



POSITION DESCRIPTION

Position Title:	Senior Mechanical Inspector
Cluster / Business Unit / Division	ANSTO Maintenance and Engineering / Technical Services
Section or Unit:	Quality Control
Classification:	Band 4 - 5 linked role
Position Description Number:	PD-0877
Work Contract Type:	Technical
STEMM/NON-STEMM:	NON STEMM

POSITION PURPOSE

The Primary objective of Senior Mechanical Inspector is working independently on Engineering Projects to ensure compliance of nuclear safety standards and conformance with technical specifications for complex plant, equipment, structure and instrumentation. This role undertakes Quality Control and Quality Assurance duties based in the metrology laboratory in Building 26.

The Senior Mechanical Inspector has a key working relationship with the Development Workshop staff, Project Managers, Project Engineers and the Package Approvals Officer team.

The Senior Mechanical Inspector also performs the role of an authorised signatory for National Association of Testing Authorities (NATA) testing of Radioactive Material Transport Package. This role is the only testing authority in Australia authorised to perform NATA testing of Nuclear Material Transport Package and the role is fully and individually accountable providing authoritative decision certifying that the radioactive material transport packages are suitable for use. This function is critical for the supply of radiopharmaceutical products nationally 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.

The ANSTO Maintenance and Engineering Group (AME) is dedicated to enhancing and maintaining ANSTO's facilities and environments for operational reliability and providing a range of customer services to support ANSTO's research, business activities and projects at the Lucas Heights Science & Technology Centre and the Synchrotron in Melbourne.

ACCOUNTABILITIES & RESPONSIBILITIES

Key Accountabilities - Band 4

- Perform wide variety of specialist activities including inspection, measurement, testing and calibration to ensure engineering project design/quality/safety/regulatory requirements are met. These activities require a competent Quality Control practitioner to Interpret engineering drawings, identify materials and components, interpret final inspection requirements, perform testing and analysis, solve problems and determine a technical conclusion based on his/her technical knowledge and experience.
- Manage metrology laboratory by performing ongoing maintenance and calibration of equipment and instrumentation to ensure compliance with NATA requirements.

- Coordinate, instruct and supervise contractors carrying out Non Destructive Testing (NDT) Inspection work for ANSTO.
- Apply knowledge and experience in interpretation of regulatory and engineering requirements and translate into test methods.
- Negotiate and advise clients, ie. engineers on test input, acceptance criteria, sampling procedure, outcome and test output. Liaise with client, workshop manager, supervisor and/or planner to clarify scope, provide updates on progress and manage relationships with all stakeholders.
- Maintain project files & QC records to ensure work meets strict control guidelines including regulatory requirements for Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) & The Therapeutic Goods Administration (TGA) licensing, by collating material certification, engineering certification and ensuring all documentation is recorded and filed.
- Technical writing of procedures and instructions relevant to Quality Control compliance requirements. This includes interpretation of relevant standards international integrated management system and regulatory requirements, review and modify operational and testing methods to ensure that documentation is kept up to date in conformance.
- Participate in internal and external auditing of Quality Control requirements to ensure compliance with NATA, ARPANSA, International Atomic Energy Agency (IAEA), TGA and Civil Aviation Safety Authority (CASA) Regulations and follow the current Business management System documentation process.
- Undertake additional duties as required and during period of leave of other staff.

In addition to performing all band 4 accountabilities, the band 5 role includes these additional accountabilities.

- Perform NATA testing for Radioactive Material Transport Packages. With substantial experience, this role is required to independently interpret regulatory (e.g. ARPANSA code, NATA rules etc.) and engineering requirements (manufacturing specifications, engineering drawings etc.) and translate into test setup/methods. As an authorised signatory for NATA testing, this role holds autonomy decision making authority and this position is the ultimate approver of test setup/methods/equipment selection/procedure for NATA testing. Furthermore, this role is the only certifier in Australia for Radioactive Material Transport Packages which are used for ANSTO's supply of radiopharmaceutical products.
- Negotiate and advise senior engineers ie package approvals officer team and senior managers ie. logistics and warehouse manager on test input, acceptance criteria, sampling procedure, expected outcome and test output.
- Provide direct training, coaching and mentoring of other staff members (may include training of this position's direct supervisor).
- Lead investigations to continually improve the performance of the overall system and any non-conformances.
- Provide verbal information and technical reports to stakeholder and Regulatory authorities.
- May be required to act in the position of AME QC Senior Technical Compliance Officer from time to time

Decision Making

- Works to regulatory framework e.g. Pharmaceutical Inspection Convention and Pharmaceutical Inspection Co-operation Scheme (PIC/S) guide and ARPANSA code for the safe transport of Radioactive Materials and AS/international standards 17025 general accreditation criteria, 9001 manufacturing etc.
- Decision making extends to all Nuclear specified components and assemblies adhere to the appropriate standard and are approved for use in these facilities. Should these items not be acceptable a non-conformance is raised, and the item cannot be used until the nonconformance is resolved and signed off for use by the role. This requires obtaining cooperation of other staff including workshop staff, engineers, project managers, warehouse and logistics manager. From

time to time, this role may be required to provide advice in the form of coaching and mentoring for its specialist area of expertise.

