

PACIFIC ALUMINIUM

Superintendent

Area: Carbon Products & Services or Molten Metal Maintenance

Document Number:

Version: 1.0

Role Description – Superintendent Maintenance (Carbon or Molten Metals)

Role Title:	Superintendent – Carbon Maintenance or Molten Metal Maintenance	Effective Date	05 April 2016
Incumbent:	TBC	Business Unit:	Pacific Aluminium
Reports to:	Manager – Assets	Division:	New Zealand Aluminium Smelters Limited
No. of Direct Reports:	TBC	Team:	Carbon Maintenance or Molten Metal Maintenance
No. of Indirect Reports:	TBC	Location:	Invercargill, NZ
Role Band:	I	Financial Authority:	10000

Context

Pacific Aluminium (PacAl) is a member of the Rio Tinto group of companies and is a medium sized, geographically dispersed organisation operating in Australia and New Zealand and competing in world commodity markets for primary aluminium. Pacific Aluminium's strategy is based on continually improving its cost competitiveness, ensuring the safe and environmentally sound operations and the realisation of the full potential of its people, technology and physical assets.

NZAS is the sole operating site in New Zealand, 79.36% owned by PacAl and 20.64% owned by Japan's Sumitomo Chemical Company. NZAS is a tolling plant, producing some of the highest purity aluminium in the world in the form of ingot, billet and rolling block. The smelter is a significant supplier of aluminium to Japan and maintains a broad market base including Asia, New Zealand, the United States and Europe.

The Assets Department provides capital and maintenance, engineering, IT, Automation, policy, support and project delivery to NZAS, as well as other services and functions to support site operations.

Primary Purpose

The primary purpose of a Maintenance Superintendent role is:

- ❑ To lead and support multi-disciplined maintenance crews within the Maintenance Output Team to continually improve its performance in maintaining accountable assets.
- ❑ To deliver safe, efficient and cost effective business results
- ❑ To be an effective leader and team member at New Zealand Aluminium Smelters'
- ❑ To ensure that maintenance is performed safely, efficiently and effectively supporting the Operational goals of the departments.
- ❑ To target the application of asset management concepts and principles to leverage business performance by improving equipment reliability and safety in use, and maintaining at the lowest possible life cycle maintenance costs.

This is a leadership role accountable for the on-going coaching and development of the people in the team as well as the daily maintenance and improvement of equipment.

PACIFIC ALUMINIUM

Superintendent

Area: Carbon Products & Services or Molten Metal Maintenance

Document Number:

Version: 1.0

Problem Solving

Problems the Superintendents would encounter are typically with the identification of critical issues (what-if's and how-to's) associated with the team leader/team membership and task assignment model within a maintenance work management context. Superintendents are expected to use a structured problem solving methodology to ensure correct resources are used to identify, prevent or remove defects from the sites assets over the life of the asset:

- **Identify:** Identifies problems or potential problems using data
- **Plan:** Plans for solving the problem and determine the prerequisites.
- **Use a Team:** Establishes a team of people with the necessary knowledge.
- **Define and describe the Problem:** Specifies the problem by identifying in quantifiable terms the who, what, where, when, why, how, and how many for the problem.
- **Develop Interim Containment Plan:** Implement and verify Interim Actions: Defines and implements containment actions to isolate the problem from any customer.
- **Determine, Identify, and Verify Root Causes and Escape Points:** Identifies all applicable causes that could explain why the problem has occurred. Also identifies why the problem has not been noticed at the time it occurred. All causes shall be verified or proved, Can use five whys or fish bone diagrams etc. to map causes against the effect or problem identified.
- **Choose and Verify Permanent Corrections for Problem:** Quantitatively confirms that the selected correction will resolve the problem for the customer. (Verify the correction will actually solve the problem)
- **Implement and Validate Corrective Actions:** Defines and Implements the best corrective actions.
- **Take Preventive Measures:** Modifies the management systems, operation systems, practices, and procedures to prevent recurrence of this and all similar problems.
- **Celebrates Success:** Recognize the collective efforts of the team and share success with wider organisation

