



# Legal and Regulatory Framework Review for PRR-1 Decommissioning Project

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# Legal Framework

- R.A. No 2067 (The Science Act of 1958)
  - created the Philippine Atomic Energy Commission (PAEC) under the jurisdiction of the National Science Development Board
  - the PAEC was responsible for research and development work on nuclear energy
- R.A. No 5207 (The Atomic Energy Regulatory and Liability Act of 1968)
  - declared as a policy the use of atomic energy for peaceful purposes
  - strengthened PAEC and gave it powers to regulate atomic energy facilities

# Legal Basis for R<sup>2</sup>D<sup>2</sup>P

- Three (3) Laws exist but not covering decommissioning
  - RA 5207 (Atomic Energy Regulatory and Liability Act of 1968)
  - RA 2067 (The Science Act of 1958)
  - Presidential Decree 1586 (Philippine EIS System Law)

*“Draft Law “Comprehensive Nuclear Safety and Regulation Act of 2009”  
undergoing the legislative mill process and will cover  
decommissioning “*

# Regulatory Framework: Internal Regulatory Control Program of PNRI Facilities

- Established thru PNRI Office Order № 002 Series of 2004
- PNRI Policy Instruction № 02 Series of 2001 entitled Radiological Health and Safety Policy

## Internal Regulatory Control Program of PNRI Facilities (2)

- PNRI Office Order No 005, Series of 2008.  
Rules for the Authorization of the Philippine  
Research Reactor
- PNRI Office Order No. 006, Series of 2008.  
Rules for the Authorization of Radiation  
Facilities and Laboratories

