is urgently

important that the United States propose construction of a pilot plant in Russia to demonstrate the immobilization of warhead plutonium in glass.

Such a U.S. proposal would broaden and strengthen U.S. bilateral cooperation with Russia on plutonium disposition, provide an appropriate complement (consistent with the Academy's dual-track approach) to an anticipated French-German proposal to build a pilot MOX fabrication plant in Russia, and reassert U.S. leadership in the multilateral forum addressing this important element of arms control and disarmament.

On behalf of the Administration, the State Department has engaged the Russian government at high levels to discuss options for proceeding in parallel with the goal of reducing to equal levels of military plutonium to be recovered from dismantled nuclear weapons and other military sources under the START I and START II treaties. Russia's Ministry of Atomic Energy (Minatom) has looked askance at the option of immobilizing plutonium in a glass form for direct disposal, insisting that Russian plutonium is a "national treasure" to be stored and recycled for eventual use in fast-breeder reactors that would produce more plutonium than they consume. U.S. non-proliferation policy opposes such a "closed fuel cycle" because it encourages civilian commerce in plutonium and increases proliferation risks.

At U.S. urging, Russia agreed at the Moscow summit to participate in a follow-on G-7 technical meeting in Paris that would assess *all* viable disposition options, including vitrification. This concession represents the first real opening that permits the United States to influence Russia toward a dual-track approach in evaluating disposition options and toward consideration of vitrification for at least some of its excess plutonium. What is needed now is a concrete U.S. proposal to be laid on the table in Paris to build upon this opportunity. To our knowledge, however, no such proposal is under consideration.

France, a steadfast proponent of plutonium reprocessing and recycling, has floated a proposal with Germany for the Paris meeting: The G-7 should finance construction of a pilot MOX fuel fabrication plant in Russia to demonstrate that approach to weapon-plutonium disposition. Unless the U.S. goes to Paris forearmed with a realistic alternative, Russia will be further emboldened to pursue its narrow MOX approach to disposition. A pilot MOX plant built with foreign capital would subsidize Russia's pursuit of a commercial plutonium industry that otherwise might collapse of its own economic weight. Such a plant could be vulnerable to diversions and thefts because Russia has insisted it will not accept international safeguards on such a facility and because of persistent security lapses in the Russian nuclear program.

Fortunately, a number of promising alternatives to MOX disposition are being developed in the United States. For example, in January, scientists at the Savannah River Site in South Carolina began work on an innovative approach to plutonium vitrification known as "can-in-a-canister." This method would mix weapons plutonium and molten glass for placement in small metal cans. After cooling, these cans are to be placed in larger steel canisters, which then would be filled with a mixture of molten glass and highly radioactive waste, thus immobilizing the plutonium and meeting the "spent fuel standard" recommended by the Academy for final disposal. Initial testing of the process using non- radioactive simulants shows considerable promise.

Russia, which has considerable expertise in glass technology, operates a vitrification plant at the Mayak nuclear facility to dispose of high-level waste from plutonium production. Some initial laboratory work on immobilization of plutonium residues is being done in Russia. However, without U.S. financial support, it is extremely unlikely that Russia would build a pilot vitrification plant for disposition of plutonium. In addition, given the uncertainty of the viability of a MOX program in Russia, support of the development of the vitrification option would insure that Russia could continue with plutonium disposition in the absence of a fully-realized program of MOX use.

We, the undersigned public interest organizations, urge you to help facilitate a Russian plutonium vitrification pilot project, as a logical follow- on to discussions of vitrification approaches that already have taken place with Russian scientists. A U.S. proposal should be flexible with regard to the design of the project and choices of technology to ensure maximum Russian input.

Such a project would introduce Russia to the Academy's approach of developing the MOX and vitrification options in parallel "with near-term milestones and aggressive schedules." The project would also help level the playing field for non-reactor disposition approaches in Russia, thereby bringing their program closer to the approach being followed in the United States. Finally, it would establish a promising disposition technology as the basis for consolidating U.S. bilateral cooperation with Russia, and thereby counterbalance the multilateral approach reflected in the French-German MOX plant proposal.

We urge the Administration to offer such a proposal at the Paris meeting this October. We would appreciate the opportunity to meet with you or your staff to discuss this proposal in more detail.

Thank you for your attention to this urgent matter.

Sincerely,

Steven Dolley

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