



POSITION DESCRIPTION

Position Title:	Radioactive Plant Engineer
Cluster / Business Unit / Division	Nuclear Operations
Section or Unit:	Waste Management Services
Classification:	Band 6
Position Description Number:	PD-1575
Work Contract Type:	Professional
STEMM or NON-STEMM:	STEMM

POSITION PURPOSE

The Radioactive Plant Engineer is accountable for the plant, equipment and related projects in their area and ensuring the specialised facilities are maintained and can be operated to achieve optimum system performance and maximum availability.

The position develops and implements project strategies for the preparation of waste streams for the ultimate disposal to the National Radioactive Waste Management Facility and are part of a team of engineers and project managers who deliver WMS projects for the safe, efficient and reliable operation of the WMS equipment.

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 Operations division operates the OPAL reactor and provides waste management services to the site, for the purpose of supporting the strategic objectives of ANSTO. This includes the provision of neutron beams for research institutes and irradiation services to ANSTO Health for the purpose of radiopharmaceutical production.

The Waste Management Services Group 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 range of activities includes collection and processing of radioactive wastes, decontamination & decommissioning, compliance management; waste processing, treatment and conditioning of radioactive wastes in preparation for future disposal. This includes running projects to further develop capabilities in radioactive waste management.

ACCOUNTABILITIES & RESPONSIBILITIES

Key Accountabilities

- Develop and implement objectives, plans, targets and activities to achieve Waste Management Services maintenance, capital investment and legacy waste strategies
- Develop and implement an asset management framework and improvement program for facilities and equipment in their area to ensure reliability of assets, productivity and availability of facility and ensure operational safety, security, sustainability and compliance with applicable standards, legislative and regulatory requirements

- Ensure preventative and reactive maintenance strategies are in place and delivered to minimise down time of processing operations across the WMS portfolio as part of the asset management process
- Monitor, review and assess performance, reliability and maintenance effectiveness of relevant WMS plant and equipment
- Respond to significant equipment breakdowns and manage the response in returning to operations, carry out investigations, and provide technical advice on WMS plant and equipment issues to assist in the resolution of defects and problems affecting performance, availability and/or safety of WMS facilities
- Lead and effectively manage WMS projects in the Plant Engineers area, including endorsing plans, identifying and allocating resources, management of financial performance, developing the User Requirement Specifications, funding requests, safety cases, approval documentation, and operational readiness plans. Develop the project plans, review of documents, tenders, risk registers, issues registers, training materials and liaising with the client and stakeholders to approve change requests
- Lead and coordinate multidisciplinary teams of engineers and technicians to achieve strategic project outcomes with little or no supervision and establish and implement project management methodology to ensure projects are delivered on time, within budget and high-quality standards
- Create and foster effective stakeholder relationships and negotiate effective outcomes with both internal and external stakeholders including regulators, government officials and international organisations through effective communication at various levels of scientific or technical understanding to ensure audience needs are met
- Provide client based input and manage client documentation reviews and feedback during the detailed engineering and construction phases, including input to the design of unit processes, safety systems and operator working environments
- Consult and collaborate with a diverse range of engineers, technicians, operators, scientists and specialists within ANSTO and internationally to develop comprehensive and practical engineering solutions for WMS operating and maintenance issues
- Undertake additional duties as required and during period of leave of other staff.

Decision Making

- The ANSTO values, organisational corporate plan, business plan, operational excellence program, the Nuclear Operations strategy and Waste Management Services objectives provide the context for the position. Within this framework the position has some independence in determining how to achieve objectives of the unit, including deciding on asset priorities, methods and approaches, operations and allocation of resources.
- The position is fully accountable for the accuracy, integrity and quality of the content of advice provided to the Manager, Waste Management Services and the Leader, Waste Operations, 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.
- Determines key work priorities within the context of agreed work plans and will consult with the Manager, Waste Management Services on complex, sensitive and major issues that have a significant impact on the Waste Management Services.
- Makes decisions as per the Asset System Engineer / Strategist for their section of waste management plant and equipment as per ANSTO's Asset Management Roles and Responsibilities. This includes assuming the required level of responsibility for the engineering design, maintenance and capital requirements; applying decision making practices and techniques to formulate maintenance strategies and capital investment plans; and assessing resourcing of maintenance tasks.
- The position works within delegated authority to:

- Purchase equipment and materials
- Manage project budgets, including significant project budgets, as a project manager
- As project client, agree on plans, changes, improvements suggested by the project manager, including commissioning plans, designs, process changes and maintenance strategies
- Event investigation and action plan outcomes
- 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

- Researching, developing and implementing new waste management processes
- Successfully implementing strategic objectives and completing projects whilst managing conflicting priorities and deadlines
- Keeping abreast of recent developments in the field, ensuring continual improvement and implementation of international best practise
- Developing innovative and creative solutions to complex WMS plant/equipment system issues where there may be few precedents
- Managing the implications of any changes across the integrated waste management strategy, including other uses for the plant
- Ensuring activities are undertaken in line with the required end state of the radioactive waste to meet the National Radioactive Waste Management Facility’s Waste Acceptance Criteria.

