Radiography Process Waste Management Practices at The Serpong Radiation

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Radiography is extensively used in non-destructive testing techniques in Indonesia, particularly in

industry, hospitals, and research. Although digital radiography and computed radiography are now

available, manual radiography is still widely used. The manual radiographic procedure utilizing

X-ray and gamma cameras generates waste in the form of B3 liquid waste from film processing

and sealed radioactive substances are not used (ZRTTD) waste from the gamma camera. The

Serpong laboratory for radiation analysis, testing, and calibration Non-destructive testing with

Digital radiography (DR) and Computed Radiography (CR) radiographic techniques and manual

radiography using X-ray and gamma cameras is one of the services provided. This activity

generates refuse that requires specialized treatment, which we cannot provide on our own. The

Research Center for Nuclear Fuel and Radioactive Waste Cycle Technology (PRTDBLR) is

responsible for the management of radioactive and B3 waste from the Serpong Radiation

Laboratory. PRTDBLR is the only research center in Indonesia whose purpose is to process

radioactive and B3 waste resulting from the use of nuclear energy. As a user of waste management

services, the Serpong Radiation Laboratory must adhere to the issued procedure for requesting

waste treatment from PRTDBLR. The Serpong Radiation Laboratory is also accountable to the

Nuclear Energy Regulatory Agency (BAPETEN) and is inspected annually to ensure compliance

with BAPETEN regulations regarding the disposal of the B3 and ZRTTD waste it generates.

Keywords: radioactive waste; radiography; B3 waste; ZRTTD