PROPOSED MINING ON A PORTION OF THE FARM BYRON NO 9448, NEWCASTLE LOCAL MUNICIPAL AREA, KWAZULU-NATAL PROVINCE

INVASIVE PLANT SPECIES MANAGEMENT PLAN

APRIL 2025

REFERENCE NUMBER: KZN 30/5/1/3/2/11072 MP

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1. INTRODUCTION

The Applicant, Mulilo Newcastle Mining Rights (Pty) Ltd, applied for environmental authorisation and a mining permit to mine aggregate, gravel and stone from 4.9 ha of the farm Byron No 9448 in the Amajuba Magisterial District of the KwaZulu-Natal Province.

The Applicant intends to extract the mineral from the mining area using opencast methods. The proposed mining method will make use of blasting to loosen the hard rock; the material will then be loaded and hauled to the crushing plant where it will be screened to various sized stockpiles. If needed the material will be washed upon which it will be stockpiled until it is used as part of the construction phase of the MNWP WEF projects.

The vegetation type of the earmarked footprint consists of the Low Escarpment Moist Grassland (LC). The vegetation composition indicates a largely natural area which is still relatively unmodified. The grass layer consists of a diversity of species, with the majority being climax species. Several of the geophytic species on site are listed as protected and have a significant conservation value. Surface rock is present as boulders, and this also creates suitable habitat for scattered trees and shrubs.

Control of invasive plant species is an important aspect during all phases of the proposed activities. Therefore, an invasive plant control plan was developed for the site to be implemented during the construction/site establishment-, operational-, decommissioning phase and 12 months' aftercare period of the mining activity.

2. OBJECTIVE

The objective of an invasive plants control plan is to provide site management with an implementation tool to control problem plant species that is present or may germinated within the proposed footprint area.

3. WHAT IS A PROBLEM PLANT?

According to the book, Problem Plants of South Africa (Bromilow 2001) a weed is a plant in the wrong place at the wrong time. Problem plants are described as vigorous growers that are easily adaptable and mostly exotic or foreign in origin. Weeds usually are pioneer plants that invade disturbed areas such as stockpile areas, overburden and topsoil stockpiles and firebreaks. Invasive plants are plants that have been imported and can invade the natural vegetation.

The National Environmental Management: Biodiversity Act, 2004 (Act No 10 of 2004) (NEMBA) came into effect in June 2004 to manage and conserve the South African biodiversity within the framework of the National Environmental Management Act, 1998 (Act No 107 of 1998) (NEMA). The Alien and Invader Species (AIS) regulations was subsequently published in terms of section 97(1) of NEMBA in August 2014 and amended in July 2016. The AIS regulations, 2014 grouped plants into four categories and prescribes the subsequent management of each category.

- Category 1a: Invasive species which must be combatted and eradicated. Any form of trade or planting is strictly prohibited.
- Category 1b: Invasive species which must be controlled and wherever possible, removed and destroyed. Any form of trade or planting is strictly prohibited.
- Category 2: Invasive species, or species deemed to be potentially invasive that may be grown if a permit is obtained.
- Category 3: Invasive species which may remain in prescribed areas or provinces. Further planting, propagation, or trade is however prohibited.

To identify invasive plants that need to be controlled/eradicated from site, the plants specified in these groups must be used as a guideline.

4. WHAT TO DO WITH PROBLEM PLANTS?

Working for Water provides the site manager with an implementation tool to control problem species and keep the site free of invasive plants:

Step 1: Conduct Site Assessment;

Step 2: Set objectives based on resources available and priorities:

- Prioritize management of plants according to the categories stipulated in the AIS regulations.

Step 3: Develop and implement an action plan to achieve objectives:

- The plan must be long term and should include a clearing plan that includes follow up actions for rehabilitation of the cleared area.
- The site plan should include a map showing the areas invested with problem plants.
- Lighter invested areas should be cleared first to prevent the build-up of seed banks, while the control plan works progressively towards the areas with denser stands.

