DEPARTMENT OF ENVIRONMENT, FORESTRY AND FISHERIES

NO. 838

31 JULY 2020

NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998

(ACT NO. 107 OF 1998)

CONSULTATION ON THE ADOPTION OF A GENERIC ENVIRONMENTAL MANAGEMENT PROGRAMME FOR THE MANAGEMENT AND MITIGATION OF ENVIRONMENTAL IMPACTS RESULTING FROM THE IMPLEMENTATION OF THE LANDCARE PROJECTS AND THE EXCLUSION OF THESE PROJECTS FROM THE REQUIREMENT TO OBTAIN AN ENVIRONMENTAL AUTHORISATION

I, Barbara Dallas Creecy, Minister of Forestry, Fisheries and the Environment, hereby consult on the intention to adopt, as an environmental management instrument, the *Generic Environmental Management Programme for the LandCare Programme (version 0 of June 2020)* and based on compliance with this generic environmental management programme, exclude, in terms of section 24(2)(e) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), identified activities, including the associated activities related to the implementation of the LandCare Programme, from the need to obtain environmental authorisation as set out in the Schedule.

Members of the public are invited to submit written comments or inputs, within 30 days from the date of the publication of this Notice in the Government *Gazette*, to the following address:

By post to:	The Director-General Department of Environment, Forestry and Fisheries Attention: Dr Dee Fischer
	Private Bag X447
	PRETORIA
	0001
By hand at: By e-mail: Enguiries:	Reception, Environment House, 473 Steve Biko Road, Arcadia, 0083 <u>dfischer@environment.gov.za</u> Dr Dee Fischer 012 399 8843
Enquinos.	

Comments or inputs received after the closing date may not be considered.

BARBARA DALLAS CREECY MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT

SCHEDULE

- Section 24(2)(e) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (the Act) allows for the Minister to exclude activities identified in terms of sections 24(2)(a) and (b) of the Act from the need to obtain environmental authorisation based on an environmental management instrument adopted in the prescribed manner.
- 2. The Department of Environment, Forestry and Fisheries has prepared a Generic Environmental Management Programme for the LandCare Programme (version 0 of June 2020) (the EMPr), to avoid, manage and mitigate the environmental impacts and risks associated with the activities of the programme including those activities identified in section 24(2)(a) and (b) of the Act.
- 3. The EMPr which has been developed by a multi-disciplinary team of specialists based on 23 years of experience in implementing the programme, has been reviewed and has been found to meet the requirements and principles contained in section 2, 24(1) and 24N of the Act.
- 4. The EMPr is therefore, to be adopted as an environmental management instrument for the purposes of excluding the identified activities associated with the LandCare programme, from the need to obtain environmental authorisation prior to commencement in terms of section 24(2)(e) of the Act.
- 5. Based on compliance with the impact mitigation measures contained in of Part C of the EMPr and the registration requirements contained in this paragraph and paragraph 6 of this Schedule, the activities described in paragraph 1.4 of Part 1 of the EMPR and which is identified in the Environmental Impact Assessment Regulations, Listing Notice 1, Listing Notice 2 or Listing Notice 3 of 2014, as amended, are hereby excluded from the need to obtain environmental authorisation in terms of section 24(2)(e) of the Act.
- 6. In order for this exclusion to apply, at least 30 days¹ prior to the commencement of a LandCare project, the provincial coordinator responsible for implementing the LandCare Programme must register the project with the competent authority by submitting to the competent authority, the signed registration form together with the declaration of compliance.
- Within 10 days of receipt of the correctly completed registration form and supporting documentation described in paragraph 6 of this Schedule, the competent authority must register the project and provide the provincial coordinator responsible for implementing the LandCare Programme with a registration number.
- 8. The competent authority must maintain a record of all registered projects and provide access to the record through their website.
- Failure to obtain a registration number prior to the commencement of the project and failure to comply with the mitigation measure set out for identified activities in Part C of the EMPr, constitutes and offence in terms of section 49A(1)(d) of the Act.
- 10. Any amendments to the EMPr will be required to be consulted on through publication in the Government Gazette.
- The Government Gazette notice can be accessed at <u>https://www.environment.gov.za/legislation/gazetted_notices</u> and the Generic EMPr can be accessed at <u>http://www.environment.gov.za/projectprogrammes/environmental_management</u> _instruments.
- 12. A hard copy of the documents can be viewed in the Departments library located at Environment House, 473 Steve Biko Road, corner Soutpansberg and Steve Biko Road, Arcadia, Pretoria.

Hard copies of the document can also be requested from Ms M Masondo at +27 12 399 9277/9280; email mmasondo@environment.gov.za.

¹ Days means calendar days

Generic Environmental Management Programme (EMPr) for the LandCare Programme

Version 0 of June 2020

Prepared for: Department of Environment, Forestry and Fisheries (DEFF)

GENERIC ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR) FOR LANDCARE PROJECTS

Prepared for:

Department of Environment, Fisheries and Forestry

Published by: Muvuledzi Consulting

Authors:

Retha Weir	Complete Environmental Services
Frits van Oudshoorn	Africa Land-Use Training

With contributions from:

Department of Environment, Fisheries and Forestry
Department of Agriculture, Land Reform and Rural Development
Department of Agriculture, Land Reform and Rural Development
Department of Agriculture, Land Reform and Rural Development
Department of Agriculture, Land Reform and Rural Development
Department of Agriculture, Land Reform and Rural Development
Onyxia Environmental Management
Muvuledzi Consulting
Muvuledzi Consulting

EMPr to be cited as:

Department of Environment, Forestry and Fisheries, 2020. Generic Environmental Management Programme for the LandCare Programme (version 0 of June 2020).