- This role is subject to ongoing regular audits by external accreditation bodies and regulators. Audits are performed against the before mentioned standards and adherence to continued standard in competencies for licence administration.
- 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 addition to all band 4 decision making, the band 5 role includes these additional decision-making requirements

- Authoritative decision making on the certification of all ANSTO transport packaging and decision making in required repairs and maintenance of these containers (This includes periodic inspection and approval of reusable and single use radioactive material transport packages for ANSTO). This role is independently accountable for certifying radioactive material transport packages via means of NATA testing, which is the quality level that is acceptable to the regulators e.g. ARPANSA, IAEA and CASA.
- Determination and ultimate approver of the appropriate testing methodology, equipment selection and the appropriate set up of the testing apparatus.
- Represent ANSTO in a range of domestic and international forums in the form of proficiency testing and / or interlaboratory comparison programs.

Key Challenges

- Maintain NATA accreditation.
- Maintain a metrology laboratory, this includes purchasing of equipment and calibrations of measuring equipment used in the nuclear environment.
- Documentation renewal and approval.
- Custodianship of NATA approved traceability documents.
- Traceability of Good Manufacturing Practice (GMP) related products and services.
- Records Management of tests completed for Radioactive Material Transport Packages.
- Exacting measurement and absolutes to the specification to the final products and feed back to the clients
- Timely communication across the organisation on client related matters.
- Provide expert advice to all nuclear business units across ANSTO.
- Educating Engineers, Project Managers, Workshop staff, planners, supervisors, managers and clients to the appropriate industry standards and process.
- High level of responsiveness to urgent requests impacting on the nuclear environment and nuclear medicine manufacture.

KEY RELATIONSHIPS

The key relationships of this position are across the critical Nuclear and manufacturing units across ANSTO. Typically, this will see nuclear critical operation being prioritised and customer interactions with all aspect of nuclear medicine manufacture and waste operations. This role works closely with the ANSTO Development Workshop and the Package Approvals Officer team.

Who	Purpose
Internal	
AME Quality Control Systems Manager	<ul style="list-style-type: none"> • Provide quality and authority of release of work • Provide expert, authoritative and evidence-based advice

	<ul style="list-style-type: none"> • Recommend and gain endorsement for plans and goals and other initiatives
AME QC Senior Technical Compliance Officer (line manager)	<ul style="list-style-type: none"> • Provide quality and authority for release of work • Provide expert, authoritative and evidence-based advice • Recommend and gain endorsement for plans and goals and other initiatives • Receive direction and guidance
Work area team members	<ul style="list-style-type: none"> • Provide supervision and work planning to the team • Provide expert advice and analysis on a full range of matters • Contribute to group decision making processes, planning and goals • Collaborate and share accountability with the development workshop and all internal clients • Negotiate and resolve conflicts
Other divisions (all internal clients ANSTO)	<ul style="list-style-type: none"> • Delivery of nuclear critical equipment and services in calibration and technical specification delivery
Contractors	<ul style="list-style-type: none"> • Provide direct supervision of contractors performing services for the QC team.
External	
NATA GMP TGA	<ul style="list-style-type: none"> • Maintain licence and quality system for NATA accreditation. • Maintain quality system for GMP audits for Health, ANM, OPAL.

POSITION DIMENSIONS

Staff Data	
Reporting Line	Reports to the AME QC Senior Technical Compliance Officer
Direct Reports	Nil
Indirect Reports	Nil
Financial Data (2015/2016)	
Revenue / Grants	
Operating Budget	
Staffing Budget	
Capital Budget	
Assets	
Special / Physical Requirements	
Location:	Lucas Heights Working in different areas of designated site as needed
Travel:	May be required travel to ANSTO sites from time to time May require visiting supplier sites (and/or other facilities) from time to time
Physical:	Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer) Labour intensive physical requirements (sitting, standing, frequent manual handling) Standing for long periods Industrial facility physical requirements (lifting, standing for long periods, operating machinery, equipment and manipulators)

	Wearing personal protective equipment for the handling of hazardous and/or radioactive materials
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 under tightly controlled safety conditions
Hours:	Willingness to work extended and varied hours based on operational requirements
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements Obtain and maintain appropriate federal government clearance

Workplace Health & Safety

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

Refer to published Organisational Chart.

KNOWLEDGE, SKILLS AND EXPERIENCE

Band (lower)	Band (higher)
1. Previous experience in Mechanical engineering trade, Engineering, Metrology, Inspection and Testing	Same as lower band
2. Mechanical Engineering Diploma and/or relevant Engineering experience	Same as lower band
3. Substantial knowledge and experience in metrology, calibration, inspection and testing	Same as lower band
4. Five years experience in quality control and quality assurance, including technical document preparation & document control	Same as lower band
5. Thorough understanding of ISO 9001 quality management	Same as lower band
6. Demonstrated experience in understanding of engineering terminology, specifications, drawing, P&IDs etc.	Same as lower band
7. Demonstrated knowledge and Non-Destructive testing knowledge & Skills.	Same as lower band
8.	Thorough understanding of ISO 17025/ISO 17020, NATA accreditation process and associated national/international standards such as ARPANSA code of practice for nuclear transport packages etc.