- Educate workers on the species that needs to be eradicated, as well as the specific method to be used.
- Conduct control of invasive plant species.
- Remove plant remains to a suitable disposal area.
- Prevent dispersal of seeds.
- Strive for collective management and planning with neighbors to prevent seed dispersal of problem plants across boundaries.

Step 4: Monitor performance and change actions if necessary

- Conduct monthly inspections to enable early detection of grow back.

5. CONTROL METHODS

The control methods to be implemented on site will depend on the specific problem plants that invaded the site. The best success is generally achieved through a combination of chemical and mechanical control methods with continuous follow-up actions. Site management must take care that the clearing methods used do not encourage further invasion through unnecessary disturbance of soil or naturally vegetated areas. The Department of Water and Sanitation's Working for Water section provides guidelines to the preferred clearing methods for most problem plants. This information can be obtained from their website: http://www.dwaf.gov.za/wfw/Control/. The selection of appropriate methods of control shall be based on the species to be controlled, the size of the plants, the density of the stand, the accessibility of terrain and environmental safety.

The Department of Water and Sanitation proposes that the following methods of control for age or size target plants:

- Seedlings

  Hand pulling or hoeing:
  - Hand pulling/hoeing should be carried out in sparse stands.
  - Seedlings should be severed below the soil surface or removed from the soil. Soil disturbance should be minimized to reduce re-germination.

  Herbicides:
  - Herbicides can be used on dense stands.

- Saplings

  Hand pulling or hoeing:

- Where appropriate saplings can be removed manually as described above.

Herbicides:

- Foliar sprays can be carried out depending on the density of the stand. Fan nozzles should be fitted for overall spraying and solid cone nozzles for individual plant treatment. Spraying should be restricted to plants waist high or lower. Ensure there is sufficient foliage to carry the herbicide to the root system.
- Basal stem treatments of suitable herbicides in diesel can be carried out to the bottom 250 mm of the stem. Applications should be by means of a low pressure, coarse droplet spray from a narrow angle solid cone nozzle.
- Cut stump treatments can be used where stems are cut as low as practical. Herbicides are applied in diesel or water as recommended for the herbicide. Applications in diesel should be to the whole stump and exposed roots and in water to the cut area as recommended on the label.
- The application of herbicides should only be sprayed/used on site by a registered pest control officer.

- Mature Trees (trees above shoulder height or robust bushes 12 – 1 months or older)

Ring Barking:

- Bark must be removed from the bottom of the stem to a height of 0.75 – 1.0 m. All bark must be removed to below ground level for good results.
- Where clean de-barking is not possible due to crevices in the stem or where exposed roots are present, a combination of bark removal and basal stem treatment should be carried out.

Frilling or partial frilling:

- Cuts should be made through the bark into the sapwood by means of a light axe and a suitable herbicide must be applied into the cuts.

Basal stem treatments:

- Suitable herbicides should be applied in diesel to the base of the stem and to any exposed roots. Stems with a diameter up to 50 mm should be treated to a height of 250 mm and stems above 50 m diameter to a height of 500 mm. This method is only suitable for stems up to 100 mm in diameter.

Cut stump treatment:

- Stumps should be cut as low as practical, and the herbicide applied.

Applications in diesel should be to the whole stump and exposed roots and in water to the cut area as recommended on the label.

When herbicides are chosen as the preferred control method the guidelines of Working for Water (DWS) as stipulated in the Policy on the Use of Herbicides for the Control of Alien Vegetation must be followed:

- Herbicides selected for control shall be registered for use on that species under the conditions specified.
- Protection of the environment is of prime importance. Riparian areas must be protected and only herbicides that are approved may be used. Washing of equipment or disposal of waste spray mixture is prohibited in or near water courses where contamination of water can occur.
- Empty herbicide containers must be disposed of as hazardous waste and may not be used for any other purpose.
- Equipment must be washed where there is no danger of contamination of a water source or natural vegetated area. It is proposed that washing be restricted to the wash bay.
- Product and spray mixtures should be stored so that it is inaccessible to the public. Site management must ensure that the Safety Data Sheet of the product is available on site.
- The application of herbicides should only be sprayed/used on site by a registered pest control officer.

