Republic of the Philippine PHILIPPINE NUCLEAR RESEARCH INSTITUTE Department of Science and Technology

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NRLSD BULLETIN NO. 92-06

CERTIFICATE OF TRANSPORT

A. ADDRESSEES

All licensees who transport sealed radioactive materials or radiography sources.

B. PURPOSE

This bulletin is issued to emphasize the importance of issuing a **Certificate of Transport (CT*)** and details of the requirement for transporting radioactive materials as contained in the CT. It is expected that the licensees affected by this bulletin will consider appropriate actions to ensure safety in transporting radioactive material.

C. DESCRIPTION OF CIRCUMSTANCES

A report was received by the **Institute (PNRI)** about the loss of a radiographic equipment loaded with radioactive source during transport. The equipment along with other paraphernalia were transported by means of a public vehicle (taxicab) and the person authorized for the trip left it in the vehicle. Efforts to locate the lost equipment were undertaken through publication in different local newspapers, broadcast in radio stations, and through telephone inquiries.

Protection of the public against unnecessary radiation exposure from the lost radiographic equipment could not be thoroughly ascertained since the package was transported without a **Certificate of Transport**. With the absence of such document the transport requirements for compliance can not be evaluated.

The lost radiographic equipment was eventually recovered intact when the same taxicab returned the package after claiming the monetary reward.

^{*} A Certificate of Transport (CT) is a written document certifying that a package has complied with the requirements of the transport regulations, CPR Part 4: Safe Transport of Radioactive Materials in the Philippines.

D. DISCUSSION

The **Institute** regulations specify that holders of radioactive materials license are responsible for the protection of the health and safety of its workers and the public against the hazards of radiation in the performance of its licensed activities. Movement or transport of radioactive materials from one location to another, if not done properly, poses some radiological risks. In transporting radioactive materials through public conveyances, the possibility of an accidental release, exposure, theft or loss of the radioactive materials should not be ignored. The effectiveness of a radiological emergency plan to cope with this occurrence lies in the availability of accurate and complete information about the material. This information should be addressed in a **Certificate of Transport** which should be completed and issued by the licensee before any radioactive material leaves its premises for transport to another location.

Each CT issued shall include the following relevant information:

- 1. The date of issuance, and if appropriate, an expiry date;
- 2. Name, address, telephone number, and license number of the licensee;
- 3. Name, address, an telephone number of person authorized by licensee (RHSO);
- 4. Place and address of origin of the package;
- 5. Place and address of destination of the package;
- 6. Name, address, and telephone number of recipient of package. If the recipient is an **Institute** licensee, its license number should be included;
- 7. Name, address, telephone number, and license number (from DOTC) of carrier/forwarder, authorized by the licensee;
- 8. Brief description of the packaging, including materials of construction, gross weight, general outside dimensions and appearance;
- 9. Brief specification of the permitted contents, including any restrictions on contents which might not be obvious from the nature of the packaging. This should include the physical and chemical forms, the activities in Becquerel (Bq) and equivalent in Curies (Ci) (including those of the various isotopes, if appropriate) during transport, the symbol and name of radioactive material;
- 10. Any restrictions on the modes of transport, types of vehicle, freight

containers, and any necessary routing instructions;

- 11. Dose rate measurements in mSv/h (mR/h):
 - a. reading at one (1) meter from each external surface;
 - b. reading at contact from each external package;
- 12. Transport Index (TI);
- 13. Leak testing measurement
 - results of swipe should be provided;
- 14. Appendices containing additional technical data or information;
- 15. Signatures and identifications of the issuing, certifying personnel, and official of the licensee.

Other responsibilities of the licensee are the following:

- 1. Provisions for labeling and marking (e.g., radiation warning signs, symbols, stickers, identifications, etc.) in accordance with transport regulations;
- 2. Provision for a locking or safety mechanism on the package;
- 3. Provision for a written statement regarding actions, if any, that must be taken by the carrier and forwarder. The statement shall be in the vernacular appropriate for the carrier/forwarder or the parties concerned;
- 4. Submission of quarterly report to the **Institute** number or frequency of transport activities performed by the licensee;
- 5. Keeping and maintenance of CT and quarterly report. Copies of CT's issued should be made available upon demand during inspection by the **Institute**.

For some clarification as to the compliance with the regulations and some particulars in this bulletin, the licensee should notify and communicate with the **Institute** as it deems necessary.

E. REQUIRED LICENSEE ACTIONS

In response to this bulletin, the licensee shall submit to the **Institute**:

- 1. A copy of its Certificate of Transport (CT) form for validation;
- 2. Relevant technical data or information that may be appended and attached to the CT;
- 3. Procedures and instructions to accomplish the CT;
- 4. Quarterly report on the radioactive transport activities.

F. COMPLIANCE SCHEDULE

Licensee shall inform the **Institute** of the actions taken to address this bulletin and comply with the specific regulatory provision within 60 calendar days after receipt hereof.

August 26, 1992

Technical Contact:

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