

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 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

Calibration of Survey meter and Pocket Dosimeter

Analysis using STA

Analysis using VSM

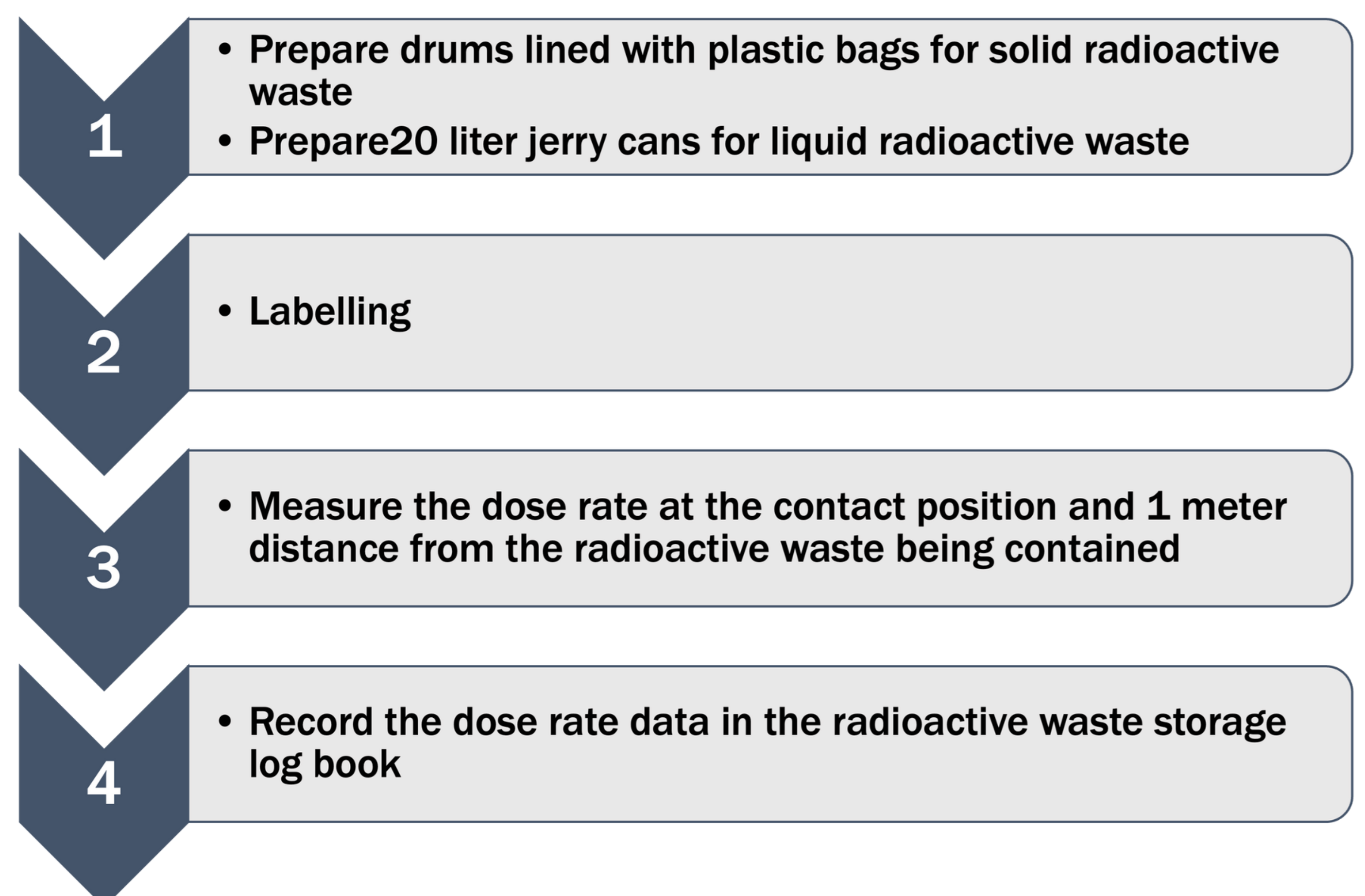
Industrial Radiography Certification

Digital Radiography

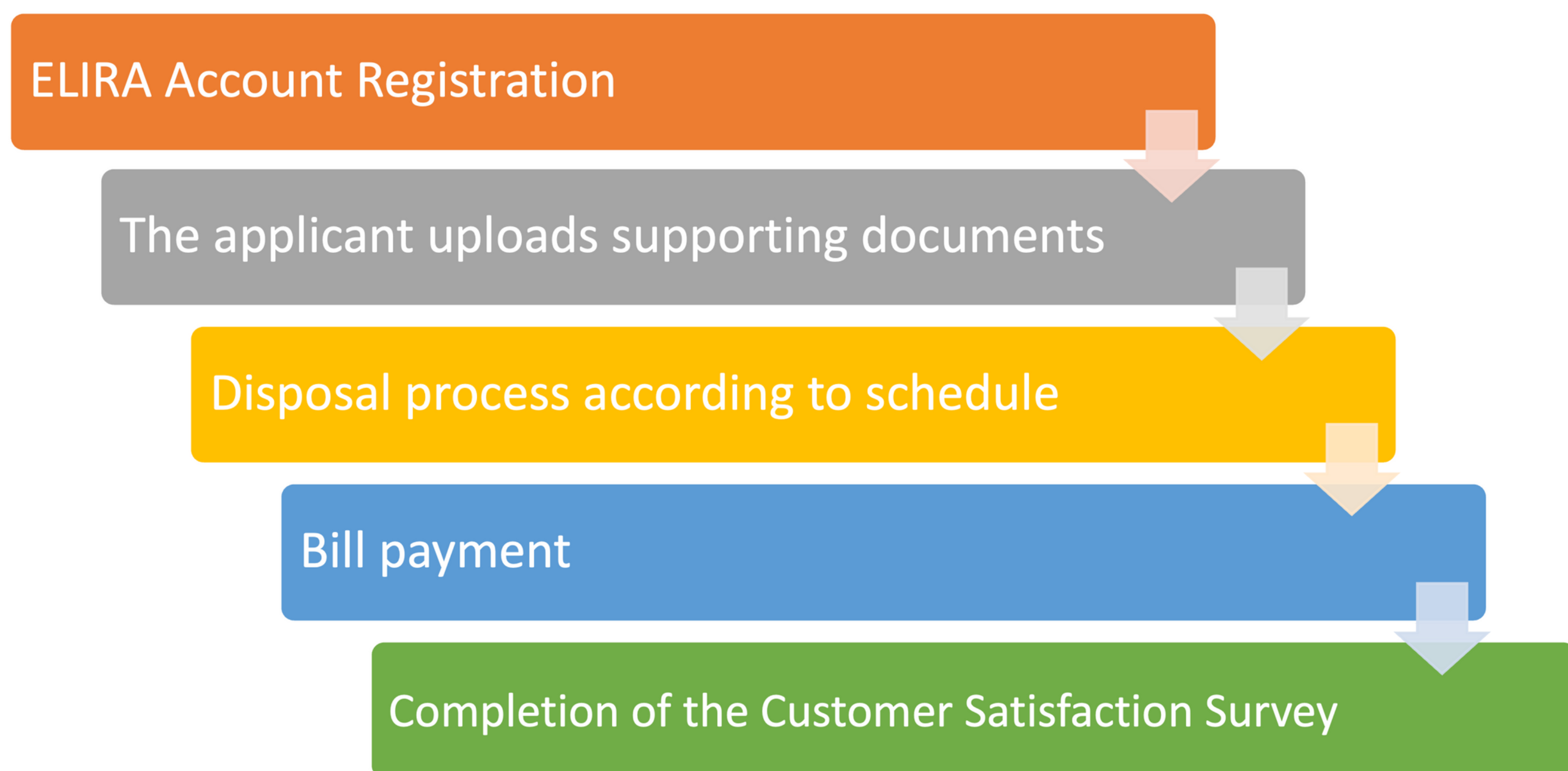
Computed Radiography

Air Radiation Monitoring

SOP FOR COLLECTING RADIOACTIVE WASTE



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 procedure to use ELIRA shown below.



RADIOACTIVE WASTE CATEGORIZATION

Solid

DISPOSABLE PIPETTE

GLOVES

UNUSED RADIOACTIVE MATERIAL

STRAW PAPER

ETC (CONTAMINATED THINGS)

Liquid

SR-90 STANDARD SOLUTION

RADIOACTIVE CONTAMINATED WASH WATER



CONCLUSION

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