Accountabilities

HSEQ

- Work in accordance with site HSE policies, systems & procedures.
- Be aware and comply with HSE requirements as relevant to specific work tasks performed by crew.
- General duty of care to self and others.
- Conduct and ensure quality pre-task risk assessments are undertaken i.e. JSA, Take 5, pre-start checks.
- PPE compliance in accordance with site and department requirements.
- Ownership and management of own health ensuring fitness for work is consistently maintained.
- Fulfil health & safety obligations as defined in New Zealand Health and Safety Act and Hazardous substances and noxious organisms.
- General duty not to carry out any activity that is likely to cause environmental harm.
- Fulfil obligations as defined in NZAS resources consent.
- Act as directed in an emergency or disaster situation.
- Ensure team members undertake all required HSEQ training.
- Ensure appropriate procedures are developed addressing risk.
- Organise and conduct regular HSE inspections of all sections in the workplace.
- Accountable for ensuring all tool box and general feedback meetings happen and improving quality over time.
- Conduct regular Lean and Safe Work Audits.
- Participate in risk register review as required.
- Promote general HSEQ initiatives within output teams
- Incident Management

PACIFIC ALUMINIUM

Superintendent

Area: Carbon Products & Services or Molten Metal Maintenance

Document Number:

Version: 1.0

TEAM LEADERSHIP

- Provide business context and purpose to all employees and also describe how each individual can contribute to business improvement.
- Coach, monitor and review performance and provide feedback and recognition to promote development of all employees
- Create and maintain a culture within the output team which is aligned to organisational objectives.
- Ensure policies, systems and procedures are communicated to team members.
- Coach, develop and provide feedback to team members.
- Monitor and manage attendance of team members.
- Monitor the work of the team maintaining high visibility in the field continually look for ways to improve and change tasks if necessary.
- Ensure data or information created by the team member is accurate (incident data, training/license records, permits, product analysis data etc.).
- Timely performance of performance management and decisions on performance ratings.
- Sourcing feedback from internal and external customers and suppliers to improve individual and team performance
- Provide adequate training and technical resources.

TEAM MEMBERSHIP

- Create, maintain and enhance constructive working relationships with own team, immediate manager, peers, customers and other parts of the business.
- Communicate effectively with own team members as well as members of other teams and other departments.
- Participation/willingness to engage in team activities/projects.
- High standards of personal behaviour set and maintained.
- Seek feedback from internal customers and suppliers (of services as well as materials) to improve team performance.
- Application of Team Leadership models.
- Display personal values and behaviour consistent with the requisites of a leader.

COSTS / PLANNING

- Effective planning & prioritisation of tasks.
- Deliver the development and implementation of Output Team improvement plans.
- Organise resources to effectively carry out the work and minimise waste.
- Consider the needs of the business when scheduling priorities.
- Accountable for the management of change and associated risk mitigation e.g. HSEQ impacts.
- Contribute to the development and application of the Output Team/department annual plan
- Develop maintenance plans and budgets as part of the yearly planning process that support the site strategic plan and the operational needs of the department
- Understand, interrogate and review Output Team and Maintenance costs. Develop plans to mitigate any cost variances from budget.
- Develop, as part of the yearly planning process, capital projects for Maintenance plan incorporating scope, cost estimate and benefit for each item
- Ensure efficient and effective use of resources (programming of people and plant) for current and predicted maintenance repairs, process operations and provided services.
- Be aware of site policies, ensuring that improvement initiatives support the intent.
- Manage projects assigned by Manager according to assigned authorities, QQR&T.
- Report on project status as part of the reporting process as specified and agreed with Manager.
- Trending, variance analysis and actioning of project performance.

TECHNICAL

- Support asset owners by providing technical advice in equipment asset management, planning, scheduling, costs and reliability improvement.

