



SOUTH AFRICA
P O Box 65
Phalaborwa
1390
Telephone: +27 15 780 2911
Facsimile: +27 15 781 0448

Registered in the Republic of South Africa
1 Copper Road Phalaborwa, 1389
Registration No 2007/033694/07
VAT Number: 4950252124
Employer Tax Number Ref: 7430771826
Income Tax Ref: 9193800167

Scope of Work

Alien Plant Eradication and Mosquito control

2019

CONTACT PERSON

Tertius Hofmeyr
Environmental Specialist
Environment – SHEQ MS
Tel. (015) 780 3996

e-mail : Tertius.Hofmeyr@palabora.co.za

Approved by:

Mark Surmon
Manager Environment & SHEQ MS

Date :	21/02/2019
Signature :	

INTRODUCTION

Palabora Copper has been ISO 14001 certified since 1996 and is committed to comply with all environmental legislation applicable to its activities. The Conservation of Agricultural Resources Act, 43 of 1983 requires the combating of weeds and invader plants. In this respect, Palabora would like to continue the eradication of invader plants.

SCOPE

The scope entails alien plant eradication covering the entire Palabora premises, including the Cleveland Game Park, of about 6 000 hectares as well as Mosquito spraying at designated sites during January to March and October to December.

REQUIREMENTS

Legal requirements

Fertilizers, Farm feed, Agricultural Remedies and Stock Remedies Act, no 36 of 1947;
The manager as well as the supervisor or team leader must be **registered as a Pest Control Operator** with the Department of Agriculture in accordance with the Fertilizers, Farm feeds, Agricultural remedies and Stock remedies Act, no. 36 of 1947.

Mine Health and Safety Act, no 29 of 1996

Due to Palabora holding a proud record for safety, the contractor is required to adhere to the conditions of the Mine Health and Safety Act, no 29 of 1996 and Palabora Standards and procedures pertaining to safety and health.

The contractor is responsible for equipping personnel with the following safety equipment:

- Safety boots
- Socks
- Safety clothing
- Gloves
- Safety glasses/goggles
- Respirators appropriate for application
- Face masks

- 1) Team leader and at least one team member per team must have a valid First Aid certificate, and have been trained in handling hazardous chemical substances. Copies of Material Safety Data Sheets of Chemicals to be used must available at all times during the contract.

The contractor and his personnel will have to attend a two (2) hour Contractor induction course at Palabora as well as Medical examinations prior to commencing with work as part of registration as Palabora contractor. There may be other Health, Safety & Environmental courses that have to be completed prior to commencing with the work.

The team must have a reliable robust vehicle for transportation purposes in a rugged terrain. Vehicle must be able to seat each team member, each with a safety belt. The driver of the vehicle must have a valid provincial driver's license. The driver and team leader need not be the same person. Team will have to attend site-specific induction training prior to commencing work in certain areas.

- 2) Provision must be made for 4 people to be present at all times on site at work including a supervisor. This includes periods when personnel are on leave. The Team will also be responsible for disposing of some alien plants removed to a designated Palabora site.
- 3) Conservation of the Agricultural Resources Act, no 43 of 1983
Invader species and weeds must be removed and controlled in accordance with the category stipulated in the Conservation of the Agricultural Resources Act, no 43 of 1983.

Invader Plants and weeds are divided into three categories:

Category 1 : must be removed and destroyed, may not be planted or grown

Category 2 : must be removed, allowed to grow with permit

Category 3 : may not plant or grow, but may remain in garden, but must be controlled.

PERSONNEL REQUIREMENTS

- 1) The personnel requirements are as follows:
Alien Plant and Mosquito Control;

The Alien Plant and Mosquito Control team will consist of four team members five days a week with the inclusion of one supervisor. The team will be available from 7am to 4pm (9 hours per day) which includes a 30 min lunch break and 15 min tea break. Lunch and tea is to be had in the field as not to waste time driving to and from destinations.

The team leader should have a strong personality and the ability to lead others.

The team leader should have good communication skills (Fluent in English).

