Neutron Initiator

Project to build neutron initiator,

the trigger to fission chain reaction for nuclear bomb

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*National Council of Resistance of Iran, Paris*

A nuclear bomb consists of three main parts: Nuclear fuel, launching systems and a neutron initiator that is needed as a trigger to a fission chain reaction in a nuclear bomb.

The Iranian regime is now pursuing to build the neutron initiator to trigger a chain reaction for a nuclear bomb. This renders false the mullahs claims that they are only seeking a peaceful use of nuclear technology.

The project in question is the attempt to build the neutron initiator, using Beryllium in conjunction with Polonium-210.

As we speak, Tehran has already succeeded to use Beryllium in conjunction with Polonium-210 for laboratory testing purposes, but has not yet reached the point of industrial production.

Polonium-210 emits Alfa source which in conjunction with Beryllium metal, it produces neutron source that serves as the trigger for fission chain reaction to detonate a nuclear bomb.

**The Ministry of Defense in charge of building the neutron initiator.**

Brigadier General Dr. Seyyed Ali Hosseini Tash, deputy Defense Minister, is the official in charge of producing weapons of mass destruction in the Ministry of Defense. He is, among other things, responsible for producing the neutron initiator for nuclear bomb. The production of Beryllium and polonium 210 is being carried out under the supervision of Hosseini Tash. He has all the capabilities of the Atomic Energy Organization of Iran at his disposal.

**Producing Polonium-210**

By irradiating Bismuth metal, the Iran regime has succeeded in transmuting it into Polonium-210. Tehran has lied to the IAEA that it has not produced Polonium-210 in the past 12 years, since 1993. It has also failed to offer convincing explanation as to why it had produced Polonium-210 in the early 1990s in the first place.

Despite such denials, Tehran is now producing Polonium-210 at Lavizan II military site (See satellite images attached), which Irans opposition, the National Council of Resistance first revealed in November of 2004. That site is affiliated with the Defense Ministrys Center for New Technology, headed by Dr. Mohsen Fakhrizadeh, who reports directly to Hosseini Tash. Dr. Fereidoon Abbasi is the deputy to Fakhrizadeh.

**Producing Beryllium**

Beryllium is a toxic metal. It is in the form of a copper-Beryllium alloy, 10 to 14 percent pure. Only three countries, the United States, China and Russia produce it and others, including Europeans, purchase and import this alloy. As a hard but light metal, Beryllium has few civilian uses. It is used for building nuclear fuel and reactors as well as for building centrifuge parts and also in missile manufacturing. Its main application, however, is for building a nuclear neutron initiator. In conjunction with Polonium-210, it becomes a neutron initiator triggers the fission chain reaction for a nuclear explosion.

**TWO METHODS**

The Iranian regime is using two methods to acquire Beryllium.

**Import:**

Iran has imported various compositions of Beryllium. It has not declared these imports to the IAEA, which only knows about a few grams of the metal purchased from Great Britain. Last year, however, the clerical regime imported significant quantities of Beryllium from another foreign country but hid it from the IAEA.

The Beryllium was purchased last year by the Foreign Purchase Directorate of the Ministry of Defense, which is headed by Brig. Gen. Mahmoud Tourani. The person directly involved in the purchase is named Col. Tabatabai. Based on reports, Tehran currently has enough Beryllium to produce a dozen nuclear bombs.

**Producing suitable compositions of Beryllium in Iran:**

Because the production of copper-Beryllium alloy is not cost effective, industrialized nations import it rather than producing it domestically. Yet, because no country is willing to sell the copper-Beryllium alloy to the regime, the Revolutionary Guards Corps and the Defense Ministry have attempted to produce this material domestically. Since four years ago, a project named TAVA has been initiated under the direction of the Ministry of Industry to discover strategic metals mines, including Beryllium. Dr. Mohammad Ghanadi, Deputy Director of the Atomic Energy Organization of Iran, told a private meeting that they have found Beryllium mines in Iran since June 2004.

**AGENCIES INVOLVED IN BERYLLIUM PRODCUTION**

Both the Ministry of Defense and the Atomic Energy Organization of Iran are involved in Beryllium production

1. **Ministry of Defense:** The Malek-Ashtar Industrial University that is run by the MOD has been working to produce Beryllium oxide for the past several years and obtained sufficient amount for laboratory testing. Experts at the University are now working on industrial manufacture of the metal.

Dr. Nasser Ehsani, Malek-Ashtar University President is directly responsible for this project. Brig. Gen. Hosseini Tash is supervising this top-secret project.

Dr. Teimourian, head of the chemical group of Malek-Ashtar University and Engineer Abbas Soliemani work with Dr. Ehsani on mixing Beryllium with Polonium 210 for nuclear neutron initiator.

The address for Malek-Ashtar chemical lab, where Beryllium oxide is being produced: Tehran, Babai Expressway, Lavizan, Malek-Ashtar University, Chemical Labs Science Complex.

1. **Atomic Energy Organization**:

Jaber Ibn Hayyan Laboratory: As the most important nuclear laboratory of the Atomic Energy Organization, it is responsible for producing Beryllium oxide. The director of Center for Research in Irans Scientific and Industrial Organization, Mr. Dahstizadeh, is cooperating with the Jaber Ibn Hayyan Laboratory on this project.

Jaber Ibn Hayyan laboratory is an extremely important facility, which produces uranium rods from enriched uranium.

**A KEY FRONT COMPANY**

The Sanat Gostar Majd Company has been working on copper-Beryllium alloy in Iran in the past three years. It is the only ostensibly private company of its kind in the country. The company has been set up to import Beryllium. It is also supposed to act as a front to justify any possible revelations and inquiries by the IAEA about Beryllium production in Iran. The regime is using the company as a front to lend support to its claim that the work is for peaceful purposes.

The company is handling civilian and military projects and smuggles Beryllium through its own channels. In June 2004, Dr. Ghanadi and Eng. Mehdi Panahi, ordered the manufacture of 5,000 pieces of Copper-Beryllium alloy to the company, which would be used for centrifuge machines.

Ehsan Marashi is the chairman of the board of the company. He is the company’s chief expert in Beryllium. Eng. Mohammad Jamil-nia is the director general of the company.

The address of the company: Tehran, Azadi Street, next to Sharif University of Technology, Martyr Ghadir Street, Alley number 5, number 102.

**NEUTRON GENERATOR**

The Iranian regime has also acquired the technical know how to produce a neutron generator both in the Atomic Energy Organization and the Ministry of Defense.

Dr. Javad Rahighi is the top expert at the AEOI and can make a neutron generator at a cost of US$100,000 with a life span of seven to eight thousand hours.

Dr. Fereidoon Abbasi, at the Revolutionary Guards Imam Hussein University, is the top expert for neutron generator and builds it for the Ministry of Defense. He is the deputy to Fakhrizadeh, at the Revolutionary Guards Lavizan site.