Contents

Definitions and Terminology Acronyms and Abbreviations	
PART A: BACKGROUND	
1 INTRODUCTION 1.1 Background to the LandCare Programme	5 7 8
1.4.1 Project types	8 8 8 00t defined.
1.5 Exclusions Error! Bookmark not 1.6 Roles and Responsibilities for the implementation of the EMPr 1.7 Structure and Framework of this Generic EMPr	9
PART B: REGISTRATION AND DECLARATION OF COMPLIANCE WITH THE EMPR	15
1 REGISTRATION AND DECLARATION	15 15 15
1 INTRODUCTION	16
2 MONITORING AUDITING	17 17 17 17 18 18 18 18
APPENDIX 1 - REGISTRATION FORM	1
APPENDIX 2 - DECLARATION FORM	3
APPENDIX 3 - ENVIRONMENTAL MANAGEMENT PROGRAMME TEMPLATE	4
APPENDIX 4 - METHOD STATEMENTS	57

TABLES

Table 1: Definitions and Terminology	1
Table 2: Acronyms and Abbreviations	
Table 3: Roles and Responsibilities for the Implementation of the EMPr	
Table 4: Format of the Method Statement	13

FIGURES

Definitions and Terminology

The definitions and terminology used in this EMPr are described in Table 1.

Table 1: Definitions and Terminology

Term	Definition
Alien invasive species	Plants, animals, pathogens and other organisms that are non-native to an ecosystem and which are listed under National Environmental Management: Biodiversity Act (GNR 864 in Government <i>Gazette</i> 40166 of 29 July 2016 – Alien and Invasive Species Lists) and regulations 15 and 16 of the Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983) Regulations (GNR 1048 in Government <i>Gazette</i> 9238 of 25 May 1984, as amended) as they cause economic or environmental harm or adversely affect human health.
Bio-engineered structure	Any organic slope-stabilising or water-flow-control structures. Examples include sawdust filled onion bags, hessian bags filled with mulch, hessian bags rolled with plant material, hessian nets with captured seed material.
Biological control	The use of specimens of one species for the purpose of preying on, parasitising on, damaging, killing, suppressing or controlling a specimen of another species (National Environmental Management: Biodiversity Act: GNR598 of Government Gazette 37885 of 1 August 2014 – Alien and Invasive Species Regulations, 2014).
Biological control agent	The specimens of a species used for controlling alien invasive species through biological control.
Biomass	The total quantity or weight of organic matter in a given area; in terms of this the plant material accumulated through mechanical and manual control of alien invasive species.
Bush encroachment	Stands of plants declared as bush encroacher species in column 1 of Table 4 in respect of regulation 16 of the Conservation of Agricultural Resources, 1983 (Act No. 43 of 1983) (Regulations (GNR 1048 in Government <i>Gazette</i> 9238 of 25 May 1983, as amended) where individual plants are closer to each other than three times the mean crown diameter.
Clearance	Ploughing of land, bulldozing of an area, eradication or removal of vegetation cover with chemicals, amongst others, constitutes clearance of vegetation, provided that this will result in the vegetation being eliminated, removed or eradicated.
Competent authority	The competent authority in respect of a listed activity or specified activity, means the organ of state charged by the Act with evaluating the environmental impact of that activity and, where appropriate, with granting or refusing an environmental authorisation in respect of that activity. In the case of the <i>Working for Programmes</i> and the <i>Land Care programme</i> , the competent authority is identified as the Minister in terms of Section 24C of the Act, as the activity is to be undertaken by a national department.
Endemic species	Plants and animals that exist only in restricted geographic regions.

Term	Definition
Extension officer	An extension officers are intermediaries between research and farmers. They operate as facilitators and communicators, helping farmers in their decision-making and ensuring that appropriate knowledge is implemented to obtain the best results.
Hazardous substance	A substance governed by the Hazardous Substances Act, 1973 (Act No. 15 of 1973) as well as the Hazardous Chemical and Substances Regulations, 1995.
Herbicides	Herbicides are a type of pesticide, specifically a substance that is toxic to plants, which is used to destroy unwanted vegetation.
Heritage resource	In terms of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), means all those heritage resources that are of cultural significance or other special value for present and future generations, and which are accordingly considered part of the National Estate.
Important species	Species that help define an entire ecosystem or provide a specific function within the ecosystem which cannot be duplicated by something else or which are already endangered.
Indigenous vegetation	Refers to vegetation consisting of indigenous plant species occurring naturally in an area, regardless of the level of alien infestation and where the topsoil has not been lawfully disturbed during the preceding ten years.
Intervention	The main categories of intervening activities undertaken to correct or improve environmental degradation.
Large trees	Established, mature trees with a stem diameter of more than 10 cm at a height of 1.5 meter or a canopy height of more than 10 meters.
Method statement	Written submission by the project manager to the project manager in response to this EMPr setting out the equipment, materials, labour and method(s) the contractor proposes using to meet an impact management outcome or action.
Non-target plant	Plant species present on or around the project site that is not the target for removal and/or control.
Pasture/soil scientists	Designated specialists from the Department responsible for Agriculture who have expertise in pastures and soils
Provincial coordinator	The designated person within the Department responsible for Agriculture charged with managing the LandCare Programme
Project Manager	The designated person within the Department responsible for Agriculture who is responsible for the day to day activities of LandCare Programme
Sedimentation and erosion prevention	Temporary or permanent measures or devices designed to keep loose or eroded soil within a defined site boundary, preventing runoff into a watercourse and leading to water quality degradation. Sediment controls are usually employed together with erosion controls, which are designed to prevent or minimize erosion and thus reduce the need for sediment controls.
Sensitive area	Any area that is denoted as sensitive due to its particular attributes, which could include the presence of rare or endangered vegetation, the presence of heritage resources (e.g. archaeological artefacts or graves), the presence of a unique

