



### POSITION DESCRIPTION

Plant Engineer **Position Title:** 

Cluster / Business Unit / Division NSTLI/Australian Synchrotron/Operations

**Section or Unit: Engineering - Facilities** 

**Classification:** Band 6 **Position Description Number:** PD-1719 **Work Contract Type: Technical** 

### **POSITION PURPOSE**

The Plant Engineer is responsible for the operation and maintenance of the facility's major plant for reliability and efficiency in order to provide services to the facility. The key objective of this role is to ensure continuous plant operation that provides services to critical systems and site operations. The plant engineer is fully accountable for maintaining the cooling towers to meet health and safety regulations as required by state legislation.

The Engineering Department is a group of multi-disciplined teams tasked with supporting the technical development and ongoing operational support of the facility. The technical scope encompasses the accelerator and beamline systems as well as their supporting technical infrastructure. To meet this challenge the Department is required to develop and maintain specialist skills and capability which are to be applied to the delivery of often technically challenging projects.

#### 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 Australian Synchrotron provides world-leading technical capability, and the nucleus around which new science and industry networks form as researchers interact. The synchrotron delivers better and faster experimental techniques that not only enhance current fundamental and applied research, but also open up new avenues of investigation to Australian science. The facility promotes international collaboration to enable leading-edge research and development, and is a hub for research that greatly benefits Australia and its regional neighbours.

### **ACCOUNTABILITIES & RESPONSIBILITIES**

### **Key Accountabilities**

- Develop, implement and regularly update operational plans and maintenance strategies, including clarifying objectives and priorities for the Synchrotron Facilities team in line with the broader strategic objectives of ANSTO.
- Manage the day-to-day Maintenance delivery strategies for entire site in accordance with the Asset Management plan whilst maintaining compliance with Operating Limits and Conditions, operating licence conditions, ARPANSA and TGA regulations to maintain and improve safety and operational efficiency and compliance. This includes the oversight of maintenance staff requirements to comply with the day-to-day safety needs of the facility including WHS.
- Take accountability for the facility's plant and its impact on machine availability to ensure that the accelerator, beamlines and buildings are supplied with critical services.
- Act as ANSTO's delegate to COMCARE for registrations and renewals for all of ANSTO Melbourne's plant pressure vessels.

- Contribute to and support project and process engineers in the development and continuous improvement of asset management strategies and plans to support achievement of plant performance and condition targets, including optimised programs for: plant maintenance & surveillance; condition monitoring & materials surveillance, spare parts and logistics management; component replacements & renewals; obsolescence management; and other specific programs identified in the asset management strategy.
- Plan and deliver plant and equipment shutdowns for maintenance and installation of new equipment taking into account, production supply constraints and quality control.
- Manage and be fully accountable for the provision to the facility of compressed air, cooling water and hot water by the plant, to ensure that the beamlines and plant are supplied with critical services.
- Manage compliance with the requirements of essential services regulations. Ensure regular
  testing/maintenance is carried out and records/reports kept in a central location, meeting
  regulatory and WHS obligations associated with the plant
- Lead and integrate continuous improvement methodologies through considering alternative design concepts, constructability and operability factors, and the application of lessons learnt, and strive to deliver improvements
- Monitor the plant distribution systems which are critical to the operation of the synchrotron
- Supervise on site contractors that are engaged to provide specialized work on the plant and ensure all work is carried out in a safe manner and according to ANSTO contractor management procedure
- Provide technical support and specialized knowledge to the facilities team in regard to Air Conditioning equipment.
- Undertake additional duties as required and during period of leave of other staff.

## **Decision Making**

This role makes decisions related to:

- 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.
- The position is to determine key work priorities for the Maintenance team, within the context of agreed work plans and will consult with key stakeholders on complex, sensitive and major issues that have a significant impact on the building
- Coordination and prioritization of project activities for which the role is accountable
- Prioritization of day to day work and just-do-it's as requested
- Selection and sourcing of contractors and service providers
- Minor changes/updates to the plant
- 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**

 Manage the performance of multiple systems on which all internal stakeholders rely on to ensure their own performance objectives are met.

