



## POSITION DESCRIPTION

<b>Position Title:</b>	SyMo Systems Engineer
<b>Cluster / Business Unit / Division</b>	Nuclear Precinct / Waste Management Services
<b>Section or Unit:</b>	SyMo Operations
<b>Classification:</b>	Band 6
<b>Position Description Number:</b>	PD-2146
<b>Work Contract Type:</b>	Professional

### POSITION PURPOSE

The primary objective of the SyMo System Engineer is to deliver comprehensive operational engineering support with a focus on asset management for a fully automated, first of a kind waste treatment facility.

As SyMo’s nominated resident expert, the System Engineer has a high level of expertise in relation to allocated plant systems and equipment, with a thorough understanding of the drivers and limitations of system availability and reliability. The SyMo System Engineer provides extensive technical support and advice to management, operations and maintenance functions.

### ORGANISATIONAL ENVIRONMENT

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

The Nuclear Precinct includes a number of facilities and operational areas including the OPAL Reactor, Nuclear Medicine with Health Products and ANSTO Nuclear Medicine (ANM), and Waste Operations incorporating SyMo.

The SyMo Facility is a new purpose-built facility at ANSTO that will apply ANSTO SYNROC technology to immobilise alkaline liquid waste arising from ANSTO's Mo-99 isotope production via conversion into a stable and durable waste form.

### ACCOUNTABILITIES & RESPONSIBILITIES

#### Key Accountabilities

- Responsible for ongoing engineering design and configuration, and for providing decision support on maintenance and capital investment strategies, for a portfolio of allocated asset systems relevant to discipline.
- Manage engineering activities so that solutions comply with the SyMo operating licence, regulatory and statutory requirements, security requirements, safety management and business management systems.
- Lead assigned end-to-end engineering and plant modification projects / tasks in accordance with project management, technical and change control requirements. Review and support the design and implementation of modification projects/ tasks undertaken by others to ensure outcomes are consistent with SyMo requirements.
- Manage allocated systems drawings, documentation and data to ensure system configuration is accurately represented.
- Develop, implement, monitor, and optimise maintenance and capital investment strategies in collaboration with asset managers, operators / custodians, key advisories and other stakeholders, applying risk-based decision making practices and balancing performance, cost and risk.

- Develop and optimise documentation and systems to support the delivery of maintenance. This includes risk assessments, maintenance plans and strategies, work instructions, training content, spare parts requirements, technical manuals, SAP data, and information.
- Undertake assigned maintenance tasks as per system maintenance strategies.
- Identify, prepare, review and present capital investment cases for relevant asset acquisition, redesign and renewal projects.
- Perform trend analysis and review and investigate system events, formulate and record lessons learned, and continually improve and optimise through implementation of corrective and preventive actions.
- Work with operations and maintenance teams to gather and analyse data, solve problems, and develop process improvement initiatives.
- Develop and maintain a broad knowledge of the SyMo facility through the SyMo training program and detailed knowledge of allocated systems.
- Foster collaborative and supportive relationships with a diverse range of groups internally and externally to SyMo.
- Provide organisational level support to solve complex problems and deliver projects when required.
- Undertake additional duties as require and during periods of leave of other staff.

### Decision Making

- The position works within a framework of legislation, policies, procedures, professional standards and resource parameters. Within this framework the position has some independence in determining how to achieve objectives of the position, including deciding on methods, approaches, and project planning.
- Accountable for the accuracy, integrity and quality of the content and advice provided to all stakeholders. Required to ensure that decisions are based on sound evidence. May be required to make effective judgements in the absence of complete information or expert advice.
- Assesses and determines key work priorities within the context of agreed work plans. Consults with the manager for the allocation of resources and on complex, sensitive and major issues that have a significant impact on the business unit.
- 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).

### Key Challenges

- Developing and implementing solutions to problems where there may be few precedents or incomplete data for a first-of-a-kind facility.
- Prioritising work to meet the needs of a diverse range of stakeholders during installation, commissioning and operations of a first-of-a-kind facility.
- Developing expert knowledge and a comprehensive suite of documentation from many sources of disparate information.

### KEY RELATIONSHIPS

Who	Purpose
<b>Internal</b>	
Manager	<ul style="list-style-type: none"> <li>• Receive guidance and direction</li> <li>• Provide expert, authoritative and evidence based advice</li> <li>• Negotiate and report on project budgets and resources consistent with strategic plans and goals</li> </ul>

	<ul style="list-style-type: none"> <li>• Recommend and gain endorsement for plans, strategies and other initiatives.</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>• N/A</li> </ul>
Other Departments (eg AME, BOS, NSTLI)	<ul style="list-style-type: none"> <li>• Collaborate and share accountability</li> <li>• Negotiate and resolve conflicts</li> <li>• Contribute to the Synroc BOK</li> </ul>
<b>External</b>	
Contractors	<ul style="list-style-type: none"> <li>• Manage projects to ensure delivery as per requirement</li> </ul>

## POSITION DIMENSIONS

<b>Staff Data</b>	
Reporting Line	SyMo Manager
Direct Reports	Nil
Indirect Reports	Operator/Maintainers for applicable tasks
<b>Special / Physical Requirements</b>	
Location:	Lucas Heights - Working in different areas of designated site/campus as needed
Travel:	May be required travel to ANSTO sites from time to time May be required to travel both internationally and nationally
Physical:	Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer). 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. Working in confined space environment including wearing respiratory equipment.
Radiation areas:	May be required to work in radiation areas and where hazardous chemicals or materials are handled under tightly controlled safety conditions
Hours:	Willingness to work extended and varied hours based on operational and project requirements. After hours work may be required for short and infrequent periods. This may include on-call technical support to resolve breakdown and recovery events.
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements Obtain and maintain appropriate federal government clearance.
<b>Workplace Health &amp; Safety</b>	
	All Workers

Specific role/s as specified in  
AG-2362 of the ANSTO WHS  
Management System

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

On file.

## KNOWLEDGE, SKILLS AND EXPERIENCE

1. Degree qualification in Engineering, or equivalent experience (Mechanical, Process, Chemical, I&C, Mechatronics, Electrical, OT) or a related field.
2. Demonstrated industrial experience relevant to discipline.
3. Engineering reliability experience with an understanding of asset management principles.
4. Experience working under GMP or other strict quality assurance system in a tightly regulated environment.
5. Experience developing and implementing innovative approaches to process improvements and the desire to seek and promote continuous improvement.
6. Experience initiating and managing projects to an agreed scope, time and budget.
7. Demonstrated ability to independently develop, implement and optimise maintenance strategies.
8. Demonstrated initiative working independently, deadline driven, and reliable in following through with actions.
9. Demonstrated understanding of safety management standards and practices.
10. Problem solving skills and ability to assess and resolve technical issues.
11. Demonstrated interpersonal and communication skills, both verbal and written.
12. Demonstrated experience in managing effective relationships with key stakeholders.

## 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

Delegated Authority		
Name:	Name:	Paula Berghofer
Title:	Title:	General Manager, Waste Management Services
Signature:	Signature:	
Date:	Date:	