



ANDREW WEST
ENVIRONMENTAL CONSULTANCY

ENVIRONMENTAL REPORT

in terms of

in terms of the NATIONAL ENVIRONMENTAL MANAGEMENT ACT
(Act 107 of 1998), and the Environmental Impact Assessment Regulations, 2014
for

**ACTIVITIES ON THE FARM 373 AND 420: OUTENIQUA GAME
FARM CC, MOSSEL BAY**

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REPORT PRODUCED BY:

Andrew West Environmental Consultancy

P. O. Box 9187
George
6530

Tel: 044 8730228
Cell: 0823336880
Email: andrewwest@isat.co.za

Academic Qualifications:

Stellenbosch University:

BSc (Forestry/Nature Conservation) IV

Rhodes University:

Certificate in Industrial Environmental Management, Environmental
Auditing and ISO 14000/18000

Other Short Courses:

Environmental Compliance Monitoring
Environmental Conflict Management
Rehabilitation Ecology

Affiliation:

Professional Natural Scientist (Pr Sci Nat)
International Association of Impact Assessors (IAIAsa)

Field of expertise:

Facilitation of the EIA process
Environmental Management Plans
Environmental control (ECO) & auditing
Alien vegetation identification & mapping
Advise regarding the Environment Conservation Act, National Environmental
Management Act, Agricultural Resources Act, National Heritage Resources
Act and the National Water Act, S24G Rectification process
EMPR's and rehabilitation of sand mining activities
Liaison with other professionals, consultants and specialists in the EIA process
Committee member - IAIAsa Southern Cape
Sixteen years experience in own Environmental Consultancy

1. INTRODUCTION

Andrew West Environmental Consultancy was requested by the *Outeniqua Game Farm CC* to provide a professional opinion on the on-going clearing of invasive alien vegetation on the property concerned, as well as taking cognisance of a recent fire that damaged a very large portion of the Farm 420 in the Mossel Bay District. The relevant Environmental Legislation applicable to activities on the farm were taken into consideration with specific emphasis on the Regulations promulgated in terms of the ***National Environmental Management Act (Act 107 of 1998) NEMA*** and the ***Environmental Impact Assessment Regulations, 2014 (as amended)***.

The aim of this report is to demonstrate that the Landowner was more than obligated to remove unwanted invasive alien vegetation on the property, given the fact that there already was substantial damage caused by a recent fire that swept the area and the fact that unmanaged alien plants pose further fire risks and significant ecological impact on watercourses.

Although it could be debated that certain site activities could constitute Listed Activities under *Government Gazette* R.983 and R.985 of NEMA, the clearing of alien plants is considered to be maintenance work. A Maintenance Management Plan (MMP) could therefore be considered as a guideline to any clearing activities and any potential environmental impacts can be managed and mitigation measures implemented in order to minimise impact significance.

2. LEGISLATIVE FRAMEWORK

Section 24 of the *Constitution of the Republic of South Africa (Act 108 of 1996)* guarantees everyone “an environment that is not harmful to their health or well-being”. To give effect to this right, the *National Environmental Management Act (Act 107 of 1998) NEMA* was promulgated. In terms of 24(2) and 24D of NEMA and the Environmental Impact Assessment Regulations 2014 (as amended), the three Listing Notices (R983, R984 and R985) were promulgated to regulate the “submission, processing and consideration of, and decision on, applications for environmental authorisations for the commencement of listed activities”.

For the purpose of this Report the focus is on the following:

Activity No(s):	Provide the relevant Basic Assessment Listed Activity(ies) as set out in Listing Notice 1 (GN No. R. 983)
27	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of vegetation is required for: (i) the undertaking of a linear activity (ii) maintenance purposes undertaken in accordance with a maintenance management plan
Activity No(s):	Provide the relevant Basic Assessment Listed Activity(ies) as set out in Listing Notice 3 (GN No. R. 985)
12	The clearance of an area of 300 square meters or more of indigenous vegetation except where such clearance of

	indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. (a) In the Western Cape I. Within any critically endangered or endangered ecosystem listed in terms of Section 52 of the NEMBA. ii. Within critical biodiversity areas identified in bioregional plans.
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The ongoing clearance and maintenance work would ‘trigger’ *Activities 27* and *12* as detailed above, but would not necessarily require an EIA Basic Assessment Report / Process given the fact that it is for management and maintenance purposes.

Legislation also requires that all alien invasive vegetation on the site as well as regeneration growth must be systematically removed and controlled.

Invasive alien plant species are those plant species that have been introduced into South Africa, either intentionally or unintentionally, and have become naturalised *i.e.* are capable of reproducing and spreading without the direct assistance of humans. These species are not only confined to areas of severe human disturbance, but the vast majority invade natural and semi-natural habitats. Many of these species are capable of penetrating and replacing indigenous vegetation.

In terms of regulations under the ***Conservation of Agricultural Resources Act, 1983 (Act No 43 of 1983) CARA***, landowners are legally responsible for the control of invasive alien plants on their properties. It is therefore critical that landowners show reasonable intent to do so. The drawing up and implementation of a control programme will serve to demonstrate to the authorities that a landowner not only intends to bring under control all alien invasive plants species on their property, but are following a structured course of action to achieve this objective.

Eradication of aliens such as Black Wattle, Pine and Eucalypts (generally occurring within the development area) should be cut off above ground level and treated with a suitable herbicide such as ***Choppa*** or ***Garlon***. Seedlings must be pulled out of the ground at the base of the stem in order to make sure that root stock is not left in the soil; any brush from the cutting out of the above must not become a fire hazard, but must be systematically stacked in a control area. This will also help prevent the unnecessary spread of unwanted seed.

