Inspection report

|  |  |
| --- | --- |
| **Licence holder:** ANSTO | **Licence number:** F0292 |
| Location inspected: Lucas Heights, NSW  | **Date/s of inspection:** 12–14 June 2019 |
| **Report no:** R19/13800 |
| 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 2018 (the Regulations), and conditions of facility licence F0292. The scope of the inspection included an assessment of ANSTO’s performance at the Interim Waste Store (IWS) facility against the Performance Objectives and Criteria (PO&Cs) for Inspection Testing and Maintenance, Event Protection, and Performance Report Verification. The inspection consisted of a review of records, ANSTO guides and standards for managing AMS Facilities, interviews, and a physical inspection of the facility.BackgroundANSTO Waste Management Services (AMS) is responsible for effective control of the IWS facility authorised under facility licence F0292. The operation of the IWS involves storage of a TN81 package containing 20 canisters of vitrified intermediate level waste and six CBF-C2 cemented drums of technological waste in an ISO container. The TN81 package is a dual purpose cask used for both transport and storage of radioactive material. These wastes were generated from the reprocessing of HIFAR spent fuel. The IWS facility has been in operation since December 2015. The plans and arrangements for managing safety at Waste Operations apply to the IWS facility. This report should be read in conjunction with the inspection report D1946013.ObservationsIn general, the safety performance at the IWS facility was found to be satisfactory.Inspection testing and maintenance (ITM)AMS personnel and other ANSTO technical, engineering and maintenance personnel undertake ITM of the IWS facility. ITM oversight and management is achieved using the ANSTO SAP software system. This assures that safety functions are maintained in facilities operated by AMS. ITM activities are entered into SAP and their satisfactory completion is monitored by AMS through SAP.ITM is undertaken using written and approved procedures and instructions, in addition to work orders for each task. Workers undertaking ITM have the necessary competencies and are suitably trained, and experienced in knowledge of the IWS and waste facilities. ANSTO Maintenance and Engineering (AME) provides training to AMS staff in the ITM of AMS facilities. Some maintenance tasks are specific to the TN81 package and are undertaken in accordance with the manufacturer’s instructions as described in the Safety Analysis Report for the TN81 package.Further details of ITM are described in inspection report D1946013.Event protectionThe effects of external events were considered in the design and construction of the facility. AWO has implemented controls to ensure the effects of external events on its facilities do not result in unsafe nuclear or radiation conditions. Fire, flood, earthquake, lightning strike, severe weather events, loss of services and attack by rodents or other pests have been analysed and appropriate controls put in place. Human error in the response to external events is optimised by the personnel following procedures and instructions which reduces the vulnerability of the facility to external threats. Operational parameters of the TN81 package are monitored by a computer system supported by an uninterruptable power supply (UPS). This ensures continuous monitoring of operational parameters in the event of a service failure such as electricity. The status of the engineering systems for event protection was sighted during the facility walkthrough and found satisfactory.Further details are described in inspection report D1946013.Performance report verificationANSTO’s quarterly reports have been submitted to ARPANSA in a timely manner and contained useful and relevant information. ANSTO maintains open and transparent communication in its dealings including providing safety performance data such as data on safety incidents, dose results etc. All staff are aware of their reporting responsibility through the ANSTO system and safety issues are discussed at staff meetings as confirmed by sighting meeting minutes. The safety culture aspects of AMS are described in inspection report D1946013. FindingsThe 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*

This report will be published on the ARPANSA website