Term	Definition
	natural feature, the presence of a watercourse or water body, the presence of steep slopes (in excess of 1:4).
Service provider	The person, company or community representative contracted to implement the interventions.
Screening tool	National Web-based Environmental Screening Tool
Slope	The inclination of a surface expressed as one unit of rise or fall for so many horizontal units.
Stream diversion	The use of a temporary channel or other diversion methodology used to redirect a stream flow.
Storm water management	Management actions implemented to manage surface runoff.
Threatened or protected	Species listed as threatened or protected under the Threatened and Protected
species	Species Regulations (National Environmental Management: Biodiversity Act: GN151 Of 2007). Species that are facing a high risk of extinction. Any species classified in the IUCN categories Critically Endangered, Endangered or Vulnerable is a threatened species.
The Act	National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.
The Department	The Department responsible for Agriculture.
The EMPr	The Generic Environmental Management Programme (EMPr) for the LandCare Programme (version 1 dated June 2020).
Topsoil	A varying depth (up to 300 mm) of the soil profile, including existing vegetation cover and soil seed bank, irrespective of the fertility, appearance, structure, agricultural potential, fertility and composition of the soil.
Waste	Any substance, material or object, that is unwanted, rejected, abandoned, discarded or disposed of, or that is intended or required to be discarded or disposed of, by the holder of that substance, material or object, whether or not such substance, material or object can be re-used, recycled or recovered and includes all wastes as defined in Schedule 3 the National Environmental Management: Waste Act (No. 59 of 2008. Examples include construction debris, chemical waste, used oils and lubricants, batteries, metal and wood off-cuts, excess cement/ concrete, wrapping materials, timber, tins and cans, drums, wire, nails, food and domestic waste (e.g. plastic packets and wrappers).
Watercourse	Means a river or spring, a natural channel in which water flows regularly or intermittently and a wetland, pan, lake or dam in which, or from which water flows and any collection of water which the Minister may, by notice in the <i>Gazette</i> , declare to be a watercourse as defined in the National Water Act 1998 (Act No. 36 of 1998) and a watercourse includes, where relevant, its bed and banks.
Wetland	Means land which is transitional between terrestrial and aquatic systems where t water table is usually at or near the surface, or the land is periodically covered w shallow water, and which land in normal circumstances supports or would supp vegetation typically adapted to life in saturated soil.

Term	Definition
Windy conditions	In terms of this EMPr conditions can be considered windy when the wind carries
	dust or pesticide sprays to neighbouring non-target activity areas or plants.
Works	Works to be executed in terms of the Contract.

Acronyms and Abbreviations

The acronyms and abbreviations used in this generic EMPr are described in Table 2.

Table 2: Acronyms and Abbreviations

Abbreviations		
AIP	Alien Invasive Plants	
CA	Competent Authority	
CARA	Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983)	
EA	Environmental Authorisation	
EIA	Environmental Impact Assessment	
EMPr	Environmental Management Programme report	
EO	Extension officer	
EPWP	Expanded Public Works Programme	
ERAP	Emergency Response Action Plan	
DEFF	Department of Environment, Forestry and Fisheries	
FFFSRA	Fertilizers, Farm Feeds, Seeds and Remedies Act, 1947 (Act No. 36 of 1947)	
FPA	Fire Protection Association	
MSDS	Material Safety Data Sheet	
NAP	National Assessment Panel	
NWA	National Water Act, 1998 (Act No. 36 of 1998)	
NEMA	National Environmental Management Act, (Act 107 of 1998) as amended	
OHSA	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)	
PAP	Provincial Assessment Panel	
PC	Provincial coordinator	
PM	Project manager	
PPE	Personal Protective Equipment	
RI&AP	Registered Interested and Affected Parties	
SAHRA	South African Heritage Resource Agency	
SEMA	Specific Environmental Management Act	
SP	Service provider	

GENERIC ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR) FOR LANDCARE PROJECTS

PART A: BACKGROUND

1 INTRODUCTION

1.1 Background to the LandCare Programme

The LandCare Programme has been implemented by the national department responsible for Agriculture since 1997. The purpose of the programme is to enhance sustainable conservation of natural resources through a community based participatory approach, to create job opportunities through expanded public works programme (EPWP) model and to improve food security and the wellbeing of society.

The objective of the programmes which is to reverse environmental degradation of agricultural land means that projects are often undertaken in areas which could be located within 32 metres of a watercourse, could involve the clearing of more than 1 hectare of indigenous vegetation or trigger other activities which are identified in terms of Section 24(2)(a) and (b) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended (hereafter referred to as "the Act") and therefore may not commence without authorisation from the competent authority. Some of these interventions could also regarded as water uses in terms of section 21(c) and (i) of the National Water Act, 1998 (Act No. 36 of 1998) (the NWA). For example rehabilitation activities could occur on the embankments or rivers as defined by the NWA.

1.1.1 Listed and specified activities under NEMA section 24(1)

When activities are identified, section 24(1) of the Act requires that the potential impacts of these activities on the environment must be considered, investigated, assessed and reported on. The manner in which these investigations, assessments and reports are to be undertaken is through an environmental impact assessment process prepared in accordance with the Environmental Impact Assessment Regulations, 2014, as amended.

The Act allows for identified activities to be excluded from the requirement to obtain an environmental authorisation from the competent authority under certain circumstances. In this regard, section 24(2)(e) of the Act allows for the exclusion of activities from the requirement to obtain an environmental authorisation based on an environmental management instrument, adopted in the prescribed manner.

As the nature of the projects undertaken under the LandCare Programme are rehabilitation oriented, human resource intensive and avoid using heavy machinery, they do not fall within the usual development projects which can cause significant detrimental impacts on the environment. In addition, the rehabilitation interventions are similar over all projects and have been consistently implemented over 23 years, their impacts and mitigation measures are therefore well understood, As such, it is deemed appropriate that projects implemented under the LandCare Programme can be excluded from the need to obtain environmental authorisation as provided for in Section 24(e) of the Act, based on adherence to this *Generic Environmental Management Programme for the LandCare Programme (version 0 of June 2020)*, which is to be adopted as an environmental management instrument.

