Inspection Report

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| **Licence holder:** CSIRO Land and Water (CLW) | **Licence number:** S0009 |
| **Location inspected:** Clayton, Vic | **Date/s of inspection:** 13-16 November 2017 |
| **Report No:** R17/12875 |
| An inspection was conducted as part of ARPANSA’s baseline inspection program to assess compliance with the *Australian Radiation Protection and Nuclear Safety Act 1998* (the Act), the Australian Radiation Protection and Nuclear Safety Regulations 1999 (the Regulations), and conditions of the Source Licence S0009. The scope of the inspection included an assessment of CSIRO Land and Water (CLW)’s performance at Clayton, Vic, against the Source Performance Objectives and Criteria (PO&Cs). The inspection consisted of a review of records, interviews, and physical inspection of sources. BackgroundCLW is authorised under section 33 of the Act to deal with controlled apparatus and controlled material. CLW used controlled material at the Clayton site to assist its research into various projects involving economic, social and environmental issues related to water, land, cities and ecosystems. This material is no longer used and in storage awaiting ultimate disposal. Radioactive material from past CLW, CSIRO Manufacturing and CSIRO Mineral Resources dealings is also stored at Clayton and a review of the storage procedures also formed a part of this inspection.This inspection focussed on the waste stores at the Clayton site and a review of the storage procedures. The main standard applicable to the radiation sources at the Clayton site for this licence is:* AS2243.4:1998 *Safety in laboratories Part 4: Ionizing radiations* (the Standard).

ObservationsIn general, the management of radiation safety at the Clayton facility was found to be satisfactory.**Performance reporting verification**The Business Unit Radiation Safety Officer (BURSO) coordinates and consolidates information from each CLW site, including Clayton, into one report to ARPANSA each quarter. CLW’s quarterly reports are submitted to ARPANSA in a timely manner and contain relevant information, including details of compliance with the Act and Regulations. The BURSO also coordinates other documentation required by ARPANSA as needed such as Regulation 51 submissions and Regulation 53 disposal requests.**Training**There were no laboratory-based CLW staff permanently located at the Clayton site. Appropriately qualified and trained staff from other CSIRO business units on-site exercise effective control over the radiation stores at Clayton. All training records are kept in hard copy form and on an electronic database. These records were made available for review during the inspection. **Radiation protection**CLW management demonstrates a commitment to radiation protection by having established a policy to facilitate the safe storage of radioactive sources at the Clayton site. This policy is supported by a comprehensive Radiation Protection Plan (RPP) to achieve and maintain best practice and compliance with radiation legislation and ARPANSA licence conditions. Version 2.3 of the RPP had been published in May 2017 and a table detailing changes is included inside the front cover showing the version number, endorsing person, approving person and issue date.Physical inspectionCSIRO BU’s have established clear requirements for access to the radiation stores and have demonstrated compliance with key safety and security requirements including access method and adequate ventilation. The CSIRO BU’s appear to comply with all requirements of section 7.1 of the Standard for the storage of radioactive substances. The radiation surveys (31/10/17) provided during the inspection of the radiation stores at Clayton showed radiation levels were below the occupational exposure limits. The radiation levels for the radiation stores are measured and recorded every 3 months.Event protectionEmergency management and preparedness are consistent within the CSIRO BU’s RPP for the Clayton site. There are procedures in place to respond to an emergency or potential incident on the Clayton site.SecurityCLW has comprehensive security plans for staff and sources. The Clayton site is patrolled by an external security agency outside working hours and the radiation stores require either swipe or key access that is limited to trained and authorised personnel only who have a need for access. The physical security measures observed at the site are in accordance with the security procedures outlined in the RPP for each CSIRO BU. Findings The licence holder was found to be in compliance with the requirements of the Act, the Regulations, and licence conditions. |

*No written response to this report is required*

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