



Australian Government

Department of Sustainability, Environment, Water, Population and Communities
Australian Antarctic Division

EXPEDITION MECHANIC

Overview of the Role

As an Expedition Mechanic (EM) you will maintain and operate a range of mechanical plant and equipment, and the station power generation facilities (mechanical side). You will also support station and field operations as required.

If you don't meet all the requirements listed below don't be discouraged, if you have good skills in some of the areas please continue with an application – in making final selections we take into account overall team building and the mix of skills required.

A suitable person will be selected from Expedition Mechanic and/or Station Mechanical Supervisor candidates to work as the Senior Expedition Mechanic for Macquarie Island.

What will you actually do on the job?

- Operate and maintain (mechanical side) station power generation facilities.
- Maintain a wide range of mobile and stationary mechanical plant and equipment (portable generators/pumps, 4x4 and specialized over snow vehicles, earth moving machinery, trailers etc).
- Operate plant and equipment as required (loaders, forklifts, tractors, cranes etc).
- Provide mechanical engineering services to various user groups as required.
- Maintain fuel, lubricant and gas cylinder storage, spare parts and material storage.
- Support station operations as required.
- Support field operations as required.
- Assist in science programs when necessary.
- You are required to maintain a personal and practical commitment to the AAD's OHS and Environmental Policies. The safety and environmental roles and responsibilities relevant to your position will be communicated to you by your supervisor.

As well as these specific job roles you will also be required to, in common with all other expeditioners, perform duties rostered by the Station Leader to support the community life of the expedition, such as general kitchen duties, garbage clearance, water duties, and assisting other expedition members with official programs.

Required Skills, Knowledge and Attributes

- Diesel engine maintenance, diagnose, repair, and overhaul (Caterpillar, Cummins, electronic and non electronic).
- Petrol engine maintenance, repair and overhaul.
- Maintenance and repair of heavy plant, including tracked, wheeled and stationary equipment (Cat loaders, tractors and excavators, Grove cranes, Komatsu crushers etc).
- Maintenance and repair of medium vehicles and plant, including over-snow vehicles, trucks, forklifts etc.
- Maintenance and repair of light vehicles, including Toyota 4x4 vehicles, Honda all terrain vehicles etc.
- Maintenance and repair of small plant, including pumps, generator sets, heaters, ice drills, outboard motors etc.
- Servicing and maintenance of single and three phase power generation equipment.
- Hydraulic systems.
- Automotive electrics.
- Fitting and machining.
- Welding and metal fabrication.
- Workshop practices, including an understanding of current occupational health and safety policies.
- Maintenance of stock inventories including stocktaking, reordering spares and consumables etc.
- Written and oral communication skills appropriate to the duties of the position.
- Possess other skills of use in an isolated Antarctic community.

Qualifications and Licenses

- You will have a suitable trade qualification (eg: motor mechanic, diesel mechanic, plant mechanic, fitter & turner).
- You will hold a current "C" class (manual) Australian driver's license
- You will have a current statement of attainment in the following units of first aid - Apply First Aid (HLTFA301B) and Perform CPR (HLTCPR201A)

Personal Qualities Requirements

As the member of a small community there are also personal attribute requirements which the Australian Antarctic Division assesses very closely. You will need to meet the personal qualities criteria listed below.

To be successful you will:

- demonstrate a strong work ethic.
- demonstrate that you can make a positive contribution to community and team.
- demonstrate that you respond to authority and are compliant with the law, legislative requirements and AAD policies and procedures.
- demonstrate a commitment to Australian Antarctic program specific requirements.

Medical, Psychological and Security Screening

If you are assessed as meeting the above job related and personal quality requirements, you will be required to undergo medical, psychological and security screening. Meeting the requirements of these is mandatory.

- The AAD's Polar Medicine Unit will decide on your medical fitness for duty in Antarctica following tests conducted on our behalf by a nominated medical practitioner.
- Psychological assessments are conducted on our behalf by the Directorate of Psychology, Department of Defence.
- Security checks vary depending on the role required. This may be limited to a police records check.