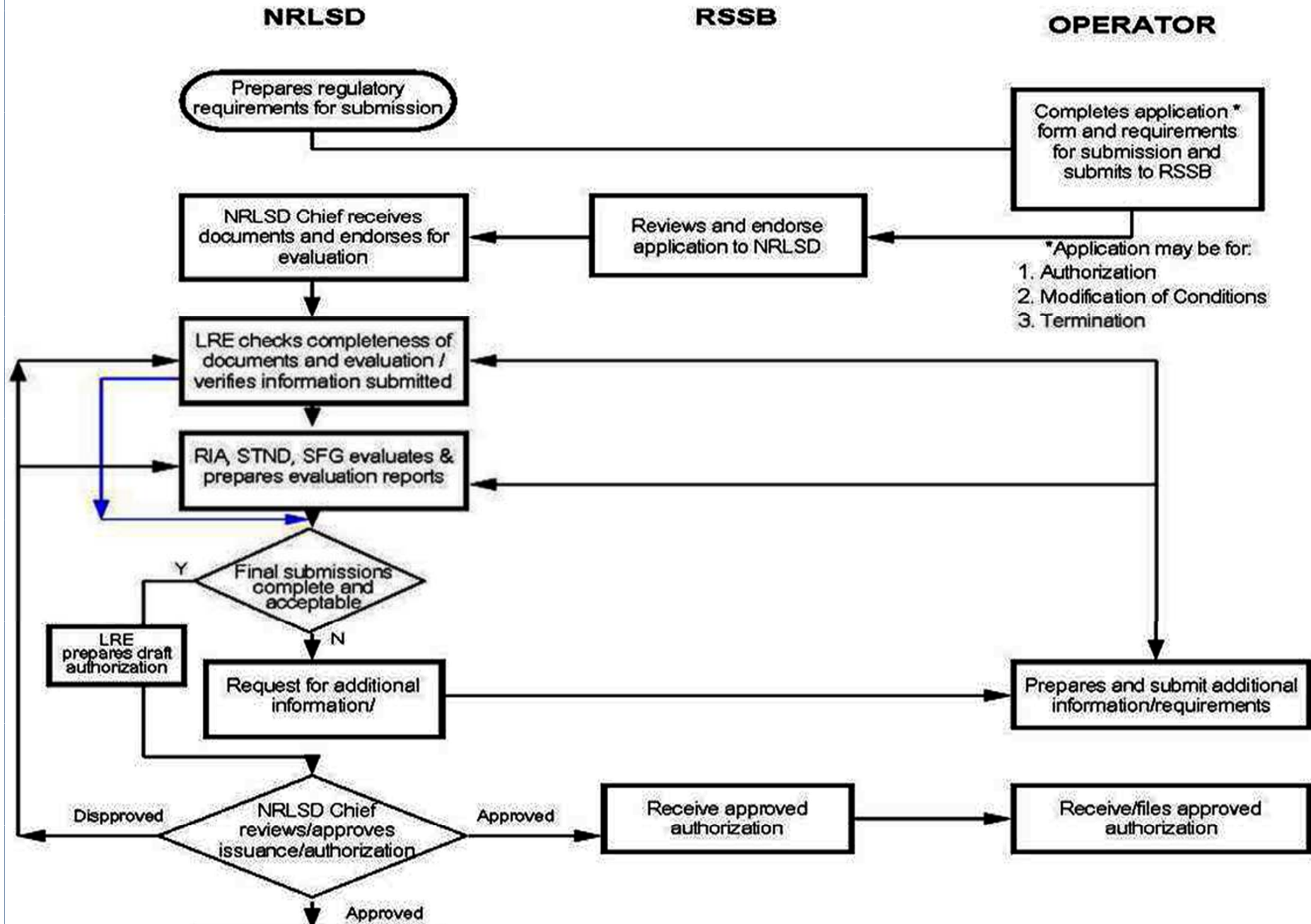
# Scope & Coverage

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

# PNRI Organization



# FLOWCHART OF REGULATORY CONTROL PROGRAM ACTIVITIES





# Regulatory and Safety Standards

- **Code of PNRI Regulations (CPR)**



- ✓ The CPR PART 3 Standards for Radiation Protection. Largely based on IAEA SS 115 International Basic Safety Standards. Establish the standards for protection against radiation arising from the use of radioactive materials and related activities
- ✓ CPR PART 4 Regulations for the Safe Transport of Radioactive Materials in the Philippines based on IAEA ST-R-1, Regulations for the Safe Transport of Radioactive Materials
- ✓ CPR PART 26 Security of Radioactive Sources

**“Various IAEA related Safety Requirements, Guides and Recommendations”**

# Clearance levels(1)

- PNRI AO 01-2007 to adopt the following for the regulation and control of bulk amounts of radioactive materials from decommissioning of PRR-1:
  1. IAEA Safety Series Guide No. RS-G-1.7 “Application of the Concepts of Exclusion, Exemption and Clearance”
  2. IAEA Safety Report Series No.44 “ Derivation of Activity Concentration Values for Exclusion, Exemption and Clearance”

## Clearance Levels(2)

- **IAEA Safety Series Guide No. RS-G-1.7**
  - guides on the concepts of exclusion, exemption and clearance
  - provides specific values of activity concentration for radionuclides (natural and artificial) origin that may be used for bulk amount of solid materials

## Clearance Levels(3)

- Safety Report Series No.44
  - supports IAEA Safety Guide No. RS-G1.7 and derives activity concentration levels for deciding should the materials be excluded, exempted or cleared

# Regulatory Inspection

6 August 2009

NRLSD/IR Form - 001  
Rev. 6, 16 June 2008

 Republic of the Philippines  
Department of Science and Technology  
**PHILIPPINE NUCLEAR RESEARCH INSTITUTE**

**PNRI INSPECTION PLAN**

<b>1.0 NAME &amp; ADDRESS OF AUTHORIZED ENTITY:</b>  Name of Facility: Philippine Research Reactor - 1	<b>2.0 AUTHORIZATION NO.:</b>  IRCP-001-0507	<b>3.0 LOCATION OF FACILITY TO BE INSPECTED:</b>  Atomic Research Center Building
<b>4.0 INVENTORY OF RADIOACTIVE MATERIALS:</b>  As indicated in the license.		
<b>5.0 INSPECTION AREAS:</b>  1. Verify compliance to an extended shutdown condition (use of NRLSD/IRCP Form D03-RR): authorization's conditions & authorized entity's commitments. 2. Verify implementation of Radiation Safety Program and Procedures 3. Check availability, operability and calibration of radiation detection instruments (area/personnel) 4. Conduct inventory of authorized Nuclear Materials and RAMs 5. Conduct radiation area monitoring 6. Check and audit records		
<b>6.0 PERSONS TO BE CONTACTED:</b>  Mr. Leonardo S. Leopando Head, ROS  Mr. Lapito A. Caluag RHSD	<b>7.0 DATE OF INSPECTION:</b>  August 5, 2009	<b>8.0 OTHER INFORMATION:</b>
<b>9.0 PREPARED BY:</b>   <b>ALAN M. BORRAS</b> Inspection Team Leader  7-20-09 Date	<b>10.0 APPROVED BY:</b>   <b>EULIMA M. VALDEZCO</b> Chief, NRLSD  July 29/09 Date	

# Regulatory Support

IAEA Expert Mission of Mr. Andrej Stritar,  
Slovenian Nuclear Safety Administration in  
2009

- Provided support and technical expertise on the regulatory aspects concerning dismantling and decommissioning of the Philippine Research Reactor (PRR-1)

# Status as of 2010

- Granted Authorization for 3 years
- Scope of Authorization
  - Site Preparation (removal of waste materials)
  - Hazards Characterization
  - Maintenance of Plant Infrastructure
  - Possession and storage of fuel rods and use of radioactive material as described in authorization
  - Conduct of regular safeguard inspection by the IAEA

# Regulatory Requirements: Non-Radiological

- Exempted from the Philippine EIS System Law. Projects operating prior to 1982 are not covered by the EIS System
- Shall comply with the demolition procedure in accordance with the National Building Code of the Philippines (PD 1096)



# Mayon Volcano's Perfect Cone

**Salamat Po  
Mabuhay!**

