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By DAVID E. SANGER

Special The N-1 - Vntl Tim'-

Tt)Kt'O. Nov. 24 - Amid great secrecy, the Japanese Government will start importing shipments of plutonium sometime next year in lightly defended sea convoys, each containing enough material to make two to 150 atomic bombs.

The purpose is not to make nuclear weapons - a step Tokyo has sworn since the end of World War II - but to take a major step toward energy independence with the plutonium fabricated in lump form from Japan's spent nuclear waste. It will beat conventional nuclear power plants and a small group of reactors that "breed" more plutonium in reverse.

But even before the first shipment makes the prospect of transporting - and then storing about 100 tons of plutonium, roughly the amount contained in the entire American nuclear arsenal. That's the next two to three decades hence. It's disturbing questions that the Japanese Government is reluctant to discuss in public.

Fear of Terrorist Action

Some American officials and Japanese reports have expressed little doubt that plutonium will be an irresistible temptation to the United States. The question is whether the shipments can be adequately protected will soon confront the Bush Administration, which has the right to approve or reject the final security plan because the United States supplied the original uranium fuel used in the Japanese reactors. Japan's effort to create a "plutonium cycle" has also caused nervousness among many of this country's Asian neighbors. In Tokyo, critics as seen despite the Government's repeated assurances that the program will inevitably create huge stockpiles of one of the most highly toxic, highly radioactive materials on earth.

The plan, conceived decades ago, has put the Japanese Government in a particularly uncomfortable diplomatic position in the last few months.

At the same time that the Government is demanding stronger nuclear non-proliferation measures, including this abandonment by North Korea of nuclear reprocessing sites that are believed to be part of that country's suspected bomb project, Japan is promoting what may be the world's largest reprocessing program at home.

U.S. Abandoning Reprocessing

The United States has abandoned large-scale reprocessing, in part because of

its lack of nuclear proliferation problems and in part because the plummeting price of uranium has made the practice uneconomical. Pressing the

case against North Korea last week  
't 'l a visit to South Korea, Defense  
Secretary...y Dick Cheney said. "South  
Korea, the United States and many  
other countries have proven that repro-  
duction is possible."

NEW YORK TIMES. November 25, 1991. mm!  
(title 141001017)

Japan plans to import shipments of plutonium in  
lightly defended convoys to fuel conventional nuclear  
power plants and a small group of fast-breeder  
reactors is not a necessary prerequisite  
to a legitimate civilian nuclear energy  
program."

A Bush Administration official said  
last week that the United States had  
seen only parts of Japan's security  
plans for transporting the plutonium.  
"but we do not yet have enough to say  
yes or no." v

Offers Only Vague Details

"There is obviously a big difference  
between Japan and North Korea." the  
official said. But Tokyo's reprocessing  
plan, he added, "is definitely some-  
thing no one is really happy about."

Japan uses enriched uranium in fuel  
its conventional power reactors. Pluto-  
onium is created as a byproduct; it can  
be recovered by reprocessing and then  
used as another kind of reactor fuel. or  
it can be transformed with relative  
ease into weapons-grade material

The Japanese Government is offer-  
ing only vague details about its plans,  
perhaps because it senses the political  
risks of the program both at home and  
abroad in response to inquiries about  
the safety of the shipments. Japanese  
officials say simply that they are tak-  
ing appropriate measures to protect  
them. .

Sensitive to charges that it is seeking  
to extend its military remit. Tokyo has  
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reactors. such as

one in Tsuruga

ruled out military escorts, The job of  
protecting the plutonium has been as-  
signed to the Maritime Safety Agency".  
roughly the equivalent of the Coast  
Guard,

The plan is to use one lightly armed  
ship; the sea route. has not yet been  
decided, In an article on the Opal  
page of The New York Times in April  
1990. Adm. Stanfield Turner, the for-  
mer Director of Central Intelligence,  
and Thomas Davies, the director of  
nonproliferation at the Arms Control  
and Disarmament Agency. wrote that  
the "The United States should advise  
Japan promptly that its plutonium se-  
curity plan is unacceptable."

0.5. Role in Last Shipment

A line Pentagon study written be-  
fore Congress barred Japan from fly-  
ing the plutonium by air over Alaska  
concluded that sea shipments pose  
enormous risks. "Even if the most

careful precautions are observed." the report said, "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 if armed with modern antiship missiles." On the one previous occasion that Japan moved plutonium by sea. in a single shipment in the early 1980s, the United States Navy provided an escort, USS Rear

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with low-level plutonium at the Monju reactor under construction in the Fukui prefecture. which "breed" more plutonium for re-use.

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Military officials said the shipment involved satellite surveillance and alerted military preparedness. "It is not something we can do again." said a senior military official in the Pacific. Paradoxically, a plan that was designed to take Japan's energy future out of foreign hands has in itself become an international issue.