6. SITE SPECIFIC CONDITIONS

The vegetation composition of the proposed site indicates a largely natural area which is still relatively unmodified. The grass layer consists of a diversity of species, with the majority being climax species. Another prominent component within the grass layer consists of geophytic species (plants with underground storage organs) which include *Hypoxis rigidula, Pelargonium luridum, Schizocarpus nervosus, Hypoxis multiceps, Crinum macowanii, Tulbaghia acutiloba, Gladiolus ecklonii, Raphionacme hirsuta, Dierama galpinii* and *Ledebouria ovatifolia*. Several of these geophytic species are also listed as protected and have a significant conservation value. Surface rock is present as boulders, and this also creates suitable habitat for scattered trees and shrubs to establish and these include *Diospyros lycioides, Searsia dentata, Buddleja salviifolia, Gymnosporia buxifolia* and *Searsia discolor*. Exotic weeds are present on the site but in

low abundance and are also indicative of low levels of disturbance and include species such as *Richardia braziliensis*. This is a common weed, which is not considered invasive. Though not present on the site, several clumps of invasive *Acacia mearnsii* (Wattle) are present in the surroundings, especially the stream systems situated on the downslope of the site.

Figure 1: Photograph of the proposed mining area, where the wattle invasion can be seen to the left of the picture.

To prevent the dispersal of the invasive plant species to the non-infected sections of the proposed mining area, site management must implement a combination of the control methods, as prescribed in this plan, during the site-establishment, operational- and decommissioning phases.

The entire mining footprint area, in particular the topsoil heaps, must be monitored for the duration of the operational phase as well as the first 12 months after rehabilitation of the area, to ensure the early detection and control/management of invasive plant species germinating because of vegetation removal and soil disturbance.

As everyone isn't familiar with the identification of plant species, photographs of the most important species to be controlled on site was included below for ease of reference.

Lantana

Lantana camara

Bugweed

Solanum mauritanium

Black Wattle

Acacia mearnsii

7. PROPOSED MANAGEMENT/CONTROL METHODS FOR MOST COMMON INVASIVE PLANT SPECIES

NB: THE PROPOSED CONTROL METHODS ARE ONLY RECOMMENDATIONS BASED ON INFORMATION AVAILABLE TO THE ENVIRONMENTAL CONSULTANT AT THE TIME. THE ENVIRONMENTAL CONSULTANTS EMPLOYED AT GREENMINED ENVIRONMENTAL ARE NOT REGISTERED PEST CONTROL OPERATORS (PCO) AND IN THE CIRCUMSTANCES THE SITE SHOULD ENSURE THAT THE EXPERT ADVICE AND OPINION OF A REGISTERED PCO IS SOUGHT PRIOR TO THE COMMENCEMENT AND IMPLEMENTATION OF CONTROL METHODS PERTAINING TO INVASIVE SPECIES.

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD
Category 1b American bramble		**Foliar Spray:** Confront 360 SL Plenum 160 ME Glyph 360 SL Mamba 360 SL Access 240 SL Garlon	**Herbicides** • The underground runners make the bramble very difficult to eradicate and specialised herbicides has the best results. • Apply as specified by supplier.

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 1b
 	
Black locust
		**Foliar Spray:**
		
		Confront 360 SL
		Plenum 160 ME
			<u>Mechanical Control</u>
			
			• Pull out during seedlings stage **(before seed ripens)**
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• If seeds have ripened, pull out plants while making sure seeds do not fall out.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides.
			
