https://web.archive.org/web/20171205135304/http://www.nti.org/gsn/article/north-korea-declares-31-kilograms-of-plutonium/

North Korea Declares 31 Kilograms of Plutonium



(Oct. 24) -Spent fuel rods removed from North Korea's nuclear reactor probably hold enough plutonium to boost the nation's stockpile to about 38 kilograms (Voice of America photo).

North Korea has formally declared that it has separated nearly 31 kilograms of plutonium through its nuclear operations, a figure significantly below previous U.S. estimates, Agence France-Presse reported today (see *GSN*, Oct. 23).

The figure of 30.8 kilograms was included in Pyongyang's June declaration of its nuclear operations and materials, a diplomatic source told the Dong-a newspaper. At the time, North Korea was expected to declare that it had produced about 40 kilograms of weapon-usable material (see *GSN*, June 26). U.S. intelligence analysts as of May were preparing to assess the amount at up to 60 kilograms (see *GSN*, May 14).

North Korea also said that it used 2 kilograms of plutonium in its October 2006 nuclear test, while directing the rest toward "developing nuclear weapons," according to *Dong-a*.

The Stalinist state could have six to eight nuclear bombs, South Korean Foreign Minister Yu Myung-hwan told lawmakers in Seoul on Wednesday. He cautioned that the figure was an "estimate," AFP reported (Agence France-Presse/Spacewar.com, Oct. 24).

only described the nation's separated plutonium and did not include plutonium still remaining in spent nuclear fuel.

"The 30 kilograms declared does not appear to represent the total amount of plutonium North Korea produced," said the report by the Institute for Science and International Security. "It does fall inside the lower bound of the range of the amount of separated plutonium that ISIS has assessed North Korea could now possess."

Furthermore, the report estimates that North Korea used 5 kilograms in its 2006 test explosion (Institute for Science and International Security release, Jan. 10).

That North Korea claimed to have used only 2 kilograms is "the most puzzling thing in the entire declaration," ISIS chief David Albright told *Global Security Newswire* today. Most estimates of the amount of plutonium needed for a weapon are considerably larger.

The 2-kilogram claim "is a very small number. It's very hard to do. Certainly you would get a low yield," Albright said, "but it's not impossible."

The North Korean nuclear test was indeed small, and some observers have said the explosive yield was so low that the test could be considered a failure.

Albright praised the deal struck this month under which North Korea signed off on foreign verification of its past nuclear activities because Pyongyang agreed to allow a study of the graphite moderating the nation's plutonium production reactor.

While the core of the reactor has been replaced repeatedly, the graphite has never been removed and therefore should hold invaluable data about the plant's operating history, he said.

"This is why the verification deal is worth supporting. It gets at the key question of how much plutonium North Korea produced," Albright said. core should hold 6 to 7 kilograms of plutonium, Albright said, which when added to its separated plutonium would mean the nation has produced about 38 kilograms if the declaration is accurate (Greg Webb, *Global Security Newswire*, Oct. 24).

The United States hopes to see North Korea's nuclear arsenal dismantled under the 2007 denuclearization deal signed last year. Pyongyang stands to receive various economic, diplomatic and security benefits for eliminating its nuclear infrastructure.

The process has appeared on the verge of failure a number of times, but appears to be on track after North Korea this month was removed from the U.S. list of state sponsors of terrorism in exchange for accepting the verification measures.

Site visits to North Korean nuclear sites are set to begin this year, after the nations in the six-party talks — China, Japan, Russia, the United States and both Koreas — sign off on the verification plan, U.S. Assistant Secretary of State Christopher Hill said yesterday. Pyongyang has reportedly acceded to inspections of its declared atomic facilities and possibly those that have not been declared.

Hill and other top negotiators from the six nations are set to meet in mid-November in Beijing, Kyodo News reported (Kyodo News I/Breitbart.com, Oct. 23).

"The checks of data on the North Korean nuclear program will be conducted by experts from the members of the six-party negotiations on the Korean Peninsula nuclear problem with the participation of the" International Atomic Energy Agency, Russian Deputy Foreign Minister Alexei Borodavkin said yesterday (RIA Novosti, Oct. 23).

North Korea has objected to the U.S. call for a written agreement on the site visits and collection of samples, according to Tony Namgung, chief secretary to New Mexico Governor Bill Richardson, former U.S. ambassador to the United Nations.

Pyongyang and Washington are expected to trade visits by informal delegations by January 2009, Namgung told the *Dong-a Ilbo*.

Richardson has made multiple trips to North Korea in recent years (see *GSN*, April 11, 2007; Kyodo News II, Oct. 23).

October 24, 2008

Share

http://nti.org/15248GSN

About

North Korea has formally declared that it has separated nearly 31 kilograms of plutonium through its nuclear operations, a figure significantly below previous U.S. estimates, Agence France-Presse reported today (see *GSN*, Oct. 23).

Countries



About the Threats

NTI has developed interactive educational tools for anyone who wants to learn more about the threat posed by nuclear, chemical, and biological weapons.