

EXHIBIT B

Affidavit of Timothy A. Frazier

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AFFIDAVIT OF TIMOTHY A. FRAZIER

I, TIMOTHY A. FRAZIER, being of sound mind and over the age of 21 years, do hereby swear and affirm that the following matters are true and correct, based on my own personal knowledge.

1. My name is Timothy A. Frazier. My current residence is located at 7701 Tomlinson Avenue, Cabin John, Maryland 20818. I am submitting this affidavit on behalf of the State of Nevada ("Nevada") in relation to the Department of Energy's current proposal to ship one metric ton of plutonium to the Nevada National Security Site in Nevada ("NNSA").

2. My professional qualifications and experience for dealing with plutonium related issues include degrees in engineering, management and operation of plutonium nuclear facilities, and over 29 years in the nuclear industry. I have almost 23 years of service with the Department of Energy ("DOE"). I managed large nuclear programs in the field and from DOE headquarters.

3. During my tenure at DOE, I worked in the nuclear weapons program at the Mound Site in Miamisburg, OH, was responsible for the production and certification of radioisotope thermoelectric generators which are fueled with plutonium-238, and was responsible for the packing, certification, and transportation of plutonium in a Type-B certified shipping container from the Russian's MAYAK Plant to the United States. I was responsible for the development and certification of Type-B certified shipping containers. During my time at DOE, I developed a broad knowledge base regarding virtually all the DOE sites and laboratories, their capabilities, security posture, and facilities.

4. I also have extensive experience with DOE's implementation of the National Environmental Policy Act ("NEPA"). I was the document manager for several Environmental Assessments – such as the relocation of assembly and testing of radioisotope thermoelectric

generators from the Mound Site to the Idaho National Laboratory; the proposed production of plutonium-238 at the Idaho National Laboratory. I was also the initial document manager for the Environmental Impact Statement for the Global Nuclear Energy Partnership.

5. Plutonium is a heavy metal and therefore toxic to humans. Plutonium-239 (“Pu-239”) is a radioisotope of plutonium with a half-life of 24,100 years. It decays by emitting an alpha particle (a helium atom). Alpha particles can be dangerous when they directly impact cells in the human body via ingestion or inhalation. Inhalation of Pu-239 particles of about 10 microns is particularly risky. Particles of this size can be inhaled and deposited in the lung – allowing the alpha particles to directly impact lung cells. The deposition alpha emitting Pu-239 particles in the lung can raise the risk of cancer in an individual; the level of risk is increased with increased exposure.

6. Pu-239 is a fissile material that can fission and release large amounts of energy. Pu-239 metal is used in the fabrication of nuclear weapon “pits.” Pits are the component of the nuclear weapon that is imploded by conventional explosives to a super-critical mass and then bombarded by neutrons to create the huge release of energy and an explosion. In thermonuclear weapons, this energy is used to drive the explosion of a secondary pit – made of highly-enriched uranium – and an even larger release of energy and explosion.

7. Pu-239 metal particles or tailings (from machining) can ignite in the presence of moist air. There were two fires at the Rocky Flats Plant outside Denver, Colorado – which made Pu-239 pits – resulting from finely divided Pu-239 particles. The fires resulted in a release of Pu-239 into the environment.

8. There are several alternatives to shipping the 1 MT of Pu to the NNSS for storage. These alternatives include: the Y12 National Security Complex in Oak Ridge, TN; the Pantex

Plant in Amarillo, TX; Sandia National Laboratory and Kirkland Airforce base in Albuquerque, NM; and, Los Alamos National Laboratory ("LANL") in Los Alamos, NM. Any of these alternatives should pose less risk and less environmental impacts than shipping the 1 MT of plutonium to the NNSA for eventual shipment to LANL due to the decreased mileage required for transportation.

FURTHER AFFIANT SAYETH NOT.

[Signature]
Timothy A. Frazier

CITY OF Manland)
STATE OF MARYLAND)

The above-named affiant personally appeared before me this 24th day of October, 2018, and executed this affidavit.

[Signature]
NAME:
NOTARY PUBLIC

My Commission Expires:
05-21-2019

RONALD SINKER
Notary Public, Montgomery Co., MD
My Commission Expires May 21, 2019