The procedures to adopt an environmental management instrument to be used for the purposes of excluding a listed or specified activity in terms of section 24(2)(e) of the Act, have been determined in Regulations¹. These procedures entail among others, the requirement to ensure that the instrument to be adopted identifies the purpose for which it was developed and the requirement to gazette the instrument in the Government *Gazette*, both for notification of proposed adoption and for adoption purposes.

This EMPr has been developed by a multi-disciplinary team of specialists and is based on 23 years of implementing the LandCare Programme and has considered the experience of the LandCare Programme in executing farm restoration plans.

In line with the requirement of the adoption procedures, it is noted that this document, entitled "*The Generic Environmental Management Programme (EMPr) for the LandCare Progamme (version 0 of June 2020)*" has been developed as an environmental management instrument which is intended to be adopted to allow for the exclusion of all activities triggered by LandCare projects as identified in the Environmental Impact Assessment Regulations Listing Notice 1, 2 or 3 of 2014, as amended, from the requirement to obtain environmental authorisation from the competent authority as contemplated in section 24(2)(e) of the Act.

1.1.2 Water uses under NWA section 21(c) and (i)

As a general principle of the National Water Act, a water use must be licensed. The NWA however, identifies permissible water uses, which include: a water use is listed as Schedule 1 to the NWA; an existing lawful water use; a water use permissible under a general authorisation; or a water use for which a licence has been waivered by the responsible authority.

Section 39(1)(a), (b) and (c) of the NWA allows for the responsible authority to generally authorise a water use, to authorise a water use in relation to a specific water resource, or to authorise a water use within an area specified in a Notice. These authorisations are subject to any Regulations made under section 26 and any conditions imposed under section 29 of the NWA.

In relation to the LandCare programme, which could trigger a water use under sections 21(c) and (i) of the NWA, the Department responsible for water affairs published a general authorisation in terms of section 39 of the National Water Act, for water uses as identified under section 21(c) and (i) of that Act, in Government Notice No. 509, in Government *Gazette* No. 40229 of 26 August 2016 subject to certain conditions, including the preparation and submission of certain documents for approval and registration prior to commencement.

1.1.3 Compliance and registration

Although no environmental authorisation will be required should the exclusion be granted in terms of section 24(2)(e) of NEMA and a general authorisation may be registered in terms of Government Notice No. 509, in Government *Gazette* No. 40229 of 26 August 2016, compliance with the requirements in Part C of this EMPr relating to the mitigation outcomes and actions to be employed for the avoidance, management and mitigation of impacts and risks associated with the implementation of a LandCare projects, and the compliance with conditions of the general authorisation, where relevant are binding on the Department's service provider/implementing agent.

Compliance with the requirements of Part C of this EMPr and the conditions of the general authorisation will be monitored by the Department of Environment, Forestry and Fisheries: Compliance Chief Directorate, and the Compliance Unit of the Department responsible for water affairs respectively, and non-compliance will constitute and offence in terms of section 49A(1)(d) of the Act and section 151 of the NWA.

¹ The Regulations Laying Down the Procedures to be followed for the Adoption of Spatial Tools or Environmental Management Instruments were published under Government Notice No. 542, in Government *Gazette* No. 42380 of 5 June 2019.

In order to facilitate compliance monitoring each project must be registered with the competent authority in terms of NEMA and the responsible authority in terms of the NWA and the service provider/implementing agent and contractor must sign a declaration indicating that they will comply with the requirements of the EMPr and the general authorisation. An integrated registration form for NEMA and the NWA and declaration forms are provided in Appendix 1 and 2 of this EMPr.

This EMPr does not exempt the LandCare Programme from the requirements of other Acts and obtaining other relevant authorisations, including but not limited to:

- Vegetation clearance in protected areas or control of protected vegetation types (e.g. trees) in terms of the relevant specific environmental management Act; and
- National and / or provincial permits for conducting work in and around heritage resources.

1.2 Institutional framework and planning processes

Community representatives or provincial LandCare coordinators may identify potential LandCare projects during the planning and design phase. Selected LandCare projects are financially supported based on a five (5) year plan.

The provincial coordinator is the lead project facilitator. During the first year the provincial coordinators facilitates the undertaking of baseline studies as well as other supporting documents, which may include CARA and NWA permissions, mapping and GIS services, consultation with stakeholders and communities. The baseline studies included will depend on the problems and or types of degradation found on the property but will include a specialist team of project engineers, pasture scientist, soil scientist and other specialist as may be required.

A technical report is compiled by the provincial coordinator, supported by the team as mentioned above, which identifies the problems and the potential solutions as well as engineer's drawings for these interventions.

From the technical report a business plan is drafted by the provincial coordinator which contains the baseline studies, awareness information, costing and engineer's plans, as well as a farm management plan indicating all interventions to be implemented and design specifications for all interventions.

After finalisation of the business plan, each project is evaluated by the Provincial Assessment Panel (PAP), Approved projects are then submitted for assessment by the National Assessment Panel (NAP) for funding.

Once funding is approved, implementation of the project will follow in years 2 to 4.

The PC appoints a project manager. A refined farm management plan is developed by the project manager to include site specific actions. The project manager in collaboration with the PC compiles tender documents based on information contained in the final farm management plan. The project manager appoints and manages the service provider. The project manager is responsible for overseeing the EMPr on site.

Once tenders are allocated, the service provider will appoint workers and take responsibility to implement the EMPr on site.

Extension officers (LandCare technicians), take part in baseline studies and do the monitoring of the implementation of project EMPrs.

