CERTIFIED TRANSLATION FROM THE POLISH LANGUAGE

PRESIDENT ---

OF THE NATIONAL ATOMIC ENERGY AGENCY ---

Warsaw, 20th October 2017

Register number: 01.201.45---File No. DOR/5001.2598.4.2017.AJ---

274.2017×24.10.2017 ----

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szawa, ul. 10 tel. 22 64 5 0

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CERTIFICATE No. PL/0018/S-96 (Rev.2) --for special form radioactive material ---

Pursuant to:

- Art. 104 of the act of 14th June 1960 Code of Administrative Procedure (i.e. Dz.U. of 2017, item 1257), ---
- Art. 109 § 1 of the act o of 29th November 2000 Atomic Law (Dz. U. of 2017 item 576 as amended),
- Art. 9 § 1.5 of the Act of 19th August 2011 on the transportation of hazardous materials (Dz. U. 2016, item 1834 as amended), ---

in relation to the prescribed requirements defined in:

- section 5.1.5.2.1 and 6.4.23.13 of Schedule A to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) (Dz. U. of 2017 item 1119), ---
- section 5.1.5.2.1 and 6.4.23.13 of the Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) representing Schedule C to the Convention concerning International Carriage by Rail (COTIF) (Dz. U. of 2017 item 1355), ---
- section 5.1.5.2.1 of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) 2015(Dz. U. of 2017, item 1719), ---
- the International Maritime Dangerous Goods Code, 2016 Edition Incorporating Amendment 38-16 (the IMDG Code), ---
- ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air 2017-2018 Edition ---

and taking into account: ---

- Regulations for the Safe Transport of Radioactive Material, 2012 Edition No. SSR-6, issued by the International Atomic Energy Agency (IAEA), ---
- the Act of 15th November 1984 the Carriage Law (Dz. U. of 2015, item 915, as amended), --

I hereby declare that the model of the radioactive material source specified herein below **complies with the requirements for special form radioactive material** as defined in the foregoing international regulations and the provisions in force in Poland relating to the safe carriage of radioactive materials. ---



274.2017, 24.10.2017 ---

1. Description of the special form radioactive material source

This certificate is related to the design for special form radioactive material source Ir-192 encased in a HB type protective housing (radioactive material source code: IR1HB) manufactured by the Radioisotopes Center POLATOM of the National Nuclear Research Center Page 2 of 2

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in Otwock, whose structure, dimensions and mode of manufacture are defined by the "Technological and Dosimetric Instruction for the Manufacture of sealed Ir-192 and Co-60 Industrial Sources". The active part of the radioactive material source is placed in a **HB** type protective housing made from **1H18N9T** steel hermetically sealed by argon-shielded welding (the TIG method). ---

2. Description of the radioactive material

The radioactive material concerned is **Ir-192** in the form of metallic iridium pellets with a maximum diameter of 3.0 mm and height of 0.2 mm. Pellets of a diameter of less than 3.0 mm are pressed into an aluminium ring of an outer diameter of 3.0 mm. The maximum dimension of the active part of the radioactive source is \emptyset 3.0 mm x 3.0 mm. The clearances in the housing formed after the required amount of iridium pellets had been placed therein, are filled out with aluminium separators with a diameter of 3.0 mm and a height of 0.2 mm. The maximum activity of the radioactive material in the **HB** type housing amounts to **6,5 TBq.** ---

3. Certificate validity

This certificate is valid until 18th October 2020 ---

The certificate has been issued at the request of the National Center for Nuclear Research of 13th October 2017 (received on 16th October 2017) file No.OR/D/MK/42/2017, based on the analysis of the following documents: ---

- a) The Technological and Dosimetric Instruction for the Manufacture of sealed Ir-192 and Co-60 Industrial Sources (No. DP 2311/8 of 15th February 2017); ---
- b) Report No. 4/2001 of 19th November 2001, and Report No. 2/2002 of 9th January 2002, of an examination of Ir-192 sources enclosed in a HB type housing. ---

An official round seal with Poland's coatof-arms, reading: THE NATIONAL ATOMIC ENERGY AGENCY ---*1* --- Authorized by The PRESIDENT of the National Atomic Energy Agency ----/ --- / Signature ---A stamp, reading: ---Ewa Paluch VICE-PRESIDENT of the National Atomic Energy Agency ---



Instruction: ---

A party dissatisfied with a decision may file an application with the President of the National Atomic Energy Agency for re-examination of the case within 14 days of this decision being served thereto.

Should such party not be willing to avail itself of the right to apply for re-examination of their case, it may submit a complaint against a re-examination decision before the Voivodeship Administrative Court in Warsaw within 30 days of the petitioner being served the re-examination decision in the case. ----Such complaint is filed through the agency of the President of the National Atomic Energy Agency. An amount collected for each complaint is PLN 200.00. The complaining party may apply for assistance in the form of being exempted from court fees and appointing an official solicitor, legal counsellor, tax advisor or a patent agent. During the application submission prescribed time, the party may renounce the right to file an application for re-examination of the case with the President of the National Atomic Energy Agency. On the date of such declaration of renouncement of filing such application for re-examination of the parties being served to the President of the National Atomic Energy Agency, such decision becomes final and valid, which means that a complaint against said decision may not be submitted with the Voivodeship Administrative Court. ---

Copies to: ---

1. The National Center for Nuclear Research, Radioisotopes Center POLATOM ----

ul. Andrzeja Sołtana 7, 05-400 Otwock ---

2. A file copy ---

Address for correspondence: ---

The National Atomic Energy Agency - the Radiological Protection Department ----00-522 Warsaw, ul. Krucza 36 Tel. 22 695 97 43, fax. 22 695 98 71 ---

I, the undersigned, Krystyna Sachmacińska, sworn translator of the English language registered under No. TP/1920/06 on the List of Sworn Translators kept by the Minister of Justice of the Republic of Poland, certify that this is a true and correct translation of an original document drawn up in the Polish language.

Warsaw, 24th October 2017

Repertory No. 274 / 2017.

