



Republic of the Philippines
Department of Science and Technology

PHILIPPINE NUCLEAR RESEARCH INSTITUTE



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PNRI INFORMATION NOTICE 2017-01

REVISED REGULATION: CPR PART 4, “REGULATIONS FOR THE SAFE TRANSPORT OF RADIOACTIVE MATERIAL IN THE PHILIPPINES”

ADDRESSEES

All PNRI licensees and applicants of radioactive material license.

PURPOSE

The Philippine Nuclear Research Institute (PNRI) is issuing this information notice to inform current license holders and applicants of the publication of the revised Code of PNRI Regulations (CPR) Part 4, “Regulations for the Safe Transport of Radioactive Material in the Philippines”, in the Official Gazette Vol. 113 No. 13 on 27 March 2017. The CPR was updated to strengthen regulations and to be consistent with internationally accepted safety standards and regulatory best practices. The PNRI enjoins the recipients to review the revised CPR for applicability to their facilities and to consider actions, as appropriate. The CPR was presented for review during the IAEA Regional Workshop on the Drafting of Regulations for the Safe Transport of Radioactive Materials held in Vienna, Austria on April 18-22, 2016

HIGHLIGHTS OF THE REVISIONS TO THE CPR

The major revisions to CPR Part 4 included, among others, the following:

Section 1. Purpose

The Section 4(i) of Republic Act. No. 5207 was stated as one of the basis for the promulgation of the CPR.

Section 2. Scope

The following provisions were included:

- Applies to the all modes of transport and applies the graded approach in specifying the performance standards which are characterized in terms of three general severity levels:
 - (1) Routine conditions of transport (incident free);
 - (2) Normal conditions of transport (minor mishaps);
 - (3) Accident conditions of transport.

- Establishes the requirements for the transport, e.g. radioactive materials, packages and packaging, etc.

Section 3 – Definitions

The following terminologies have been modified:

- A1
- A2
- Carrier
- Consignor
- Excepted Package
- Freight Container
- Low Specific Activity (LSA) Material
- Packaging
- Surface Contaminated Object (SCO)

The following additional terms used in the document were defined:

- Act
- Consignor's Declaration (CD) currently called "Certificate of Transport (CT)"
- Design
- Management System
- Multilateral Approval
- Nuclear Material
- Radiation Protection Programme
- Transport
- Unilateral Approval
- UN Number
- Vehicle
- Vessel
- Worker

The following terms were deleted:

- Certificate of transport (CT)
- Competent Authority
- Criticality Safety Index
- Fissile Material
- Quality Assurance
- Type A Package
- Type B Package

THE FOLLOWING NEW PROVISIONS HAD BEEN STIPULATED:

Section 8. Authorization to Transport Radioactive Material

Transport of radioactive materials shall be authorized in a license issued by PNRI.

Section 10. Transport Documents

Licensee shall prepare Consignor's Declaration (formerly Certificate of Transport) which contains the necessary information as stipulated in the CPR for assuring that each package can be transported safely.

Section 11. Permit to Transport.

Any shipment to be made by a PNRI license-holder not specifically authorized in his radioactive material license or by a non-PNRI license consignor to transport any radioactive material shall secure a **Permit to Transport** from PNRI. An application for a **Permit to Transport** shall include:

Section 12. Management System.

Provision for the establishment of management system based on international, national or other standards acceptable to PNRI shall be established and implemented for all activities within the scope of the Regulations to ensure compliance with the requirements of this Part.

Section 14. Non-compliance

- In an event that non-compliance to any limit stipulated in the CPR, the carrier, consignor or consignee shall be **informed**.
- The carrier, consignor or consignee shall take immediate steps to **mitigate** the consequences; **investigate** the non-compliance and its causes, circumstances and consequences; take appropriate action to **remedy** the causes and circumstances that led to the non-compliance and to **prevent** a recurrence of circumstances similar to those that led to the non-compliance;

Section 16. Training

- Radiation protection, including the precautions to be observed in order to restrict their occupational exposure and the exposure of other persons who might be affected by their actions.
- General awareness/familiarization training
- Function specific training
- Safety training
- Training on content of the CPR
- Records of training be kept

Section 17. Retraining

The training required in the immediately preceding section shall be provided or verified upon employment in a position involving radioactive material transport and shall be periodically supplemented with retraining every **five (5) years** or as may be deemed appropriate by PNRI.

Section 18. Information for Carriers.

- Actions, if any, that are required to be taken by the carrier as specified by the consignor in the transport documents shall be implemented.
- The consignor shall make available to the carrier the Consignor's Declaration before loading and unloading.

Section 19. Assignment of UN Numbers

- Refer to Figure 6
- Refer to Appendix A

Section 21. Classification of Material

- Low Specific Activity (LSA) Material
- Surface Contaminated Object (SCO)
- Special Form Radioactive Material
- Low Dispersible Radioactive Material

Section 25. Consignor's Responsibilities (formerly Section 29)

- Mark, label, placard;
- Comply with **Section 10**, Transport Documents;
- Retain copy of transport documents for a minimum period of three (3) years;
- For consignments of more than one package, the information contained in Section 10 shall be given for each package;
- Remove or cover the labels in an empty packaging.