1.3 Purpose

The purpose of this EMPr is to provide rules which must be complied with when implementing a LandCare project, to –

- a) Ensure compliance to the principles contained in Section 2 of NEMA and the duty of care, in terms of Section 28(1) of NEMA;
- b) Set generally accepted mitigation measures to ensure that the impacts associated with the LandCare projects are avoided, mitigated and managed in an acceptable manner;
- c) Provide a template for the management outcomes and activities to avoid, manage and mitigate identified impacts associated with the interventions of a LandCare project; and
- d) Provide for an integrated registration process for a LandCare project in terms of NEMA and the NWA which is a specific environmental management Act; and
- e) Constitute an environmental management instrument which, once adopted with allow for the exclusion of activities associated with the LandCare Programme, identified in the Environmental Impact Assessment Regulations Listing Notice 1, Listing Notice 2 or Listing Notice 3 of 2014, as amended, from the requirement to obtain environmental authorisation.

1.4 Scope

This EMPr applies to all LandCare interventions which aim to rehabilitate, conserve and enhance the productivity of agricultural land. These interventions include hard engineering interventions or interventions with softer less invasive actions and they are often used in combination to achieve the desired objective.

1.4.1 Project types

Interventions under the LandCare programme are divided into three broad categories, namely SoilCare, VeldCare and WaterCare. This generic EMPr applies to all interventions related to the identified categories being:

- 1. **SoilCare**, includes interventions such as the construction of erosion control structures, establishment of vegetation for erosion control, construction of contour banks and the clearing and preparation of new crop fields on virgin land;
- 2. VeldCare, which includes interventions such as the control of bush encroachment and invasive alien plants, firebreak construction and maintenance, veld restoration (e.g. reseeding), fencing of boundaries, fencing to facilitate rotational grazing or to protect erosion sites and cultivated areas and the provision of water points for life stock; and
- 3. **WaterCare** related projects include the control of invasive alien plants in wetlands in agricultural areas or along rivers; water harvesting, including the construction and maintenance of water harvesting infrastucure, and the removal of sand and silt from earth dams to restore capacity.

1.4.2 Spatial Extent

This EMPr applies to LandCare projects in all nine provinces of the country.

1.4.3 Proponent/Implementer

All LandCare projects must utilise and comply with this EMPr to manage the environmental impacts associated with programme's interventions.

1.5 Roles and Responsibilities for the implementation of the EMPr

The effective implementation of this EMPr is dependent on established and clear roles, responsibilities and reporting lines within the institutional framework and planning processes. This section gives guidance to the various roles and reporting lines and defines responsibilities for each role within the institutional framework for successful implementation of the EMPr. However, project specific requirements will ultimately determine the need for the appointment of specific person(s) to undertake specific roles and or responsibilities. The roles and responsibilities for implementing the EMPr are represented in Table 3.

Table 3: Roles and Responsibilities for the Implementation of the EMPr

Function	Role and Responsibilities
Provincial coordinator	 Role and Responsibilities Forms part of the team which identifies potential LandCare project. Assigns specialist such as pasture scientists and soil scientist. Facilitate baseline studies and the preparation of the business plan with the project team. Generate a screening report from the National Web-based Environmental Screening Tool should the project entail the clearance of indigenous vegetation for the expansion of agricultural activities. Prepares the business plan. At least 14 days before the commencement of the LandCare project, notify the competent authority of the commencement date of the project and the coordination of the EMPr. Assign an extension officer or a LandCare technician from the local or district office to do the environmental monitoring. Submits the registration form to register the project. Ensure that the completed EMPrs and declaration of compliance for all LandCare project are available on the Department's website. Ensure that the completed EMPrs and declaration of compliance for all candCare project and the project are available on the Department's website. Inform the completed EMPrs and declaration of compliance for all candCare project are available on the Department's website. Ensure that all requirements within the EMPr are communicated and adhered to by the project manager and its SP(s). Is responsible for the overall management of the project and EMPr implementation.
Project manager	 Role: Develop the final farm management plan, with the assistance of the PC, indicating the position of planned interventions and activities. Report directly to the PC, oversees site works, and liaises with all SP(s). Prepare the method statements as required in Part C of the EMPR, setting out in detail how the impact management actions contained in the EMPr will be implemented during the implementation of the LandCare projects. Responsibilities: Oversee the EMPr and ensure the compliance of all SP(s) with the environmental management actions stipulated in the EMPr. Ensure that the SP(s) are fully conversant with the environmental management actions of the EMPr. Must be fully conversant with the environmental management outcomes and actions of the EMPr.
	 and actions of the EMPr. Oversee site works, liaison with service provider and EO. Establish, manage and keep the EMPr file up to date;

Function	Role and Responsibilities
	Ensure that all landowners have the relevant contact details of the PM and
	SP.
	 Issuing of site instructions to the SP for corrective actions required.
Project engineer	Role:
	 Undertake the planning and design components of the project.
	Responsibilities:
	 Provide detailed drawings of the planned rehabilitation works.
Pasture scientist	Role:
	 Undertake the specialist studies relating to veld condition assessment (grass species composition); bush encroachment (plant density); invasive alien plants infestation.
	 Responsibilities: Provide scientific insight into the operation of site and bring expert and often
	local knowledge to the project teams.
Soil scientist	Role:
	 Undertake the specialist studies relating to soil survey (soil classification); soil sampling for chemical, physical properties and biological trends; soil
	erosion survey; soil waterlogging and salinisation and soil cover studies, etc.
	Responsibilities:
	 Provide scientific insight into the operation of site and bring expert and often
	local knowledge to the project teams.
Extension officer (LandCare	Role:
technician) (EO)	 Will report to the PM. Provide environmental input to the PM and SP ,
	 Liaise with SP and the landowners as well as a range of environmental
	coordination responsibilities.Is the PC's environmental representative on-site.
	Responsibilities:
	 Be fully conversant with: the EMPr and any licenses; and
	 all relevant environmental legislation.
	 Be familiar with the environmental management outcomes and actions of this EMPr, and implement these measures.
	• Ensure that all stipulations within the EMPr are communicated and adhered
	to by the SP.Reporting environmental incidents to the PM and ensure that corrective
	action is taken, and lessons learnt shared.
	 Assist the SP in investigating environmental incidents and compile investigation reports.
	investigation reports.Follow-up on pre-warnings, defects, audit finding reports.
	 Measure and communicate environmental performance to the SP.
	 Conduct environmental awareness training on site together with the SP.
Service provider (or the	Role:
community representative)	 Has overall responsibility for ensuring that all work, activities, and actions linked to the delivery of the contract are in line with the EMPr and that
	method statements are implemented as described.
	 Must ensure compliance with this EMPr while performing the onsite activities as per their contract with the Department.
	Responsibilities:

