



## POSITION DESCRIPTION

<b>Position Title:</b>	OPAL Condition Monitoring Leader
<b>Cluster / Business Unit / Division</b>	Nuclear Precinct
<b>Section or Unit:</b>	OPAL Maintenance
<b>Classification:</b>	Band 5/Band 6
<b>Position Description Number:</b>	PD-1371
<b>Work Contract Type:</b>	Technical
<b>STEMM/NON-STEMM:</b>	STEMM

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### POSITION PURPOSE

The primary objectives of the OPAL Condition Monitoring Leader is to implement and continually improve condition monitoring programs and activities within OPAL as per system maintenance strategies to support the achievement of OPAL performance targets. The Condition Monitoring Leader also reviews and reports asset health data and reliability data and undertakes root cause analysis to determine root cause of failures and initiate continuous improvement actions. The Condition Monitoring Leader coordinates, supervises, and mentors a team of technical staff who gather and assess condition data across ANSTO.

### 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 Nuclear Precinct brings together the key areas of Reactor Operations, the commercial businesses of Health, ANSTO Nuclear Medicine (ANM) and Minerals & Radiation Services and Waste Management.

Reactor Operations provides nuclear services to ANSTO for the purpose of supporting the strategic objectives of the organisation. This includes the provision of neutron beams for research institutes and irradiation services to Health and ANM for the purpose of the manufacture and sales of radiopharmaceutical and radiochemical products.

Waste Management is responsible for the safe, compliant and effective management of legacy, current and future predicted radioactive waste arising in line with ANSTO's strategic objectives, regulatory requirements and public expectations.

The Minerals and Radiation Services business provides practical solutions and innovative technology in ways that deliver financial and environmental benefits to the mining and minerals processing industries.

### ACCOUNTABILITIES & RESPONSIBILITIES

Band 5 - key accountabilities for this position include:

- Develop, implement, and continually improve condition monitoring programs using techniques such as vibration analysis, thermography, oil analysis, process monitoring analysis. This includes setting up the systems for sampling, data collection, analysis and reporting, as well as establishing, reviewing and improving relevant procedures and documentation.
- Provide authoritative expertise and judgement in undertaking rotating equipment monitoring and acceptance testing by understanding failure modes and consequences, using statistical information, and interpreting and applying Australian Standard AS2625.4-2003: Mechanical Vibration - Evaluation of machine vibration by measurements on non-rotating part (ISO10816-3) and ISO 18436-2: Condition Monitoring and Diagnostics of machines -Thermography.

- Coordinate and supervise condition monitoring activities within OPAL.
- Collect, track, trend, analyse, and interpret condition monitoring data and produce asset condition health information (reports, charts, dashboards etc.) in a form that facilitates informed risk based decisions on asset operation, maintenance and renewal actions.
- Undertake fault finding activities in response to condition monitoring data and information, working with maintenance and operations representatives where necessary.
- Encourage best practice standards in maintenance delivery and data collection through the collation and assessment of condition monitoring data taken by maintainers into asset health information and the feeding back of this information to engineers and maintainers.
- Keep up to date with best practice in the field of condition monitoring, through reading relevant literature and establishes and fosters professional networks in order to access and share information. This may include participating and representing ANSTO in local and international meetings such as IAEA Coordinated Research Programs as required.
- Undertake additional duties as required and during periods of leave of other staff.
- Fulfil WHS responsibilities as specified in AG-2362 of the ANSTO WHS system.

**In addition to performing all Band 5 accountabilities, the Band 6 role includes these additional accountabilities:**

- Under the direction of the OPAL Maintenance Manager, undertake root cause analysis investigations focusing on maintenance and reliability to identify and develop continuous improvement strategies to improve asset health and eliminate failures.
- Coordinate condition monitoring activities for other divisions within ANSTO such as ANSTO Health, ANM, and adhoc equipment as requested by the OPAL Maintenance Manager
- Lead and provide expert advice on the use and interpretation of international standards for Condition Monitoring, such as ISO 13379 Condition Monitoring and Diagnostics
- Train, develop and mentor staff in condition monitoring, root cause analysis and reliability improvement processes across ANSTO
- Contribute to proactive maintenance programs, for example, lubrication management, defect elimination, root caused failure analysis and precision maintenance.
- As a subject matter expert, provide support and advice to Systems and Project Engineers on plant upgrades and reliability improvements.
- Support System Engineers/Strategists, both within Reactor Operations and other ANSTO Divisions/Departments in developing and implementing strategies and programs for condition monitoring and asset health assessments.