			<u>Herbicides</u>
			
			• Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 1b
 	
Brazilian Pepper Tree
		**Foliar Spray:**
		
		Lumberjack 360 SL
		Timbrel 360
			<u>Mechanical Control</u>
			
			• Pull out during seedlings stage **(before seed ripens)**
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• If seeds have ripened, pull out plants while making sure seeds do not fall out.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides.
			
			<u>Herbicides</u>
			
			• Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD
Category 1b Bugweed		**Foliar Spray:** Confront 360 SL Starane 200 EC Tomahawk 200 Roundup Max 680 WG Tumbleweed 240 SL	**<u>Mechanical Control</u>** ✸ Pull out during seedlings stage **(before seed ripens)** ✸ Disposal of eradicated plants: ◆ Dispose with general waste, ◆ Use in areas prone to erosions, ◆ Dispose of plant material into quarry pit. ✸ If seeds have ripened, pull out plants while making sure seeds do not fall out. ✸ Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed. ✸ File proof of delivery to the facility. ✸ Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides. **<u>Herbicides</u>** ✸ Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 2
 	
Castor-oil Plant
		**Cut Stump / Frill:**
		
		Confront 360 SL
		Plenum 160 ME
		Chopper 100 SL
		Hatchet 100 SL
			Mechanical Control
			
			• Pull out during seedlings stage **(before seed ripens)**
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• If seeds have ripened, pull out plants while making sure seeds do not fall out.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides.
			
			Herbicides
			
			• Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD
Category 1b Fountain Grass		**Foliar Spray:** Roundup	**<u>Herbicides</u>** The species can be controlled by the usual industrial herbicides used on road sides.

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 1b
 	
Guava
		**Foliar Spray:**
		
		Plenum 160 ME
		
		Cut stump / Frill:
		
		Chopper 100 SL
		Hatchet 100 SL
			Mechanical control
			
			• Pull out during seedlings stage
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• If seeds have ripened, pull out plants while making sure seeds do not fall out.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides.

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 1b
 	
Inkberry
		**Cut Stump / Frill:**
		
		Chopper 100 SL
		Hatchet 100 SL
			<u>Mechanical control</u>
			
			• Pull out during seedlings stage **(before seed ripens)**
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• If seeds have ripened, pull out plants while making sure seeds do not fall out.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides.
			
			<u>Herbicides</u>
			
			• Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD
Category 1b Lantana		**Foliar Spray:** Plenum 160 ME Roundup Max 680 WG Tumbleweed 240 SL Glyph 360 SL Roundup Turbo 450 SL Hatchet 100 SL Mamba Max 480 SL	**<u>Mechanical control</u>** ✸ Pull out during seedlings stage **(before seed ripens)** ✸ Disposal of eradicated plants: ◆ Dispose with general waste, ◆ Use in areas prone to erosions, ◆ Dispose of plant material into quarry pit. ✸ If seeds have ripened, pull out plants while making sure seeds do not fall out. ✸ Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed. ✸ File proof of delivery to the facility. ✸ Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides. **<u>Herbicides</u>** ✸ Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 1b
 	
Large Cocklebur
		**Foliar Spray:**
		
		Roundup
			Mechanical control
			
			• Pull out during seedlings stage **(before seed ripens)**
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• If seeds have ripened, pull out plants while making sure seeds do not fall out.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides.
			
			Herbicides
			
			• Apply as specified by supplier

INVASIVE PLANT SPECIES MANAGEMENT PLAN

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD
Category 1b Large Thorn Apple	 Large Thorn-Apple	**Foliar Spray:** Roundup *These plants are annual and die once seeds have ripened. Still it is very important to remove the dead plants as leaving them will result in vigorous grow-back the following season.*	**Mechanical control** ✸ Pull out during seedlings stage **(before seed ripens)** ✸ Disposal of eradicated plants: ◆ Dispose with general waste, ◆ Use in areas prone to erosions, ◆ Dispose of plant material into quarry pit. ✸ If seeds have ripened, pull out plants while making sure seeds do not fall out. ✸ Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed. ✸ File proof of delivery to the facility. ✸ Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides. **Herbicides** ✸ Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 1b
 	
