



## POSITION DESCRIPTION

<b>Position Title:</b>	Nuclear Safeguards Officer
<b>Cluster / Business Unit / Division</b>	Nuclear Safety Security and Stewardship
<b>Section or Unit:</b>	Nuclear Security and Nuclear Safeguards
<b>Classification:</b>	Band 6
<b>Job Family:</b>	Security & Intelligence
<b>Position Description Number:</b>	PD-0979
<b>Work Contract Type:</b>	Professional
<b>STEMM/NON-STEMM:</b>	NON-STEMM

### POSITION PURPOSE

The Nuclear Safeguards Officer undertakes a key role in supporting the management of ANSTO's Nuclear Material Accountancy and Control (NMAC) system, to ensure ANSTO meets its international treaty obligations with the International Atomic Energy Agency (IAEA), and its national obligations under permits issued to ANSTO by the Australian Safeguards and Non-Proliferation Office (ASNO). The role undertakes complex and sensitive professional and technical advice both internally and externally, ensuring the highest standards of nuclear safeguards and stewardship across the entire organisation, Australia and internationally.

### ORGANISATIONAL ENVIRONMENT

ANSTO leverages great science to deliver big outcomes. We partner with scientists and engineers and apply new technologies to provide real-world benefits. Our work improves human health, saves lives, builds our industries and protects the environment. ANSTO is the home of Australia's most significant landmark and national infrastructure for research. Thousands of scientists from industry and academia benefit from gaining access to state-of-the-art instruments every year.

ANSTO is the national organisation for nuclear science and technology. We focus on undertaking leading edge research, delivering innovative scientific solutions and services, and providing specialised advice to government, industry, academia and other research organisations.

The NSSS Group includes High Reliability (Safety), Nuclear Security and Nuclear Safeguards, Nuclear Stewardship and ANSTO's Nuclear-Powered Submarine Working Group. High Reliability and the Nuclear Security and Nuclear Safeguards areas provide key enabling services across ANSTO such as supporting the operation of the OPAL multi-purpose research reactor, nuclear medicine production, engineering capital projects and research activities.

### ACCOUNTABILITIES & RESPONSIBILITIES

#### Key Accountabilities

Under broad direction from the Manager Nuclear Safeguards, undertake with a considerable degree of independence and performing a leadership role to:

#### *NMAC System*

- Manage the day-to-day NMAC database system, recording facility level transactions of nuclear material or associated items to ensure sound integrity of nuclear safeguards outputs. Prepare complex reports and submissions to ensure a high level of compliance with ASNO permits and to maintain compliance with 3 hour short-notice inspection requirements.
- Develop, manage and implement database IT strategies and reporting mechanisms to ensure ANSTO complies with its nuclear material accountancy and control and reporting requirements.

Using expert judgement and experience anticipate the variable and subjective reporting requirements of IAEA inspectors and be able to meet those changing reporting requirements utilising advanced techniques involving PERL scripts, SQL database querying and excel pivot tables.

- Monitor NMAC permit outcomes and analyse against nuclear safeguards requirements for compliance.
- Develop and maintain an effective NMAC contingency and backup plan. Design, maintain, administer and upgrading of the nuclear materials accountancy computer program and system as well as the protection (and backup) of the data held therein.
- Key contributor to Nuclear Safeguards technical requirements, review of the SAP system and responsible for leading a detailed review of implementation, follow up and testing after system patching.
- Responsible for preparing documentation of specifications and review of proposed SAP system changes. Responsible for on-going surveillance and monitoring of SAP system performance and reporting and documentation of problems to SAP development team.

#### ***Regulatory Functions and Inspection Activities***

- Plan and arrange the required resources, preparation and carrying out for the effective and efficient implementation of IAEA safeguards inspections and ASNO inspections.
- Maintain knowledge of legislative and ASNO permit requirements, Australian and international standards, quality assurance procedures and best practice. Provide high level specialist advice on nuclear safeguards specific issues, related to ANSTO's compliance with regulatory and inspection requirements.

#### ***Safeguards Authorised Officers & Material Stores***

- Oversight of ANSTO Authorised Officers to ensure compliance of their safeguards functions, along with the provision of training and advice and auditing of those activities and reporting on results to line management.
- Oversee and administer the safeguards aspects of the nuclear materials stores (and laboratory) and along with the Manager Nuclear Safeguards, act as auditor of ANSTO's valuable and strategically sensitive nuclear materials and associated items.
- Facilitate access to associated items (as defined by ASNO permits), carry out audit/review/re-packaging/consolidation and re-location activities managing nuclear material stores. Facilitate and oversee security testing in limited access areas.