**Decision Making**

- The ANSTO values, organisational corporate plan, business plan, operational excellence program, the NSTLI strategy and Synroc Technologies defined strategy and plans provide the context for the position.
- The position works within a framework of legislation, policies, professional standards and resource parameters. Within this framework the position has some independence in determining how to achieve assigned objectives however will be constrained by the project deliverables and timeframes.
- The position is fully accountable for the accuracy, integrity and quality of the content of advice provided and is required to ensure that decisions are based on sound evidence, but at times may be required to make effective judgements under pressure or in the absence of complete information or expert advice.

- Determine key work priorities within the context of agreed work plans and project plans and consult with the line manager on complex, sensitive and major issues that have a significant impact on the project.
- The levels of authority delegated to this position are those approved in accordance with the project management structure and issued by the Chief Executive Officer. All delegations will be in line with the ANSTO Delegation Manual AS-1682 (as amended or replaced).

## Key Challenges

### Band 5

- Ensure all critical rotating equipment health are maintain to enable OPAL Reactor to be operated safely, met its key performance requirements, and to continuously maintain its world class reliability
- Develop and maintain robust Condition Monitoring programs for OPAL which ensures that data is correctly collected, analysed, reported, and stored.
- Ensure the exact data is collected in the correct way and right time to ensure plant condition and operational limits and safety conditions are met.

### Band 6

- Support and develop the Condition monitoring systems throughout ANSTO and roll it out to ANSTO's other critical assets.
- Programme SAP to store and collect relevant data to provide a central point for data retrieval for all relevant personnel.
- Foster a cultural change towards the effectiveness of Condition monitoring across the whole of ANSTO

## KEY RELATIONSHIPS

Who	Purpose
<b>Internal</b>	
Manager/Executive	<ul style="list-style-type: none"> <li>• Provide guidance and direction, facilitate organisational alignment</li> <li>• Provide expert, authoritative and evidence based advice</li> <li>• Make decisions based on advice / recommendations provided</li> <li>• Report on budgets and resources consistent with strategic plans and goals</li> <li>• Approve significant projects, changes, expenditures</li> <li>• Set objectives and assess performance</li> <li>• Escalate issues and propose solutions</li> </ul>
Work area team members	<ul style="list-style-type: none"> <li>• : Provide expert advice and analysis on a full range of matters</li> <li>• Contribute to group decision making processes, planning and goals</li> <li>• Collaborate and share accountability</li> <li>• Negotiate and resolve conflicts</li> </ul>
Direct Reports	<ul style="list-style-type: none"> <li>• Nil direct reports, however this role provides mentorship and expert advice to maintenance and engineering staff.</li> <li>• Provide leadership, guidance and support as Condition Monitoring SME to the division.</li> </ul>
Other departments	<ul style="list-style-type: none"> <li>• OPAL Operations, Utilisation and Engineering Sections</li> <li>• ANSTO Maintenance &amp; Engineering Group (AME)</li> <li>• Other departments as per OPAL Asset Management Plan</li> <li>• ANM, ANSTO Health</li> </ul>

## POSITION DIMENSIONS

Staff Data	
Reporting Line	Reports to the OPAL Maintenance Manager
Direct Reports	Nil
Indirect Reports	Support and advice to Engineering & Maintenance staff, 40 off

Special / Physical Requirements	
Location:	Lucas Heights Working in different areas of designated site/campus as needed
Travel:	Travel is not a requirement of the role, but opportunities to travel both internationally and nationally may arise from time to time to participate in activities such as training, conferences, collaboration projects, supplier visits, etc.
Physical:	Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer) Public speaking Industrial facility physical requirements (lifting, standing for long periods, operating machinery, equipment and manipulators) Wearing personal protective equipment Working in confined space environment Working at Heights
Radiation areas:	Will 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 radioactive materials are handled under tightly controlled safety conditions
Hours:	Willingness to work extended and varied hours based on operational requirements After hours work may be required for short and infrequent periods
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements

Workplace Health & Safety	
Specific role/s as specified in <a href="#">AG-2362</a> of the ANSTO WHS Management System	All Workers Officer (definitions found in appendix 1 of AG-2362) Other specialised roles identified within the guideline a position holder may be allocated to in the course of their duties

## ORGANISATIONAL CHART

Refer to published Organisational Chart.

