ARIR Incident Number 2023-0022 December 2020 Exposure from contaminated equipment

During maintenance activities, dried and liquid waste was found to be present in the bunding of a liquid waste bottle. Two workers sought to undertake a radiological measurement but were unable to gauge the dose due to high background radiation in the area. A swab was taken of the material which led to an off-scale reading. The swab was disposed of in a radioactive waste bin. Additional safety staff arrived and undertook their own swab which was also off-scale. While no personal contamination occurred the workers both received a dose from the contaminated swabs.

The two workers received estimated extremity doses of 52 mSv and 160 mSv. The annual extremity dose limit is 500 mSv.

The area was cleaned, and the equipment fittings were replaced with an improved design. Good practice was reinforced through training and education.