#### ***Project Management***

- Lead tasks within projects including setting goals and objectives, providing specialist knowledge and technical advice, monitoring and reviewing work and ensuring milestones are achieved within time, scope and budget.
- Responsible for utilising expertise to support several cross-functional projects and utilise specific expertise to assess the viability of proposed approaches and exercise sound judgement in order to select and provide advice on the most effective techniques and methods. Ensure a flexible approach to work is applied and continually review and reorganise work plans and activities to manage conflicting priorities, be deadline driven and reliable in following through with actions and pro-active when attending to ANSTO and customer interests.
- Leads development of procedures and processes to ensure ANSTO is compliant with the TSP.

#### ***Stakeholder Engagement***

- Responsible for working in a highly collaborative way, building and maintaining productive working relationships within internal (ANSTO) and external (ASNO and IAEA, external suppliers and partners).

- Represent ANSTO in international fora, through collaboration, exchange of experience, maintaining awareness and knowledge of emerging, new, and contemporary safeguards techniques and technology.
- Collaborate with AFP Officers and Nuclear Security Operations, to ensure the physical and personnel protection requirements for nuclear and associated materials and facilities, national security requirements and procedures are applied and maintained, and consistent with ASNO permit requirements.
- Building and maintaining ongoing productive working relationships with internal and external stakeholders

### ***Cross-functional engagement***

- Leads the co-ordination with external stakeholders (e.g., AFP and airline representatives) on the secure deliver of nuclear material to ANSTO. Including receipt and transport, of nuclear material, Fuel and Target Plates, attending arrival at the airport, identification of items on unloading and transfer to contact carrier while ensuring ANSTO maintains regulatory compliance with the TSP.
- Prepare and publish nuclear security transport plans to reflect nuclear security requirements and best practice standards that ensure ANSTO compliance with ASNO permit compliance, especially for fuel and uranium target plate deliveries. Prepare and carry out audit of compliance against TSP requirements.
- Provide BMS support, technical writing support, and content review for Nuclear Security BMS documents. Leads development of procedures and processes to ensure ANSTO is compliant with the TSP.
- Undertake additional duties as required and during period of leave of other staff.

### **Decision Making**

- Required to exercise decision-making and judgement in ensuring complex nuclear safeguards matters are managed effectively, either in preparation for or during inspections by ASNO, IAEA or other regulators, such as the Australian National Audit Office (ANAO).
- The levels of authority delegated to this position are those approved and issued by the Chief Executive Officer. All delegations will be in line with the ANSTO Delegation Manual AS-1682 (as amended or replaced).
- In the absence of the Manager Nuclear Safeguards, this position has the delegation to exercise decision making in the capacity of Manager Nuclear Safeguards role.

### **Key Challenges**

- Always ensure full compliance with the quality and environmental frameworks, safety procedures and standards, regulatory requirements and management principles.
- Contribution to continuous improvement efforts in the delivery of products, services and facilities.
- To facilitate a culture across the organisation that results in Nuclear Security & Nuclear Safeguards being considered a positive contributor to ANSTO operations.
- Apply knowledge of ANSTO operational activities to inform and ensure permit obligations of NPT/IAEA safeguards/bilateral and national safeguards.
- Investigate new methods and technologies and modify designs and apply new techniques to systems including trialling and procurement of new technology and equipment that will improve processes or facilities and add value to ANSTO's safeguards capabilities.
- Pro-active in encouraging the sharing of knowledge and experiences within the team.

- Ability to operate and manipulate physically demanding tasks in a laboratory environment, including use of lifting equipment, gas cylinders, drums, scientific apparatus, fume cupboards, ovens.
- Research and resolve historical and legacy issues which arising from integrated safeguards and bi-lateral nuclear material obligations.