"The Japanese would like to consider this simply a domestic matter. in part because a whole industry has built up around its reprocessing plans," said Paul Leventhal, the head of the Nuclear Control Institute, a Washington group that has opposed the plutonium plan. "But it is just a matter of time before quantities of separated plutonium that are this large fall into the wrong hands. And it establishes the wrong precedent."

in the 1950s, when it first began to think about nuclear power. Japan set a long-term goal of eventually relying on plutonium-fueled "fast-breeder" reactors. Because the reactors produce plutonium for reuse, they greatly reduce the amount of new uranium that needs to be imported.

Twenty years ago the country built its first artificial for fabricating plutonium fuel, called Tokai, and followed it with two experimental fast-breeder reactors. But political disputes with the

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Carter Administration. which was intent on limiting the construction of new reprocessing centers around the world, delayed Japan's next major step, the construction of a major reprocessing site at Rokkasho-mura on the northeastern coast of Honshu.

Vow by Activists

Because of technical hurdles and increasing anti-nuclear protests. that center. designed by the French to reprocess up to two tons of uranium a year. will not be ready until the end of the 1990s, nearly a decade late. Anti-nuclear activists. who are gaining influence in Japan, have vowed to make sure it does not open at all.

To stay on target in the interim. Japan signed contracts with Britain and France to reprocess 4,500 tons of spent Japanese nuclear fuel. Contracts that had the added benefit of delaying the day when Japan had to host a permanent storage facility for its high level nuclear wastes. .

Japan will not say how much plutonium it intends to import or burn all this now and the year 2000, conceding that there are too many unknowns to make an accurate forecast. Oddly, however, the Government has published projections to 2000

"By then, our hope is to have brought back or produced here about 80 or 90 tons of plutonium," Hiroshi Kimoto, the deputy director of the nuclear energy division at Japan's Agency of Natural Resources and Energy, said recently.

"But the numbers are small. We don't know when we will be able to stop relying on Britain and France."

In fact, in estimates that it has shared with other countries, Mr. Kimoto's agency has projected that about 30 tons will be shipped to Japan from Europe over the next nine years. That will mean up to a half-dozen shipments a year across the ocean on a route that is still being hotly debated. But the question that no one can seem to resolve is whether Japan will also be able to burn 30 tons of net, as the Government insists, or whether its projections of plutonium demand are wildly optimistic.

Studies Predicted But Stoelting's ' indeed, many studies suggest that Japan 'may be forced to accumulate large stockpiles until its nuclear industry is prepared to use the plutonium. It is an enormously sensitive issue in Japan because there is little doubt that such stockpiles would prompt an outcry from the populace.

"People are only now beginning to realize that handling such large amounts of plutonium will be a huge toxic hazard and will create a market in the most dangerous material used to make weapons," said Jinzaburo Taniguchi, the former nuclear engineer who is one of the most outspoken critics of the plan. "But Japan does not want to tell its own people about it." (V)

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No one is suggesting, at least publicly, that Japan has anything but peaceful uses in mind for the plutonium."

Nonetheless, the prospect of that much plutonium in use - more than international inspectors can keep track of with enormous precision - has many of the country's Asian neighbors nervous.

"Without question Japan has the technical skills to make a weapon," a Government official in South Korea

said earlier this year. "it seems foolish to leave the raw materials around as well." a

This year, for the first time, the Japanese Government acknowledged that the plutonium it hopes to import was a "militarily sensitive material." But it reasserted that "Japan will not possess plutonium beyond the amount required to implement its nuclear fuel recycling program."

Consensus Begins to Fray

The carefully honed consensus that had been vital in the entire operation has recently begun to fray. With 47 percent of the Japanese telling Government poll takers last year that they regarded nuclear power as unsafe, the Ministry of International Trade and Industry has been unable to find sites for new nuclear power plants, including the breeder reactors that are the key to the whole plan.

The Government's solution has been to convert some existing heavy water reactors - designed to burn uranium, not plutonium - so that they can be fueled by the mixed-oxide fuels made from the reprocessed plutonium. (Japan has no facilities for manufacturing the fuel by itself.)

Officially, the Government plans to begin that process in 1995. But the utilities are dragging their feet. "They are certainly not enthralled about using plutonium," said Mr. Leventhal, in a comment echoed by many Japanese executives. "it is expensive, and it is different." Moreover, uranium, which seemed in the 1970's to be a very scarce commodity, is now in oversupply and selling at record low prices.

' Dangerous In Power Form

Unless Japan breaks its contract with the European reprocessors, something the Japanese Government is loath to do, it will be left with "mounting stocks of plutonium," concluded a report by Frans Berkhout, Tatsujiro Sulutl and William Walker that was published last year by the Massachusetts Institute of Technology.

A third of the plutonium will be transported in powder form, but it cannot be stored in that state for more than a few years because it grows ever more radioactive.

"The important thing for us is not to have any excess plutonium in Japan," Mr. Kimoto said. But he said he could not specify how that would be accomplished, because "we cannot make up a rigid consumption plan." t'