PACIFIC ALUMINIUM

Superintendent

Area: Carbon Products & Services or Molten Metal Maintenance

Document Number:

Version: 1.0

- ❑ Ability to manage and minimise rework and waste generation, ensuring plant is operated according to specifications and area requirements.
- ❑ Achieve planned asset utilisation by minimising unscheduled equipment downtime and time to repair.
- ❑ Perform any other task assigned by the Manager which the team member is competent to perform and which can be done safely.
- ❑ Develop a thorough understanding of equipment performance and capability and use this knowledge systematically to eliminate failure root cause, performance variation and excessive cost.
- ❑ Maintain the consistent application of standards.
- ❑ Develop and implement specific maintenance plans for all critical equipment which will deliver required capability and reliability at lowest life cycle cost.
- ❑ Schedule, plan and complete maintenance tasks (excluding breakdowns) to maximise asset utilisation and performance by working with Operations teams.
- ❑ Ensure all equipment receives planned maintenance at requisite levels to ensure safe, reliable and efficient operation.
- ❑ Ensure that equipment subject to statutory regulations is maintained to a standard which ensures compliance and that inspections are carried out at the specified frequency.
- ❑ Deliver projects in a manner that meet or exceed safety, quality, cost, and schedule requirements.
- ❑ Effective planning & prioritisation of tasks.
- ❑ Support the development and implementation of Output Team HSE Improvement plans.
- ❑ Organise resources to effectively carry out the work and minimise waste.
- ❑ Carry out any necessary management of change and associated risk mitigation e.g. HSEQ impacts.
- ❑ Contribute to the Output Team/department annual plan.
- ❑ Participate and support Lean and Six Sigma projects as required.
- ❑ Understand and interrogate accountable crew and maintenance costs. Develop plans to mitigate any cost variances from budget.
- ❑ Implement projects as per Maintenance plan incorporating scope, cost estimate and benefit for each item
- ❑ Ensure efficient and effective use of resources (programming of people and plant) for current and predicted maintenance repairs, process operations and provided services.
- ❑ Liaise closely with Operational Superintendents to deliver long term sustainable operations at the lowest life cycle costs.
- ❑ Apply the leader's routines framework:
 - Core Skills - Ensure we have enough competent people to get our work done to the standard.
 - Shift Handover - Provide the oncoming Crew Leader with all the information necessary to prepare and plan for an effective Toolbox meeting.
 - Toolbox - Prepare for the shift ahead so that the team can consistently meet customer safety, quality, and takt time requirements.
 - Root Cause Problem Solving - Implement effective solutions that prevent workplace problems recurring.
 - Within Shift Flow - Monitor work management progress to plan and schedule throughout the shift.
 - Safety Controls - Ensure controls are in place and effective in preventing harm
 - Safety Coaching - Reinforce safer behaviours
 - Workplace Flow - Help team members achieve a smooth and efficient flow of materials and motion.
 - Workplace Standards - Ensure important job steps are consistently achieved to a documented standard.
 - Performance Management - Formally provide recognition and assessment of performance against expectations.
 - Output Team Metric Review – Ensure Output Team goals are achieved

IMPROVEMENT

- ❑ Initiation, generation and analysis of improvement ideas for incorporating into improvement plan.
- ❑ Understand benchmark performances for similar plant and use knowledge to improve performance.
- ❑ Active involvement and support of other organisational improvement initiatives.
- ❑ Maintain effective communication with peers at other PacAl sites, enabling sharing of best practices and identification of improvement opportunities.

PACIFIC ALUMINIUM

Superintendent

Area: Carbon Products & Services or Molten Metal Maintenance

Document Number:

Version: 1.0

- ❑ Implementing and sustaining LEAN, Info Centres and other BI initiatives in accordance with site plans and targets.

Key Relationships

Interaction with	Frequency	Aim of interaction
General Manager	Infrequent	Managerial MoR Operational Support
Department Manager	Frequent	Interactions include: <ul style="list-style-type: none"> - Assign task - Review performance Personal Development
Crew Leaders	Frequent	Interactions include: <ul style="list-style-type: none"> - Development, coaching, and feedback. - Constructive working relationship with members of output team to ensure safe and efficient performance. - Task assignment - Technical issues and decision making
Planner and Scheduler	Frequent	The right work is planned to the right level has the right resources to complete it effectively at the right time
ERO	Frequent	Improved equipment reliability
Output Team Members	Frequent	Development, coaching, and feedback. Constructive working relationship with members of output team to ensure safe and efficient performance.
Operations Leadership	Frequent	Interactions include: <ul style="list-style-type: none"> - Technical support. - Supporting Operational goals - Improving Maintenance Process understanding - Life cycle support
Central Maintenance	Frequent	- Process and technical support as necessary
Maintenance Superintendents	Frequent	- Peer coaching, support, maintenance consistency and professional development

