



INTERNAL REGULATORY CONTROL OF PNRI FACILITIES AND LABORATORIES

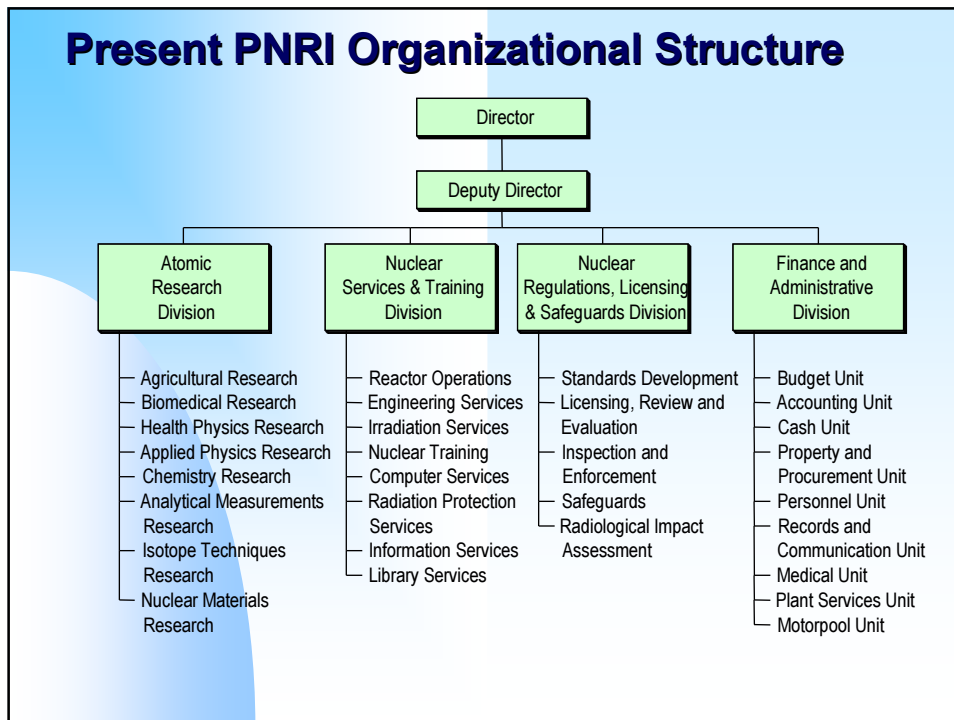
**Philippine Nuclear Research Institute
Department of Science and Technology**



Regulatory Infrastructure

Two National Regulatory Authorities in the Philippines:

- **Philippine Nuclear Research Institute (PNRI), Department of Science and Technology (DOST) is the national authority responsible for the regulation, licensing and safeguards of radioactive materials and atomic energy facilities.**
- **Bureau of Health Devices and Technology (BHDT), Department of Health (DOH) is the national agency in charge of radiation protection and safety of the ionizing and non-ionizing radiation emitted from electrical/electronic devices.**



The Philippine Nuclear Research Institute: As The Regulatory Body

- ◆ Headed by a Director and a Deputy Director
- ◆ Consists of 4 divisions, namely:
 - Atomic Research Division
 - Nuclear Services and Training Division
 - Nuclear Regulations, Licensing and Safeguards Division
 - Finance and Administration Division

Internal Regulatory Control Program of PNRI Facilities/Laboratories

- was established thru PNRI Office Order 002 Series of 2004
- in accordance with the PNRI Policy Instruction No.02 Series of 2001 entitled Radiological Health and Safety Policy

Coverage of Implementation of the Internal Regulatory Program

- Philippine Research Reactor (PRR-1)
- Co-60 Multi-Purpose Irradiation Facility
- Radioisotope Dispensing Laboratory
- Radioactive Wastes Management and Interim Storage Facility
- Secondary Standard Dosimetry Laboratory and
- other PNRI research laboratories where radioactive materials are used and handled

Nuclear Regulations, Licensing, & Safeguards Division (NRLSD)

- was tasked to take the responsibilities to implement the Program
- Consists of the following Units:
 - ① Standards Development Unit
 - ① Licensing, Review, and Evaluation Unit
 - ① Inspection and Enforcement Unit
 - ① Safeguards Unit
 - ① Radiological Impact Assessment Unit

NRLSD Task Force

- was created to review and evaluate applications for authorization of PNRI facilities/Laboratories was issued.
- took charge of the development of application form for authorization of PNRI Facilities/Laboratories

Requirements for Authorization of PRR-1

- ☛ Radiation Control Programme
- ☛ Safety Analysis Report (SAR)
- ☛ Decommissioning Plan

Radiation Control Programme

To ensure that PRR-1's radiation protection and monitoring system remains in operable condition during the period of extended shutdown and eventual decommissioning.

Safety Analysis Report (SAR)

The purpose is to justify the design which is to be the basis for the safe extended shutdown and decommissioning of the research reactor.

The SAR should provide the following:

- General description of the facility
- Safety objectives
- Site characteristics
- Buildings and structures
- Reactor Description and Design
- Reactor coolant systems and connected systems
- Engineered safety features
- Instrumentation and control
- Electric power
- Auxiliary systems
- Radiological safety procedure
- Conduct of activities during extended shutdown
- Administrative and surveillance requirements
- Quality assurance

Decommissioning Plan

- a description of the experience, resources, responsibilities and structure of the decommissioning organization, including the technical qualification/skills of the staff;
- an assessment of the availability of special services, engineering and decommissioning techniques required, including any decontamination, dismantling and cutting technology as well as remotely operated equipment needed to complete decommissioning safely;
- an assessment of the amount, type and location of residual radioactive and hazardous non-radioactive materials in the nuclear reactor installation, including calculational methods and measurements to be used to determine the inventory of each;
- a description of the waste management practices

Requirements for Waste Management Practices

- ◆ identification and characterization of sources, types and volumes of waste;
- ◆ criteria for segregating materials;
- ◆ proposed program for waste processing, storage, or transport to radioactive waste management facility of radioactive waste packages or disused sources;
- ◆ the potential to reuse and recycle materials;
- ◆ anticipated discharges of radioactive and hazardous non-radioactive materials to the environment