Function	Role and Responsibilities
	 Ensure implementation and compliance with environmental management outcomes and action of the generic EMPr, and the method statements for the project; Ensure all site staff are trained and kept updated in terms of the EMPr and other legal requirements; Project delivery and quality control for the implementation of the intervention; Monitor and report to the PM on the daily activities; Ensure that safe, environmentally acceptable working methods and practices are implemented and that equipment is properly operated and maintained, to facilitate proper access and enable any operation to be carried out safely; To familiarise him or herself with the site prior to the commencement of activities to confirm the procedure and designated activity zones.
Competent Authority: Integrated Environmental Authorisations Chief Directorate	 <u>Role:</u> Register the project. <u>Responsibilities:</u> Within 10 days of receiving the complete and correct information required in terms of Part B and C of the EMPr register the project and provide a registration number. Keep a recod of all registered projects and make this available on the Departmental website.
Competent Authority: Compliance	Role: Monitor compliance with the EMPr Responsiblities: • On receipt of the communication noting the date of commencement of the construction activities, monitor compliance to the EMPr.

1.6 Structure and Framework of this Generic EMPr

The EMPr is structured in three parts as indicated below and illustrated in Figure 1:

PART A: BACKGROUND AND CONTEXT:

• This section provides the background and the institutional framework and planning process for the programme. It includes the purpose, scope and exclusions of the EMPr as well as roles and responsibilities of key persons involved in the planning and implementation of Land Care projects.

PART B: REGISTRATION AND DECLARATION OF COMPLIANCE:

- This section requires the completion of two forms, being the registatraion form (Appendix 1) and the declaration of compliance form (Appendix 2) which requires supporting documentation.
- The registrion form must be completed by the provincial coordinator and signed and dated by the contractor, service provider/implementer and the provincial project project manager. It requires the provision of relevant contact and project details including GPS coordinates of the interventions.
- The declaration of compliance (Appendix 2) must be signed and dated by the provincial coordinator, the project manager and the service provider to indicate that all parties will comply with the contents of the EMPr template contained in Appendix 3 of Part C, and understand that the impact

management outcomes and impact management actions are legally binding. The business plan, farm management plan, and where the project requires the removal of indigenous vegetation to extend agricultural activities, the screening report generated by the screening tool and the completed and signed EMPr template (Appendix 3) (excluding the method statements) prepared as Part C of this EMPr, must be appended to this declaration of compliance.

- Part B and the supporting documentation required in terms of Part C of the EMPr, must be submitted by the provincial coordinator to the competent authority before the LandCare project commences to allow the competent authority to register the project for the purposes of facilitating compliance.
- At least fourteen days (14) days before the commencement of the LandCare project, the provincial coordinator must inform the Compliance Chief Directorate of the competent authority of the date of commencement of the project, to facilitate compliance inspections.
- If a new service provider is employed or the provincial coordinator or project manager is replaced, Part B must be re-signed by all relevant parties. A copy of the revised declaration of compliance must be re-submitted to the competent authority by the provincial coordinator for their information and record keeping purposes and a copy must be filed in the EMPr file. Once re-signed, the declaration of compliance becomes legally binding to the new party.
- If a new service provider/implementer is employed the method statements must be resigned by all relevant parties and a re-signed copy included in the EMPr file.

PART C: ENVIRONMENTAL CONTROLS AND REPORTING:

- This section provides the generic environmental controls, auditing and reporting requirements relevant to all LandCare projects. Controls in this section reflect minimum and general requirements for avoiding, managing and mitigating impacts of LandCare projects during the implementation phase.
- The EMPr template (Appendix 3) and the method statements must be completed by the project manager. The method statement is to be numbered and the number cross referenced in the last column of the EMPr template. Where an activity or intervention or an impact management outcome is not relevant, the words "not applicable" can be inserted in the template under the "Method Statement" column.
- The method statements as well as each page of the EMPr template must be signed and dated by the service provider and provincial coordinator and the project manager. Should any method statement change during the course of the project, the amended method statement must be approved by the provincial coordinator and re-signed by all parties. The revised method statements must be filed in the EMPr file.
- This template, once signed and dated, is legally binding. The provincial coordinator, the project manager and the service provider will remain responsible for the implementation of the EMPr.

The method statement must provide the following information for each environmental management action as per the format in Table 4 below: a method statement reference number, the location of the works, plant, materials, labour, method and schedule that will be used to carry out an activity on the project site as well as any permit, licence and authorisation required to carry out the activity. The method statement must include:

- For implementation of the intervention:
 - o a "responsible person";
 - o a method for implementation; and

- o corrective actions for an audit finding.
- For monitoring:
 - o a responsible person;
 - o checklist/reports: and
 - \circ frequency.
- Evidence of compliance.
 - Dated photograph.