9.	Minimum of 2 years working as a QC senior mechanical inspector (lower band level)
10.	Proven competency via successful completion of proficiency testing and/or interlaboratory comparison
11.	Proven competency via a minimum of 2 internal audits, without any non-conformity.
12.	Proven competency via successful technical assessment of the NATA accreditation audits.
13.	Demonstrated technical leadership capabilities
14.	Previous experience in training preferred

LINKED ROLE TRANSITION REQUIREMENTS

- Minimum 5 years working as Senior Mechanical Inspector (Band 4) OR Minimum 5 years equivalent experience and;
- Become an ANSTO's approved signatory as per process defined in G-7821: Manual for AME Quality Control, which includes (but not limited to):
 - Minimum 2 years working as a QC senior mechanical inspector (lower band level)
 - Complete modules relevant to QC activities as per QC's proficiency matrix
 - Obtain thorough understanding of ISO17025/17020, relevant national/international standards and codes of practice for the relevant NATA testing

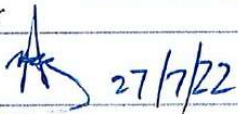

Transition from Band 4 to Band 5 will occur following a recommendation from the relevant line manager, assessment by management and approval from the Group Executive of AME

Transition within the linked role is not automatic and ability to perform Band 5 accountabilities will need to be demonstrated and assessed. This is to be done by completing the Transition Checklist and providing a full written submission demonstrating and justifying how the employee meets the transition requirements noted above.

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:	Hiram Yeung	Name:	Gerard Breen
Title:	A/ Manager	Title:	Technical Services Manager
Signature:		Signature:	
Date:	30 July 2022	Date:	30 July 2022

Line Manager		Delegated Authority	
Name:	Hiram Yeung	Name:	Gerard Breen
Title:	A/ Manager	Title:	Technical Services Manager
Signature:		Signature:	
Date:	30 July 2022	Date:	27 30 July 2022

Name:	
Commencement Date:	
Assessment Date:	

Written submission demonstrating and justifying how the employee meets requirements must also be attached.

Requirements for transition	Met Criteria
a) Minimum 5 years working as Senior Mechanical Inspector (Band 4) OR b) Minimum 5 years equivalent experience	<input type="checkbox"/> Yes <input type="checkbox"/> No OR <input type="checkbox"/> Yes <input type="checkbox"/> No
Become an ANSTO's approved signatory as per process defined in G-7821: Manual for AME Quality Control	<input type="checkbox"/> Yes <input type="checkbox"/> No

Demonstrated ability to independently and responsibly perform Band 4 accountabilities and apply required knowledge, skills and experience for the Band 5 position including:	
Undertake all Band 4 accountabilities at a technical expert level independently without supervision or guidance	<input type="checkbox"/> Yes <input type="checkbox"/> No
F-4979: Proficiency matrix complete	<input type="checkbox"/> Yes <input type="checkbox"/> No
Participation in NATA surveillance and reaccreditation audits	<input type="checkbox"/> Yes <input type="checkbox"/> No
Training and transfer of knowledge to other engineering and technical staff	<input type="checkbox"/> Yes <input type="checkbox"/> No

Attach written submission demonstrating and justifying how the employee meets each of the above requirements.

Senior Technical Compliance Officer Recommendation

I have reviewed the employee's competence in accordance with Linked Role PD-XXXX and certify that the employee meets all requirements for transition and recommend transition from Band 4 to Band 5 be endorsed as demonstrated in the attached written submission detailing how the employee meets each of the requirements.

Name & Title:			
Signature:		Date:	

Quality Control Systems Manager

I have reviewed all information and approve transition from Band 4 to Band 5.

Name & Title:			
Signature:		Date:	
Effective date of transition:			


General Manager / Group Executive

I have reviewed all information and approve transition from Band 4 to Band 5.

Name & Title:			
Signature:		Date:	
Effective date of transition:			

General Manager / Group Executive

I have reviewed all information and approve transition from Band 4 to Band 5.

Name & Title:	<i>Col Lyras</i>	<i>CHIEF ENGINEER</i>
Signature:		Date: <i>27.7.2022</i>
Effective date of transition:		

Appendix 1

ANSTO Job Families
Accounting & Finance
Administration
Communications & Marketing
Compliance & Regulation
Engineering and Technical
Human Resources
ICT & Digital Solutions
Information & Knowledge Management
Legal
Manufacturing
Monitoring & Audit
Operations
Organisational Leadership
Project & Program
Research
Science
Security & Intelligence
Senior Executive
Service Delivery
Strategic Policy
Trades & Labour