Mauritius Thorn
		**Foliar Spray:**
		
		Roundup Max 680 WG
		Glyph 360 SL
		Mamba 360 SL
		Mamba Max 480 SL
		Roundup 360 SL
		Roundup Turbo 450 SL
		Garlon 480 EC
			Mechanical control
			
			• Pull out during seedlings stage **(before seed ripens)**
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• If seeds have ripened, pull out plants while making sure seeds do not fall out.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides.
			
			Herbicides
			
			• Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 1b
 	
Mexican Poppy
	
	Mexican Poppy
		Foliar Spray:
		
		Access 240 SL
		
		These plants are annual and die once seeds have ripened. Still it is very important to remove the dead plants as leaving them will result in vigorous grow-back the following season.
			Mechanical control
			
			• Pull out during seedlings stage **(before seed ripens)**
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• If seeds have ripened, pull out plants while making sure seeds do not fall out.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides.
			
			Herbicides
			
			• Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 1b
 	
Mexican Sunflower
		**Foliar Spray:**
		
		Grazon DS {triclopyr (300 g/L) + picloram (100 g/L)}
			<u>Mechanical control</u>
			
			• Pull out during seedlings stage **(before seed ripens)**
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• If seeds have ripened, pull out plants while making sure seeds do not fall out.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides.
			
			<u>Herbicides</u>
			
			• Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD
Category 1b Paraffin / Triffid weed		**Foliar Spray:** Confront 360 SL Plenum 160 ME Roundup Max 680WG Glyph 360 SL	**Mechanical control** ✸ Pull out during seedlings stage **(before seed ripens)** ✸ Disposal of eradicated plants: ◆ Dispose with general waste, ◆ Use in areas prone to erosions, ◆ Dispose of plant material into quarry pit. ✸ If seeds have ripened, pull out plants while making sure seeds do not fall out. ✸ Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed. ✸ File proof of delivery to the facility. ✸ Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides. **Herbicides** ✸ Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 1b
 	
Peanut Butter Cassia
		**Cut Stump / Frill:**
		
		Chopper 100 SL
		Hatchet 100 SL
			<u>Mechanical control</u>
			
			• Pull out during seedlings stage **(before seed ripens)**
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• If seeds have ripened, pull out plants while making sure seeds do not fall out.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides.
			
			<u>Herbicides</u>
			
			• Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD
Category 1b Queen of the Night		**Full Cover Spray:** MSMA 720 SL	**Mechanical control** • Plants can be chopped down, but the stem base must be dug up. • Cut plants must be deeply buried or left on a cemented area until dried out. • Chopped or broken branches are capable of taking root and forming new plants, therefore pieces should not be carted away or discarded. **Herbicides** • Small plants can be sprayed and larger ones injected with MSMA.

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 1b
 	
Red Sesbania
		**Foliar Spray (Seedlings <1m):**
		
		Roundup 360 SL
		Roundup Max 680 WG
		Glyph 360 SL
		Mamba 360 SL
		Mamba Max 480 SL
		Springbok 360
		
		Foliar Spray (Seedlings 1 – 2 m):
		
		Roundup Max 680 WG
		Glyph 360 SL
		Mamba 360 SL
		Roundup 360 SL
		Garlon 4 EC
		
		Foliar Spray (Adult):
		
		Roundup Max 680 WG
		Chopper 100 SL
		Hatchet 100 SL
			<u>Mechanical control</u>
			
			• Pull out during seedlings stage (before seed ripens)
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• If seeds have ripened, pull out plants while making sure seeds do not fall out.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides.
			