# **KEY RELATIONSHIPS**

| Who                                       | Purpose  |
|---|--|
| Internal                                  |  |
| Manager                                   | <ul> <li>Receive guidance and direction</li> <li>Provide expert, authoritative and evidence-based advice</li> <li>Staff engagement and quality recruitment</li> <li>Negotiate and report on budgets and resources consistent with strategic plans and goals</li> <li>Recommend and gain endorsement for plans and goals and other initiatives</li> </ul>   |
| Work area team members                    | <ul> <li>Provide expert advice and analysis on a full range of matters relating to plant and facility requirements</li> <li>Contribute to group decision making processes, planning and goals</li> <li>Negotiate and collaborate to resolve conflicts</li> <li>Clarify priorities and timing of maintenance activities</li> <li>Engage in monitoring trends, performance and progress against the strategic plan and evaluate further support which may be required to ensure delivery against the plan</li> </ul> |
| WHSE team                                 | <ul> <li>Daily, weekly or as required to discuss upcoming on-site works,<br/>safety issues and provide documentation as required</li> </ul>  |
| Science teams and operators               | <ul> <li>Regularly or as required to discuss issues during planned and<br/>unplanned shut downs, provide technical advice on specific<br/>technical issues, including those associated with the plant, provide<br/>guidance on the use of all services and respond to any<br/>noncompliance in the service delivery plant</li> </ul>   |
| OHSE                                      | <ul> <li>Regularly or as required to arrange and supervise work carried out<br/>on all critical plant and equipment</li> </ul>   |
| External                                  |  |
| Contractors                               | <ul> <li>On site as required to arrange and supervise work carried out<br/>within the area of responsibility</li> </ul>  |
| Commonwealth Government, ARPANSA, COMCARE | <ul><li>Create clear and transparent communication channels</li><li>Compliance with standards and regulations</li></ul>  |

| Financial Data (2015/2016 | 6)  |  |  |
|---------------------------|-----|--|--|
| Revenue / Grants          | Nil |  |  |
| Operating Budget          |     |  |  |
| Staffing Budget           |     |  |  |
| Capital Budget            |     |  |  |
| Assets                    |     |  |  |

# **POSITION DIMENSIONS**

| Staff Data       |   |
|------------------|---|
| Reporting Line   | Reports to the Facilities and Maintenance Manager |
| Direct Reports   | Nil   |
| Indirect Reports | Maintenance Planner, Maintenance Technicians-     |

# **Special / Physical Requirements**

| Location:               | Clayton Working in different areas of designated site/campus as needed May be required to travel to ANSTO sites interstate                           |
|-------------------------|--|
| Tanada                  | May be required to travel internationally  |
| Travel:                 | May be required travel to ANSTO sites 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 up to 20kg)  |
|                         | Working in a loud environment  |
|                         | Public speaking  |
|                         | 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 with and in an area where hazardous chemicals   |
|                         | or materials are handled under tightly controlled safety   |
|                         | conditions   |
| Harring                 |  |
| Hours:                  | Willingness to work extended and varied hours based on operational needs and requirements  |
| Clearance requirements: | Satisfy ANSTO Security and Medical clearance requirements  |
|                         |  |

| Workplace Health & Safety       |  |
|---------------------------------|--|
| Specific role/s as specified in | All Workers  |
| AG-2362 of the ANSTO WHS        | Other specialised roles identified within the guideline a position |
| Management System               | holder may be allocated to in the course of their duties           |

### **ORGANISATIONAL CHART**

On file.

### **KNOWLEDGE, SKILLS AND EXPERIENCE**

- 1. Relevant degree/diploma level engineering qualification preferably in mechanical engineering or equivalent experience.
- 2. Demonstrated extensive experience in plant management.
- 3. Specialised engineering and technical knowledge in the area of plant management across mechanical, electrical and controls aspects of plant engineering.
- 4. The ability to build relationships with contractors and peers in other facilities.
- 5. Significant experience planning and prioritising maintenance activities and shutdowns.
- 6. The ability to problem solve in a methodical, systematic manner.
- 7. Experience in Project Management methodology.
- 8. The ability to work collaboratively in a workplace with many stakeholders and competing priorities.
- 9. The ability to communicate effectively across the organisation and effectively express technical issues to non-technical staff.
- 10. The desire to seek and promote continuous improvement demonstrated ability and willingness to implement change.

# **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 Legg                   | Name:               | Brad Mountford      |
| Title:       | Facilities manager Engineering | Title:              | Head of engineering |
| Signature:   | Mitted                         | Signature:          |                     |
| Date:        | 10/01/2020                     | Date:               |                     |