KEY RELATIONSHIPS

Who	Purpose
Internal	
Manager / Executive	<ul style="list-style-type: none"> ● Receive guidance and direction ● Provide expert, authoritative and evidence based advice ● Negotiate and report on budgets and resources consistent with strategic plans and goals ● Recommend and gain endorsement for Asset Management Plans and other process initiatives ● Recommend and gain endorsement for User requirements specifications for complex projects ● Recommend and gain endorsement of the Project management plans for locally managed projects
Engineering team members	<ul style="list-style-type: none"> ● Provide expert advice and analysis on a full range of matters ● Contribute to group decision making processes, planning, resource sharing and goals ● Negotiate and resolve conflicts ● Develop User requirements specifications and project definitions ● Coordinate when waste changes from one area to another (Decontamination, Intermediate Level Waste, Low Level Solid Waste or Liquid Waste)
Engineering and Capital Projects	<ul style="list-style-type: none"> ● Provide leadership, guidance and support as project clients ● Set performance requirements and manage performance and development of the project
Waste Operations	<ul style="list-style-type: none"> ● Provide expert technical advice on identified problems with the plant, equipment and facilities. ● Collaborate on resource planning, project definition and project

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	<p>implementation</p> <ul style="list-style-type: none"> • Coordinate handover and manage operational readiness for the completion of projects
External	
Regulatory bodies (APRANSA, ASNO, Public Works Committee, EPBC, Sydney Water)	<ul style="list-style-type: none"> • Provide expert, authoritative and evidence based advice to enable regulatory approval of the projects required to meet strategic objectives
Federal Government/ANSTO Manager Repository Development	<ul style="list-style-type: none"> • Provide information on radioactive waste and support the process for a National Radioactive Waste Management Facility
Visitors / VIPs	<ul style="list-style-type: none"> • Provide information to the public in support of safe and effective radioactive waste management

POSITION DIMENSIONS

Staff Data	
Reporting Line	Reports to the Manager, Waste Management Services
Direct Reports	Nil
Indirect Reports	Nil

Financial Data (2015/2016)	
Revenue / Grants	N/A
Operating Budget	N/A
Staffing Budget	N/A
Capital Budget	Through IRC (annually from \$1,000,000 to \$20,000,000)
Assets	~\$150,000,000

Special / Physical Requirements	
Location:	Lucas Heights Working in different areas of designated site/campus as needed
Travel:	May be required to travel to other ANSTO sites, nationally, and internationally
Physical:	Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer) Public speaking Wearing personal protective equipment for the handling of hazardous and/or radioactive materials Working in confined space environment including wearing respiratory equipment
Radiation areas:	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>AG-2362</u> of the ANSTO WHS Management System	All Workers Asset System Strategists Other specialised roles identified within the guideline a position holder may be allocated to in the course of their duties

ORGANISATIONAL CHART

See Attached

KNOWLEDGE, SKILLS AND EXPERIENCE

1. Degree in a relevant discipline such as Mechanical, Environmental, Industrial, Electrical or Chemical Engineering or equivalent nuclear industry experience
2. Significant experience in radioactive material handling or hazardous waste industries
3. Broad experience in engineering design, process engineering, technology development, environmental management, decommissioning and decontamination
4. Demonstrated experience in Asset Management, engineering project management and proven ability to deliver project outcomes on budget and in time
5. Demonstrated experience in managing effective relationships with key stakeholders
6. Experience in troubleshooting plant systems and investigating / proven ability to resolve plant problems
7. Demonstrated ability to initiate and manage change, allocate resources effectively and identify and manage risks to achieve asset management outcomes and organisational objectives
8. Excellent interpersonal, written and verbal communication skills
9. Technical writing experience in preparing budget submissions, asset management plans, technical reports and papers, scientific publications and project management documentation
10. Demonstrated computing, analytical and problem-solving skills

VERIFICATION

Line Manager		Delegated Authority	
Name:	Duncan Kemp	Name:	Pamela Naidoo-Ameglio
Title:	Manager, Waste Management Services	Title:	Group Executive, Nuclear Operations
Signature:		Signature:	
Date:		Date:	