## KEY RELATIONSHIPS

Who	Purpose
<b>Internal</b>	
Manager/Executive	<ul style="list-style-type: none"> <li>• Receive guidance and direction.</li> <li>• Report on compliance of nuclear safeguards approved projects and activities with permit and treaty obligations.</li> <li>• Exchange information.</li> <li>• Escalate issues and propose solutions.</li> <li>• Provide updates on key tasks, issues, and priorities.</li> </ul>
Work area team members	<ul style="list-style-type: none"> <li>• Collaborate and provide expert advice and shared accountability in maintenance of ANSTO's regulatory compliance.</li> <li>• Contribute to group decision making processes, planning and goals.</li> <li>• Support team members and work collaboratively to contribute to team outcomes.</li> <li>• Identify, negotiate, and resolve conflicts.</li> </ul>
Indirect Reports	<ul style="list-style-type: none"> <li>• Provide guidance, expert advice and professional support.</li> <li>• Build strategic relationships and ensure performance and plans align with nuclear safeguards approved projects and activities.</li> <li>• Engage to assess performance against NMAC plan and provide support required to ensure compliance against permits.</li> </ul>
<b>External</b>	
ASNO	<ul style="list-style-type: none"> <li>• Provide required reports to State System of Accounting and Control (SSAC) Australian Nuclear Safeguards Regulator.</li> </ul>
IAEA	<ul style="list-style-type: none"> <li>• Build effective and productive networks with International Safeguards Regulator</li> <li>• Identify opportunities for engagement to ensure safety and regulatory compliance</li> </ul>
ANAO	<ul style="list-style-type: none"> <li>• Provide updates as requested by Chief Operating Group in relation to financial enquiries and respond to requests from Australian National Audit Office, relating to audit and assurance.</li> </ul>

## POSITION DIMENSIONS

### Staff Data

Reporting Line	Reports to the Manager Nuclear Safeguards
Direct Reports	Nil
Indirect Reports	Nuclear Safeguards Authorised Officers ~12-15 (various ANSTO Divisions or Institutes).

### Financial Data (2022/2023)

Revenue / Grants	Not Applicable
Operating Budget	Not Applicable
Staffing Budget	Not Applicable
Capital Budget	Not Applicable
Assets	Not Applicable

### Special / Physical Requirements

Location:	Usually Lucas Heights. May require infrequent travel to Clayton. Working in different areas of designated site/campus as needed
Travel:	May be required travel to ANSTO sites within Australia from time to time. May require infrequent travel both internationally and nationally. May involve infrequent field work in remote locations.
Physical:	Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer). Infrequent labour-intensive physical requirements (sitting, standing, manual handling). Infrequent standing for long periods. Infrequent movements (climbing, stooping, kneeling, crouching, crawling). Infrequent working in a loud environment. Public speaking Infrequent industrial facility physical requirements (lifting, standing for long periods, operating machinery, or equipment). Wearing personal protective equipment for the handling of hazardous and/or radioactive materials. Working in confined space environment including wearing respiratory equipment.
Radiation areas:	May be required to work in radiation areas under tightly regulated conditions. Perform duties in an area where radioactive materials are handled under tightly controlled safety conditions. Perform duties with and in an area where hazardous chemicals or materials are handled or stored under tightly controlled safety conditions
Hours:	Willingness to work extended and varied hours based on operational requirements. May involve infrequent shift work. After hours work may be required for short and infrequent periods.
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements. Obtain and maintain NV1 security clearance

### Workplace Health & Safety

Specific role/s as specified in <a href="#">AP-2362</a> of the ANSTO WHS Management System	All Workers
	Other specialised roles identified within the guideline a position holder may be allocated to in the course of their duties

### ORGANISATIONAL CHART

Refer Attached.

### KNOWLEDGE, SKILLS AND EXPERIENCE

1. Degree or higher in Science or Engineering, and/or demonstrated equivalent experience. Eligibility for professional membership of the Institute of Nuclear Materials Management or other relevant professional body.

2. Experience in providing systems and control for the management of highly sensitive and controlled safeguards equipment or nuclear materials, or equivalent experience.
3. Experience in materials measurement and accounting.
4. Knowledge of statutory nuclear safeguards requirements for a nuclear facility.
5. Experience in regulatory and quality compliance in an operational nuclear environment.
6. Demonstrated high-level problem-solving skills and ability to recognise and respond appropriately when confronted by sensitive issues.
7. Demonstrated high level numeracy and computer skills.
8. Highly developed communication and interpersonal skills including report writing capability.
9. Ability to contribute to the development of, and follow policy, procedures and guidelines.
10. Ability to co-ordinate multiple projects and activities.
11. Demonstrated ability and desire to work as part of a team and ability to work independently.
12. Knowledge and experience of the nuclear, radiation and chemical safety hazards associated with nuclear materials, and associated materials.
13. Understanding of the diverse operational activities undertaken across ANSTO as they relate to nuclear safeguards permit compliance.

#### VERIFICATION

This section verifies that the line manager and appropriate senior manager/executive confirm that this is a true and accurate reflection of the position.

Line Manager		Delegated Authority	
Name:	Michael Bridson	Name:	Travis Van Der Velden
Title:	Manager Nuclear Safeguards	Title:	Chief Security Officer
Signature:		Signature:	
Date:	15.09.2023	Date:	15.09.2023