## KNOWLEDGE, SKILLS AND EXPERIENCE

<b>Band 5</b>	<b>Band 6</b>
1. Diploma in Engineering, trade qualification or equivalent discipline	Same as Band 5
2. ISO Cat II Vibration monitoring qualification	ISO Cat III or higher
3. Considerable vibration monitoring experience in an industrial facility	Extensive (> 5 years) vibration monitoring experience in an industrial facility
4. Experience in all forms of condition monitoring techniques such as thermography, oil analysis, and process analysis	Formal training and qualifications and experience in all forms of condition monitoring techniques such as thermography, oil analysis, and process analysis
5. Experience in leading and mentoring a technical team in the area of condition monitoring	Same as Band 5
6. Demonstrate an understanding of proactive (defect elimination), predictive maintenance strategies and tools used to achieve plant reliability, including root cause failure analysis and the implementation of corrective strategies	Same as Band 5, with proven record of achievements
7. Knowledge of best practice techniques, including modern diagnostic techniques	Same as Band 5
8. Experience in SAP or similar CMMS	Same as Band 5
9. Personal qualities that add value to a team operating in a high level safety & quality environment	Same as Band 5 with demonstrated Ability to educate and train stakeholders in the application of developed analytical methods
10. Excellent interpersonal and communication skills, both written and verbal	Same as Band 5

## LINKED ROLE TRANSITION REQUIREMENTS

- Minimum 5 years working as Condition Monitoring technician (Band 5) or equivalent experience
- Demonstrated capability to independently manage condition monitoring programs
- Demonstrated ability to independently and responsibly perform Band 5 accountabilities and apply required knowledge, skills and experience for the Band 6 position including:
  - Undertake Band 5 accountabilities independently with no direct supervision
  - Apply extensive technical knowledge and experience to troubleshoot, investigate and resolve complex systems and problems (relevant to discipline) with no supervision or guidance
  - Independently develop, verify and validate analytical techniques for the characterisation of radioactive and non-radioactive materials in a highly regulated environment.
  - Utilise judgement to independently assess priorities of projects and tasks to optimise the allocation of resources
  - Providing feedback and contributing to the process of continual improvement in safety, reliability and efficiency and individual knowledge and competency

Transition from Band 5 to Band 6 will occur following a recommendation from the relevant line manager, assessment by management and approval from GM

Transition within the linked role is not automatic and ability to perform Band 6 accountabilities will need to be demonstrated and assessed. This is to be done by completing the attached form and completing 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.

<b>Line Manager</b>	<b>Delegated Authority</b>
Name:	Name:
Title:	Title:
Signature:	Signature:
Date:	Date:



**OPAL Condition Monitoring Leader (PD-1371)  
Band 5 to Band 6 Transition Checklist**

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 Condition Monitoring technician (Band 5) OR	<input type="checkbox"/> Yes <input type="checkbox"/> No OR
b) Minimum 5 years equivalent experience	<input type="checkbox"/> Yes <input type="checkbox"/> No
Demonstrated capability to independently manage condition monitoring programs	<input type="checkbox"/> Yes <input type="checkbox"/> No

Demonstrated ability to independently and responsibly perform Band 5 accountabilities and apply required knowledge, skills and experience for the Band 6 position including:	
Undertake Band 5 accountabilities independently with no direct supervision	<input type="checkbox"/> Yes <input type="checkbox"/> No
Independently develop, verify and validate analytical techniques for the characterisation of radioactive and non-radioactive materials in a highly regulated environment	<input type="checkbox"/> Yes <input type="checkbox"/> No
Utilise judgement to independently assess priorities of projects and tasks to optimise the allocation of resources	<input type="checkbox"/> Yes <input type="checkbox"/> No
Lead and coordinate a project team of technical staff to achieve outcomes	<input type="checkbox"/> Yes <input type="checkbox"/> No
Providing feedback and contributing to the process of continual improvement in safety, reliability and efficiency and individual knowledge and competency	<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 requirements.

**Manager Recommendation**

I have reviewed the employee's competence in accordance with Linked Role PD-1371 and certify that the employee meets all requirements for transition and recommend transition from Band 5 to Band 6 be endorsed as demonstrated in the attached written submission detailing how the employee meets each of the requirements.

Name & Title:			
Signature:		Date:	

**Senior manager**

I have assessed the submission and confirm that the employee meets all requirements for transition from Band 5 to Band 6.

Name & Title:			
Signature:		Date:	

**GM**

I have reviewed all information and approve transition from Band 5 to Band 6.

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