An additional team with appropriate transport will be needed to affect the complete removal of Alien vegetation on a seasonal cycle on a needs basis. The cycles will be as follows:

- November – December
- February – April
- June

For mosquito spraying an additional team should be available for 3 months per year. This usually follow after seasonal rain (November, February, March) this is to allow the resident team to focus on alien weeds, the exact month may vary due to seasonal shifts and should be confirmed with the Environmental section. This work will not form part of the monthly costs but will be billed additionally, forming part of the contract cost

- 2) Tasks:
 Alien Plant and Mosquito Control
 Additional environmental related tasks as required

REPORTING

- 1) The contractor will be expected to submit a comprehensive monthly report containing the following detail to Environmental Section:
 - Area treated i.e. Locality
 - Treatment methods used (felling, herbicide, burning)
 - Species identified
 - Common and Scientific name
 - With their specific densities (%)
 - Size class (i.e. seedling, young, mature, all)
 - Herbicides and dosage used
 - Hectares cleared during the month.

- 2) The contractor will also be expected to submit a comprehensive semi - annual report – one for summer and also one for winter containing the following detail to Environmental Section:
 - Area/sector
 - Vegetation unit
 - No. of alien Species
 - Alien species density (per ha)

- 3) A separate Mosquito control report is to be submitted during months that Mosquito spraying were conducted and should contain the following information, and example of a report would be made available on request:
 - Area treated i.e. Locality
 - Treatment method,
 - Insecticide and dosage

BI-ANNUAL SURVEY

The contract manager will be required to accompany an Environmental Specialist on a bi-annual alien plant survey with the purpose of identifying and logging alien plants with a GPS system in order to determine the success of the program and work progress. A report that includes data from all monthly reports as reference should be submitted to the Environmental Department on completion of such survey.

PROJECT MANAGEMENT

Environmental representative

The representative who shall be responsible for co-coordinating the program is an Environmental Specialist or delegate.

Meetings

The team leader is expected to meet with the environmental representative or delegate on a daily basis prior to commencing work.

INFORMATION, DOCUMENTS & DRAWINGS

Information relevant to this project will be supplied by Palabora Copper.

CONDITIONS OF CONTRACT

The order will be subject to the standard terms and conditions of contract of Palabora Copper. Contractor will undergo a technical review with which references may be required before final approval.

TENDER DOCUMENTATION

The tender document shall include the following documents and information:

- Health, Safety and Environmental Policy
- List of Safety equipment and clothing to be used
- List of herbicides to be used
- Disposal method of herbicides to be used
- Certificate of Registration as Pest Control Operator officer
- Manager
- Supervisor or Team leader
- First Aid training certificates of mentioned personnel
- Certificates or proof of training of competency in handling hazardous chemical substances of:
 - Team Leader
 - Every team member
- Please submit quotation in the format attached.

Items	Current usage	Amount/Volume	Unit cost	Total cost
Transport				
Vehicle				
Fuel				
Other				
Pesticides (Fendona)				
Herbicides				
Personnel				
Supervisor/team leader (1)				
Alien plant team (4 members)				
Team members				
Additional team members				
PPE				
Safety overall				
Safety boots				
Socks				
Gloves (Welding)				
Safety glasses/goggles				
Respirator appropriate for application of Herbicides and Pesticides				
Hard hats				
Training				
Tools				
Slasher				
Chain saw				
Panga				
Other				
Total cost				

Seasonal Alient Plant Control Team :

Items	Current usage	Amount/Volume	Unit cost	Total cost
Transport				
Vehicle				
Fuel				
Other				
Pesticides (Fendona)				
Herbicides				
Personnel				
Supervisor/team leader (1)				
Alien plant team (10 members)				
Team members				
Additional team members				
PPE				
Safety overall				
Safety boots				
Socks				
Gloves (Welding)				
Safety glasses/goggles				
Respirator appropriate for application of Herbicides and Pesticides				
Hard hats				
Training				
Tools				
Slasher				
Chain saw				
Panga				
Other				
Total cost				