Additional information: Implementation procedures; PPE, materials and equipment to be used; getting the equipment to and from site lay-out; how the equipment and material will be moved while on site; how and where material will be stored; farm management plan; the containment or action to be taken if containment is not possible of leaks or spills of any liquid or material that may occur, an emergency plan and a health and safety plan.

Table 4: Format of the Method Statement

Method Statem	ent Ref n	o. MS x	XXXXXXX						
	Activity or intervention: PREDEFINED AS PART OF THE EMPr								
Environmental	Impact: P	REDEFI	NED AS PART OF TI	HE EMPr					
Impact Manage	ement <u>Out</u>	tcome: F	PREDEFINED AS PA	RT OF THE	EEMPr				
Location of the	works:				Plant (e	quipment need	ded):		
Materials:					Labour:				
Impact		Imple	ementation of inter	vention		ľ	Nonitor	ing of interve	ention
Management	Respor	sible	Method of	Timefra	me for	Responsible) F	requency	Evidence of
Actions	Pers	on	Implementation	Impleme	entation	Person		requericy	Compliance
PREDEFINED				Т					
AS PART OF									
THE EMPr									
Additional	informati	on:							
				Signa	tures				
Provincial coordinator Project manager Service provider									
	Date			Dat	e			Date	e

Part A – BACKGROUND AND Part C – ENVIRONMENTAL Part B – REGISTRATION AND CONTEXT CONTROLS AND REPORTING **DECLARATION OF COMPLIANCE** • Background and need; • Introduction; • Registration form; • Institutional framework and • Monitoring and auditing; • Declaration form; planning processes; • Appendix 1 – Registration form; • Farm management plan. • Purpose; • Appendix 2 – Declaration form; • Scope; • Appendix 3 - Environmental • Exclusions; management programme • Roles and responsibilities. template; • Appendix 4 – Approved method statements.

Figure 1: Framework for the EMPr

PART B: REGISTRATION AND DECLARATION OF COMPLIANCE WITH THE EMPR

1 REGISTRATION AND DECLARATION

This section of the EMPr is to be completed by the project manager. The registration form and the declaration of compliance must be signed by the relevant parties and submitted to the competent authority to register the project for compliance purposes. The competent authority is required to provide the project manager with a registration number within 10 days of receiving the complete and correct information.

1.1 Registration form

The registration form is provided in Appendix 1.

1.2 Declaration form

The declaration form is provided in Appendix 2.

1.3 Farm management plan

The farm management plan for the project must be appended to this declaration of compliance. The farm management plan must include as a minimum the following:

- The location of the LandCare project.
- The position of the interventions identified in the rehabilitation plan illustrated at an appropriate resolution. These interventions could include, but not be limited to, bush encroachment control areas, earth works, soil stabilisation areas, rock and concrete interventions.
- Farm portion names and gate access points.
- Areas of specific sensitivity where access must be restricted.
- Eating, parking, smoking, storage, laydown, chemical mixing, cement mixing areas etc.
- Dated photographs of location area and site.

Should the project require the clearance of indigenous vegetation for the expansion of agricultural activities, a screening report generated from the screening tool must be prepared by the project manager appended to the declaration of compliance. The screening tool is available at (https://screening.environment.gov.za/screeningtool).

PART C: ENVIRONMENTAL CONTROLS AND REPORTING

1 INTRODUCTION

This section captures the interventions or activities and their impacts for the different types of LandCare interventions. It also provides generally or specific accepted impact management actions required to achieve the impact management outcomes for the avoidance, management and mitigation of these impacts and risks.

The EMPr template (Appendix 3) must be completed by the project manager. The project manager is required to prepare a method statement responding to each impact management action relevant to the project as per the format in Table 4 must be compiled. The method statement is to be numbered and the number cross referenced in the last column of the EMPr template. Where an intervention, impact management outcome or impact management action is not relevant, the words "not applicable" can be inserted in the template under the "Method Statement" column.

Once the method statements have been approved by the provincial coordinator and the numbers cross referenced into the EMPr template (Appendix 3), each page of the method statement and template must be signed and dated by the provincial coordinator, the project manager as well as the service provider. Should any of the method statements or impact management actions change, the pages are to be amended and resigned by the provincial coordinator, the project manager as well as the service provider. All updates are to be filed in the EMPr file.

Should the project manager be replaced or a new contractor be appointed, the EMPr template and method statements must be resigned by all relevant parties and the re-signed document included in the EMPr file.

To allow interested and affected parties access to the EMPr for the project, the project manager must have a hard copy of the document available on the project site.

The provincial coordinator, the project manager and the service provider are responsible to ensure the implementation of these outcomes and actions for all projects as a minimum requirement, in order to mitigate the impact of such aspects identified for the LandCare projects.

2 MONITORING AUDITING

2.1 Environmental documentation, monitoring and reporting

To ensure accountability is demonstrated in the implementation of the EMPr, a number of reporting systems, documentation controls and compliance mechanisms shall be in place for all LandCare projects as a minimum requirement.

2.1.1 Document Control/Filing system

An EMPr file shall be established at the outset of the implementation phase and shall be maintained throughout the lifespan of the project. The project manager is solely responsible for the upkeep and management of the EMPr file. At a minimum, all documentation detailed below will be stored in the EMPr file. A hard copy of all documentation shall be filed and this file must remain current and up-to-date.

The EMPr file must be made available at all times on request by the EO or other relevant authorities requiring the file for compliance monitoring.

2.1.2 Documentation to be available

At the outset of the project, the following documents shall be placed in the filing system and be accessible at all times:

- Copy of the competent authority's registration number;
- Copy of the EMPr template as well as any amendments thereof, signed and dated as required;
- Copy of the signed declaration of compliance to the requirements of the EMPr;
- All signed method statements and revised statements if relevant;
- Copies of any other licenses, permission or permits required;
- Emergency numbers;
- Evidence of occupational health, safety and environmental training undertaken;
- A fire control officer and certified first aider must be appointed and the names documented with a copy of the certification;
- Copies of the accepted monthly environmental audit reports;
- A copy of all non-compliance notice issued;
- Monthly audit report;
- A copy of the service providers agreement;
- A copy of all instructions or directives issued;
- The corrective action record;
- A complaints register;
- Dated photographs, before, during and after implementation of project; and
- An incident register.

