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# **RADIOACTIVE WASTE MANAGEMENT PRACTICES AT** THE SERPONG RADIATION LABORATORY - NATIONAL **RESEARCH AND INNOVATION AGENCY FOR ENVIRONMENTAL SAFETY**

Alfitri MELIANA, Yanni ANDRIANI, and Baskan HANURAJIE Directorate of Laboratory Management, Research Facility, and Science and Technology Park National Research and Innovation Agency of Indonesia (BRIN) Building Number 71, KST B.J. Habibie Serpong, Tangerang Selatan, Banten, Indonesia 15314 alfitri.meliana@brin.go.id

## INTRODUCTION

Regarding BRIN Regulation Number 1/2021, the Directorate of Laboratory Management, Research Facility, and Science and Technology Park (DPLFRKST) has job and functions as follow: • preparing the formulation and implementation of policies in

## SOP FOR COLLECTING **RADIOACTIVE WASTE**



• Prepare drums lined with plastic bags for solid radioactive waste

- Prepare20 liter jerry cans for liquid radioactive waste • Labelling 2 • Measure the dose rate at the contact position and 1 meter distance from the radioactive waste being contained 3
- the domains of laboratory administration, research facilities, space administration facilities, and science and technology;
- implementation of quality control, application of standards, and accreditation
- implementation of laboratory services, research facilities, and space administration facilities;

• etc.

## **OUR SERVICES**

Serpong Radiation Lab, as part of the DPLFRKST, provides laboratory services such as:

# Non-Destructive Test (Radiography, PT, MT, and **TLD Analysis SEM Analysis XRD** Analysis

• Record the dose rate data in the radioactive waste storage log book

When the temporary storage for radioactive waste in our laboratory is full, the person in command will propose that the radioactive waste be taken by the BRIN Radioactive waste installation and report to BAPETEN as a regulatory body. The procedure is conducted online via the ELIRA website and SALT application. The procedur to use ELIRA shown below.

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**Calibration of Survey meter and Pocket Dosimeter** 

**Analysis using STA** 

Analysis using VSM

**Industrial Radiography Certification** 

**Digital Radiography** 

**Computed Radiography** 

**Air Radiation Monitoring** 

## **ELIRA Account Registration**

The applicant uploads supporting documents

Disposal process according to schedule

Bill payment

**Completion of the Customer Satisfaction Survey** 

## **RADIOACTIVE WASTE CATEGORIZATION**





## CONCLUSION

 Serpong laboratory radioactive waste comes from radiographic processes and TLD analysis processes as well as radiation monitoring in the

### **GLOVES**

### **UNUSED RADIOACTIVE** MATERIAL

## **STRAW PAPER**

### **ETC (CONTAMINATED** THINGS)



### **SR-90 STANDARD** SOLUTION

### RADIOACTIVE **CONTAMINATED WASH** WATER

air.

- The categories of waste generated are solid waste and liquid waste
- Reporting of radioactive waste to BAPETEN is performed by routinely entering waste data into the SALT application.
- With an efficient waste management procedure, waste inventory, transfer to relevant parties, and mandated waste reporting will be simplified.

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