Section 27. Requirements and Controls for Contamination and for Leaking Packages.

- Non-fixed contamination on the external surfaces of any package shall be kept as low as practicable
- If package may have leaked or been damaged, access to the package shall be restricted
- In excess of allowable limits for normal conditions of transport may be removed to an acceptable interim location under supervision

Section 29. Limits on TI and Radiation Levels for Packages and Overpacks.

- TI of any package or overpack shall not exceed **10**
- the maximum radiation level at any point on the external surface of a package or overpack shall not exceed 2 mSv/h.
- Requirements for consignments under the exclusive use

Section 33. Requirements on Segregation and Stowage during Transport and Storage in Transit.

Additional requirements:

- Rail and road vehicles carrying packages, overpacks or freight containers labeled with any of the labels shown in Section 30 (c), or carrying consignments under exclusive use, shall display the placard shown in Fig. 5 on each of the two external lateral walls in the case of a rail vehicle; or on the two external lateral walls and the external rear wall in the case of a road vehicle.
- In the case of road vehicles, no persons other than the driver and assistants shall be permitted in vehicles carrying packages, overpacks or freight containers bearing Category II-YELLOW or III-YELLOW labels.
- Type B(M) packages and consignments under exclusive use shall not be transported on passenger aircraft.
- Vented Type B(M) packages, packages that require external cooling by an ancillary cooling system, packages subject to operational controls during transport and packages containing liquid pyrophoric materials shall not be transported by air.

Section 38. Import/Export Controls.

A licensee who imports radioactive material from another country shall submit to PNRI true copies of transport documents such as Consignor's Declaration, bill of lading, or airway bill with packing list of a radioactive material shipment that will arrive or have arrived at the Philippine Port of Entry. Upon verification/inspection as applicable of the shipment, the PNRI may grant the licensee a **Certificate of Release** for submission to the Bureau of Customs in compliance with the requirements for the release of such package from the customs cargo hold area.

DISCUSSION

In 2012, the IAEA approved the latest edition of the Regulations for the Safe Transport of Radioactive Material – SSR-6, 2012 edition and recommended to all Member States the adoption of the revised regulations or use them, as far as practicable, as their basis for the formulation of their own regulations. Hence, the PNRI issued PNRI Administrative Order No. 01 Series of 2013, Adoption of the IAEA Safety Standards SSR-6 “Regulations for the Safe Transport of Radioactive Material” - 2012 Edition and was published in the Official Gazette on March 24, 2014. The IAEA Safety Series SSR-6 “Regulations for the Safe Transport of Radioactive Material – 2012 edition” govern, whenever practicable, the safe transport of radioactive materials in the Philippines by all modes on land, water, or in the air, including transport which is incidental to the use of radioactive material.

The PNRI shall now include the ***Authority to Transport Radioactive Materials in the Philippines*** in all license applications, as applicable, in accordance with Section 8 of the revised CPR Part 4. However, Section 11, Permit to Transport states that any shipment to be made by a PNRI license-holder not specifically authorized in his radioactive material license or by a non-PNRI license consignor to transport any radioactive material shall secure a **Permit to Transport** from PNRI.

Furthermore, the PNRI has been implementing a prescriptive regulatory approach wherein specific regulatory criteria and procedures were defined for strict compliance. However, recent developments from international regulatory practices recommended a more flexible approach towards meeting regulatory objectives. In line with this effort, PNRI has been updating its regulations which include this revised CPR Part 4.

In general, the requirements stipulated in the revised CPR Part 4 are commensurate with the degree of complexity of procedures and associated risks. The licensee is required to prepare its Radiation Protection Program, Management System, Emergency response and arrangements and others as required in the CPR. Transport Safety procedure shall also be tested and evaluated.

During the course of the development of this CPR, consultations had been made to the stakeholders or licensees to solicit inputs or comments on the draft CPR. It may be recalled that a regulatory conference was conducted on September 14, 2016 attended by most licensees especially those involved in the transport of radioactive materials to further discuss issues and concerns and finalize the draft CPR. It was noted that there was no objections made on the draft CPR. The CPR Part 4 has

been approved by the Director on January 6, 2017 and published in the Official Gazette on March 27, 2017 (Volume 113, No. 13)

The CPR Part 4 Rev. 02 is now available and can be downloaded from the PNRI website (www.pnri.dost.gov.ph).

REQUIRED LICENSEE RESPONSE

The licensee is expected to direct all staff involved in the safe transport of radioactive materials to review the revised regulation and to make necessary revisions in its radiation safety program, as appropriate and applicable, to reflect the changes and additional requirements necessary for compliance.

CONTACT

If you have any question about the information in this notice, please contact:

ALFONSO A. SINGAYAN

OIC, Regulations and Standards Development Section
Nuclear Regulatory Division
Philippine Nuclear Research Institute
Tel. No. 929-6011 to 19 local 227

TEOFILO V. LEONIN, JR.

Chief, Nuclear Regulatory Division
Philippine Nuclear Research Institute
Tel. No. 920-8796

APPROVED:


TEOFILO V. LEONIN, JR.
Officer-in-Charge

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