



Australian Government

Australian Radiation Protection and Nuclear Safety Agency

INSPECTION REPORT

<p>Licence Holder: ANSTO (Centre for Accelerator Science (CAS) – SIRIUS and VEGA Accelerators)</p>	<p>Licence Number: F0290 and F0280</p>
<p>Location inspected: Lucas Heights, NSW</p>	<p>Date of inspection: 21–24 June 2016</p>
	<p>Report No: R16/073079</p>
<p>An inspection was conducted under Part 7 of the Australian Radiation Protection and Nuclear Safety Act 1998 (the Act). The purpose of the inspection was to assess compliance with the Act, applicable regulations, and licence conditions. The inspection was conducted as part of ARPANSA’s baseline inspection programme. The scope of the inspection included an assessment of ANSTO’s performance against the ARPANSA Performance Objectives and Criteria (POCs) as described in notification letter R16/04117. The inspection consisted of a review of records, discussion with staff and visit to the facilities.</p> <p>Background</p> <p>The SIRIUS and VEGA facilities are accelerator installations dedicated to an applied research programme in accelerator mass spectrometry and ion beam analysis. These facilities are used for a diverse range of activities in such areas as materials analysis, biological and environmental studies, and basic nuclear physics. The inspection consisted of a review of records, interviews, and a visit of both facilities.</p> <p>Observations</p> <p>Performance Reporting Verification</p> <p>The ARPANSA Inspectors found that performance reporting verification met the performance objectives and criteria. No issues were raised.</p> <p>Plans and Arrangements and the facility Safety Analyses Reports have recently been updated to consolidate all the facilities from the Centre of Accelerator Science into one Licence and will be submitted to ARPANSA once internal review is completed.</p> <p>Configuration Management</p> <p>Evidence was provided that Configuration Management for SIRIUS and VEGA met the performance objectives and criteria. No issues were raised.</p> <p>Inspection, Testing and Maintenance (ITM)</p> <p>The newly implemented computerised ‘AccLog system’, which was developed by the licence holder, was noted to be a useful maintenance management tool and provided a comprehensive overview of ITM for the facility.</p> <p>However, it was noted that the SIRIUS and VEGA 3 Monthly Maintenance Log showed that some of the maintenance requirements had not been completed. This was due to a staff member who had responsibility for these tasks leaving and no replacement being authorised to date. The maintenance is now scheduled for the near future.</p>	

Radiation Protection

ARPANSA inspectors found that radiation protection arrangements were generally in line with the ANSTO Work Health and Safety Management System requirements and met the requirements of the Radiation Protection performance objectives and criteria. However, one issue was raised as outlined below.

Sources Licence Condition 3 – Compliance with AS2243.4

At the time of the inspection it was noted that records of the calibration sources (sealed sources SS886 and SS2378) showed that the annual wipe test was overdue. The lack of annual source wipe testing does not comply with the recommendations of AS2243.4 which appears as a code which must be complied with in Licence Condition 6 of F0280 and F0290 and the requirements of internal ANSTO guide AG2471 Safe Management of ARPANSA Controlled Material and Controlled Apparatus. It was noted that the tests may have been completed and the records misplaced due to a staff member leaving. The tests have been scheduled now for the near future.

Security

ARPANSA inspectors found that Security arrangements met the applicable Performance Objective and Criteria. No issues were raised.

Cross Cutting Areas

ARPANSA inspectors noted that applicable cross cutting areas were in line with the ARPANSA POCs.

Event Protection

ARPANSA inspectors found arrangements for event protection to be satisfactory.

Training

ARPANSA inspectors found arrangements for training to be satisfactory

Emergency Preparedness

ARPANSA inspectors ANSTO's arrangements for emergency preparedness to be satisfactory.

Findings

Performance Deficiencies:

1. ANSTO has not always conducted wipe testing of sealed sources in accordance with the recommendations of AS2243.4 and AG2471 Safe Management of ARPANSA Controlled Material and Controlled Apparatus.
2. ANSTO has not complied with all of the 3 monthly maintenance requirements for SIRIUS and VEGA in the past 6 months.