According to the ***National Veld and Forest Act, 1998 (Act No. 101 of 1998)*** Section 12(1) and 2(a), the landowner is legally obliged to maintain an adequate firebreak around his property in order to reasonably prevent the spread of accidental fires onto neighbouring properties. Property owners must be timeously informed of any burning that may be implemented during any particular phase of the project. Clearly in this case, the fire on the property / farm concerned resulted from a burn that was started on an adjacent property and then spreading under extreme weather conditions onto Farm 420.

2.1 National Environmental Management Principles

Section 2(3) of the *National Environmental Management Act (Act 107 of 1998)* clearly states that “Development must be socially, environmentally and economically sustainable”

Section 2(2) states that environmental management must place ***people and their needs*** at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably, but together with this, Section 4 must be taken into account with due consideration to the potential disturbance of ecosystems and loss of biological diversity, or, where they cannot be altogether avoided, are minimised and remedied. Also that pollution and waste are avoided or minimised and that use is made of a waste recycling system as part of the proposal.

It is believed that the proposed activities of alien vegetation clearing and maintenance on site as well as minor internal road repair works is essential and provide for an overall safer environment in terms of fire control on the property and adjacent properties in the area.

3. ACTIVITY DESCRIPTION

3.1 Invasive Alien Vegetation Clearing

Recently the property and environs has experienced damage due to uncontrolled fires spreading from neighbouring properties, resulting in significant damage to existing vegetation and fences. Mature alien vegetation is known to stimulate and result in intense fires (this was also recently seen in the June 2017 Knysna fires) and to this end, the Landowner has embarked on an alien vegetation clearing strategy to not only reduce the fuel load, but to also decrease the density of mainly *Acacia mearnsii* (Black Wattle) growing near to the river embankments. Such growth is known to have a significant negative impact on the natural water flow.

Clearing activities have taken place by hand and with the use of light machinery. Where thick root stock has been encountered, a bulldozer has been used in an attempt to adequately remove and to prevent future coppicing / re-growth. Management roads (tracks) on the farm have been maintained and are essential for access in terms of daily managerial activities and as emergency access and exit routes during times of disaster ie. runaway fires. In areas already cleared, natural vegetation growth is seen to be increasing.



An example of dense Black Wattle growth – not on this particular property

3.2 The Site

This property where activities are occurring is known as Farm 420, Mossel Bay and is accessed off the R328 and approximately 7km from the small settlement of Brandwacht.

The co-ordinates of the property are as follows:

Latitude:	33°	58'	40"	South
Longitude:	22°	04'	30"	East

4. ENVIRONMENTAL IMPACT ASSESSMENT

National Environmental Management Principles:

As mentioned, under *Section 2(3) and (4) of the National Environmental Management Act (Act 107 of 1998)* it is stated that any development must be socially, environmentally and economically sustainable and the disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be avoided, are minimized and remedied.

It is believed that, having identified potential impacts on the environment and those aspects of the proposed activity that will affect the ecological integrity of any natural systems, with mitigation proposed the impact is minimized.

The main focus of the impact assessment is on the invasive alien vegetation removal:

4.1 Impacts on the Biophysical Environment

4.1.1 Vegetation

Potential Impact: Damage to the existing natural vegetation

The clearance activities will be confined to the existing disturbed areas and no significant impacts are expected. The more aliens cleared in the correct manner, the greater will be the re-growth of naturally occurring fynbos species.

Recommended Mitigation:

- Where areas are to be cleared, consideration must first be given to hand clearing with light machinery (chainsaws and brush-cutters) before using heavy machinery.
- Avoid damage to the veld through the making of new access tracks and keep to those already existing.
- Consistent monitoring of operations with respect to emergency situations and rehabilitation of disturbed areas.

4.1.2 Ground Water and Watercourses

Potential Impact: Impact on any wetland system and all adjacent watercourses

Watercourses can be considered to be ecologically sensitive areas so therefore any clearing along embankments must be exercised with care. The clearing operations will also assist in opening up rivers and eradicating alien plants that impact significantly on water quantity.

Recommended Mitigation:

- Any areas to be cleared should first receive the input and approval of an Environmental Control Officer (ECO).

- Prevent accelerated soil erosion and subsequent siltation that may result from excessive clearing in one concentrated area / section.
- Consistent monitoring of operations with respect to emergency situations and rehabilitation of disturbed areas.

Table: Objectives, Actions and Remedial Action

<i>OBJECTIVES</i>	<i>ACTIONS</i>	<i>MITIGATION PROPOSED</i> <i>MONITORING</i>
Riverine Areas 1) Maintain healthy river area 2) Protect indigenous vegetation 3) Protect river system 4) Prevent accelerated erosion	Clearly indicate and demarcate all areas of ecological sensitivity as identified (with possible assistance from an ECO). Maintain a good storm water drainage system which allows water to flow naturally	ECO to establish no-go areas prior to clearing activities Strong consideration given to hand clearing and use of light machinery above that of heavy machinery Adherence to any specification contained in the applicable <i>Environmental Legislation</i>

5. CONCLUSION

The Environmental Legislation cited, nl the *National Environmental Management Act (NEMA)*, the *Conservation of Agricultural Resources Act* and the *National Veld and Forest Act* appear to be in conflict in that the Landowner is required to keep his property clear of invasive alien plants and protected from fire, but on the other hand, the clearing of vegetation could constitute a Listed Activity under NEMA.

Considering the fact that the landowner has been subjected to the effects significant damage caused by recent fires on the property, it would therefore make sense that he continue to clear specific areas of alien plants (notably Black Wattle) in order to fulfil a environmental legal obligation. However these operations must be exercised with care, taking into consideration the mitigatory measures mentioned as well as the periodic input from An ECO. Cognisance must be taken of “Good Environmental Practice” and the “Duty of Care” as stipulated in *Section 28 of NEMA*.