Contribution ID: **259**   Type: **POSTER**

POST-CLOSURE SAFETY ASSESSMENT OF THE PROPOSED BOREHOLE DISPOSAL FACILITY DESIGN FOR DSRS AT SERPONG NUCLEAR CENTER

One of the preferred choices for near-surface type disposal facilities for radioactive waste including DSRS based on the DSIDE methodology is borehole disposal. This borehole disposal facility is part of a radioactive waste management installation which is centralized at the Serpong Nuclear Center according to the principle of co-location. The design of the borehole disposal facility in Serpong consists of a standard hole (diameter 165 mm) with a depth of 100 m and the maximum capacity in the borehole disposal zone is 170 DSRS containers. The radioactive waste that will be stored is DSRS category 3-5, which until 2023 has stored more than 3,500 pieces of DSRSs. For this reason, it is necessary to evaluate the safety aspects in more depth, especially at the post-closure stage. This is absolutely necessary to ensure safety, maintain sustainability and build self-confidence so that it is not a burden on future generations. Safety evaluation of the borehole disposal facility design was carried out for the post-closure stage using analysis with AMBER software.

Keywords: borehole disposal, disused sealed radioactive sources, safety assessment

Primary author: Mr PRATAMA, Hendra (National Research and Innovation Agency)

Co-authors: SETYAWAN, Ajrieh (National Research and Innovation Agency); Mr SETIAWAN, Budi (National Research and Innovation Agency); ISKANDAR, Dadong (National Research and Innovation Agency); Ms SRI-WAHYUNI, Heru (National Research and Innovation Agency); SUCIPTA, Sucipta (National Research and Innovation Agency)

Presenter: Mr PRATAMA, Hendra (National Research and Innovation Agency)

Track Classification: Track 5 - Practical experiences in integrating safety and sustainable development