			<u>Herbicides</u>
			
			• Apply as specified by supplier

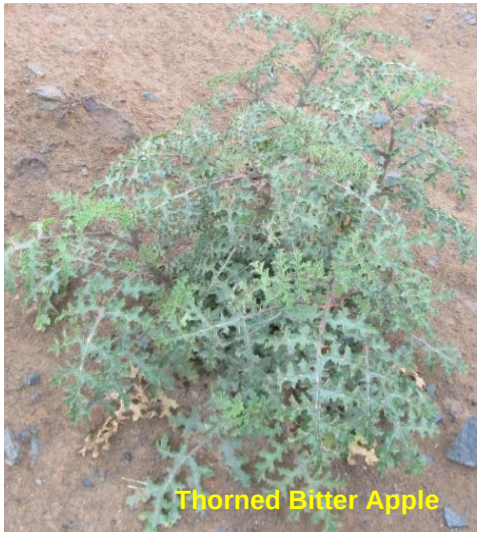
SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 1b
Spear Thistle /
Scotch Thistle
	
	Spear Thistle
		Foliar Spray:
		
		Confront 360 SL
		Plenum 160 ME
		Access 240 SL
		
		These plants are annual and die once seeds have ripened. Still it is very important to remove the dead plants as leaving them will result in vigorous grow-back the following season.
			Mechanical control
			
			• Pull out during seedlings stage **(before seed ripens)**
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• If seeds have ripened, pull out plants while making sure seeds do not fall out.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides.
			
			Herbicides
			
			• Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 1b
 	
Seringa
		**Cut stump / Frill:**
		
		Confront 360 SL
		Plenum 160 ME
		Chopper 100 SL
		Hatchet 100 SL
		Access 240 SL
			Mechanical control
			
			• Pull out during seedlings stage
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep.
			
			Herbicides
			
			• Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 1b
 	
Thorned Bitter Apple
		**Foliar Spray:**
		
		Roundup
		Access 240 SL
			Mechanical control
			• Pull out during seedlings stage **(before seed ripens)**
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• If seeds have ripened, pull out plants while making sure seeds do not fall out.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides.
			
			Herbicides
			• Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD
Category 1a – 3 Wattle species	 Black Wattle	Seedlings – 1m **Foliar Spray:** Confront 360 LS Starane 200 EC Tomahawk 200 EC Volvoxypyr 200 EC Roundup 360 SL RoundUp Turbo 450 SL	**Mechanical control** ✸ Pull out during seedlings stage **(before seed ripens)** ✸ Disposal of eradicated plants: ◆ Dispose with general waste, ◆ Use in areas prone to erosions, ◆ Dispose of plant material into quarry pit. ✸ If seeds have ripened, pull out plants while making sure seeds do not fall out. ✸ Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed. ✸ File proof of delivery to the facility. ✸ Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides. **Herbicides** ✸ Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 1b
Wild Tobacco
		**Foliar Spray:**
		
		Access 240 SL 2,4,5-trichlorophenoxyacetic acid (2,4,5-T)
			Mechanical control
			• Pull out during seedlings stage **(before seed ripens)**
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• If seeds have ripened, pull out plants while making sure seeds do not fall out.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides.
			
			Herbicides
			
			• Apply as specified by supplier

SPECIES	PHOTO	HERBICIDES	CONTROL METHOD

Category 1b
 	
Yellow Firethorn
		**Cut Stump / Frill:**
		
		Access
			Mechanical control
			
			• Pull out during seedlings stage **(before seed ripens)**
			• Disposal of eradicated plants:
			  ◆ Dispose with general waste,
			  ◆ Use in areas prone to erosions,
			  ◆ Dispose of plant material into quarry pit.
			• If seeds have ripened, pull out plants while making sure seeds do not fall out.
			• Place plants in a black plastic bag and dispose of at an incineration facility to be destroyed.
			• File proof of delivery to the facility.
			• Alternatively, the removed plants can be buried in a trench of at least 1m deep. Grow-back will need to be controlled in this area, preferably with herbicides.
			
			Herbicides
			
			• Apply as specified by supplier

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