PACIFIC ALUMINIUM

Superintendent

Area: Carbon Products & Services or Molten Metal Maintenance

Document Number:

Version: 1.0

Education & Qualifications

Education & qualifications

- Tertiary Qualification in the Electrical or Mechanical disciplines or a comparable degree or trade is preferable
- Diploma in Leadership is preferable

Relevant experience

- 5 – 10 years' experience in an operational maintenance discipline is preferable
- 5 - 10 years' experience in a leadership role is desirable
- Experience in heavy industry, large scale complex continuous processing operations (utilities, mining, processing, etc)

Languages

Fluent in English

Leadership Competencies & Skills:

- Demonstrated leadership skills in a production / maintenance / project environment.
- Ability to build and develop an efficient and effective team
- Experience and knowledge of the maintenance systems.
- Demonstrated commitment to safety.
- Demonstrated ability to effectively utilise resources (people, plant, process).
- Demonstrated ability and passion to improve the performance of a team.
- Capability for systems design.
- An energetic and enthusiastic "hands on" approach with a passion to learn, improve and achieve.
- Ability to lead and supervise.
- Ability to decide on and initiate action.
- Ability to cope with pressure and challenges.

Technical / Other Attributes:

- Experience with computerized maintenance packages and reporting tools associated with these packages.
- Demonstrated optimisation of equipment performance while reducing maintenance costs through continuous improvement will also be highly regarded.
- General Knowledge of Mechanical and/or Electrical engineering
- Demonstrated knowledge and/or application of Project Management skills
- Ability to plan and work efficiently with discretion, reliably and accuracy – aim to do it right the first time.
- Ability to work effectively both within a team and independently with minimal supervision
- Strong commitment to health, safety, environment and community.
- Good written, verbal, numerical and mechanical skills.
- Ability to adapt and respond to change.
- Demonstrated communication skills.
- Demonstrated problems solving and analytical skills
- Demonstrated knowledge of Business Improvement Tools e.g. Lean Manufacturing, SixSigma
- Experience and knowledge of the maintenance systems. Experience in Defect Elimination / Root Cause Analysis is desired.
- Ability to write project briefs, specifications and capital appropriations.
- Proficiency in the use of industry standard tools and systems for use in project management, equipment, maintenance strategy development, root cause analysis, condition monitoring, continuous improvement and MS software including Word and Excel.

PACIFIC ALUMINIUM

Superintendent

Area: Carbon Products & Services or Molten Metal Maintenance

Document Number:

Version: 1.0

Leadership Accountabilities and Competencies

<u>Leading Self:</u>	Taking responsibility and accountability for own behaviour, performance and development. Motivating and developing people to deliver superior results.
<u>Leading People:</u>	<ul style="list-style-type: none">• Adopt inclusive techniques whenever possible and thereby improve personnel self worth.• Be a team member and also engage support & overcome resistance when no formal authority exists
<u>Business Focus:</u>	Leveraging the broader organisation for value creation through sharing knowledge, experience, resources and skills.
<u>Commercial Focus:</u>	Applying commercial rigor and discipline to all business decisions and customer relationships.
<u>Strategic Effectiveness:</u>	Developing and communicating rigorous and creative business strategies that drive sustainable value for Rio Tinto.
<u>Operational Delivery:</u>	Taking actions that optimise short and long term operational performance.
<u>External Engagement:</u>	Understanding and building relationships with external parties that strengthen and sustain Rio Tinto's competitive advantage.
<u>Managing Change:</u>	Initiating and implementing change with commitment and drive.

Note

The requirements and responsibilities contained in this job description do not create a contract of employment and are not meant to be all-inclusive. They may be changed by the role manager during employment on an as-needed basis.