2.1.3 Required Method Statements

Method statements that set out the equipment, materials, labour and method(s) the service provider will employ to respond to the environmental outcomes and actions required to avoid, manage or mitigate potential environmental impacts or risks posed by implementing LandCare projects, must be compiled in accordance with the format in Table 4. The method statements must be prepared in such detail that the provincial coordinator is able to assess whether the service provider's proposal will meet the requirements of the generally accepted impact management outcomes and actions required by the EMPr. A copy of the signed and dated method statement, including any updates, must be appended in Appendix 4 and kept in the EMPr file.

The provincial coordinator and project manager shall ensure that the service provider performs in accordance with these method statements.

2.1.4 Audit finding

Continued and repeated failure to redress the cause of an audit finding could be reported to the relevant Compliance Chief Directorate within the competent authority's structure by the PC, for them to deal with the transgression, as it deems fit.

An audit finding notice will be issued to the responsible service provider by the EO via the PC or PM. The audit finding notice must be issued in writing and a copy filed in the EMPr file. The notice must as a minimum include the following:

- Time and date of the audit finding;
- Name of the service provider responsible;
- Nature and description of the audit finding;
- Recommended/required corrective action; and
- Date by which the corrective action to be completed.

The SP(s) shall act immediately when a notice of an audit finding is received and correct whatever is the cause for the issuing of the notice. Complaints received regarding activities on the construction site pertaining to the environment shall be recorded in a dedicated register and the response noted with the date and action taken. The project manager should be made aware of any complaints. The service provider is deemed not to have complied with the EMPr if, inter alia:

- There is a deviation from the impact management outcomes and impact management actions, as approved in the EMPr and/or the approved method statements which deviation has, or may cause, an environmental impact; or
- Contravenes environmental or other legislation; or
- Results in an unforeseen environmental impact. This may be caused by direct or indirect actions or activities on site. Significance will be determined by the EOs, but will be informed by geographic extent, the lasting effects of the impact and extent of remediation to rectify the impact.

2.1.5 Corrective Action Report

For each audit finding notice issued, a documented corrective action must be recorded. On receiving an audit finding notice from the PC, the PM will ensure that the corrective actions required take place within the stipulated timeframe. On completion of the corrective action the PM is to issue a Corrective Action Report in writing to the EOs. If satisfied that the corrective action has been completed, the EO is to sign-off on the Corrective Action Report to the audit finding notice in the EMPr file. A corrective action is considered complete once the report signed off by the EO.

2.1.6 Service provider (Community representative) Agreement

Each service provider working on site is required to sign the service provider agreement. This agreement provides for signed acknowledgement by the service provider of the EMPr and the environmental outcomes and actions therein. The signed copies of the service provider agreements are to be filed in the EMPr file. No service provider will be allowed to start work without having signed the service provider agreement.

APPENDIX 1 – REGISTRATION FORM

Land Care Project - Registration Form

The project manager of a LandCare project must complete this form for every LandCare project and submit the correctly signed form, together with the supporting information, to the Director: Integrated Environmental Management Systems and Tools Coordinationat the address below. The registration of the project by the competent authority is to allow the activities associated with the project, as identified in the Environmental Impact Assessment Regulations Listing Notice 1, Listing Notice 2 or Listing Notice 3, of 2014, as amended, to be excluded from the requirement to obtain environmental authorisation, based on compliance to an environmental management instrument adopted in the prescribed manner as provided for in section 24(2)(e) of the National Environmental Management Act, 1998 (Act No. 107 of 1998). In this case the environmental management instrument is the Generic Environmental Management Programme for the LandCare Programme (version 0 of June 2020).

By post at: The Director-General Attention: Director: Integrated Environmental Management Systems and Tools Coordination Department of Environment, Forestry and Fisheries Private Bag X447 PRETORIA 0001

> By hand at: 473 Steve Biko Road ARCADIA 0083

Project details

Project name:	
General project location:	
Farm name/s:	
Farm number/s:	
Portion name/s:	
Portion number/s:	
General description of the interventions to be carried out:	

Details of the provincial coordinator

Generic Environmental Management Programme for the LandCare Programme (version 0 of June 2020)

E-mail Address:	
Postal Address:	_
Physical Address:	

Details of the project manager

Name of project manager:
Tel Number:
E-mail Address:
Postal Address:
Physical Address:

Details of the service provider

Name of service provider:
Геl Number:
E-mail Address:
Postal Address:
Physical Address:

Signature provincial coordinator

Signature project manager

Signature service provider

Date:

Date:

Generic Environmenta	al Management	Programme	for the	LandCare	Programme	(version	0 of	June
	-	202	20)		-			

APPENDIX 2 – DECLARATION FORM

Declaration of Compliance

The provincial coordinator, project manager and the service provider, in their capacities as identified in paragraph 1.6 Part A, must sign the declaration of compliance as confirmation of understanding of the requirements of the EMPr and the need to implement its provisions.

Project name: _____

I, _____, in my capacity as provincial coordinator of this LandCare project, I, _____, in my capacity as project manager of this LandCare project, and I, _____, in my capacity as service provider of this LandCare project, affirms that I:

- will abide by and comply with the prescribed impact management outcomes and actions as stipulated in Part C of this EMPr;
- have the understanding that the impact management outcomes and actions are legally binding; and
- I as project manager will provide written notice to the competent authority: Complaince Chief Directorate within 14 days of the date of commencement of the project in order to facilitate compliance inspections.

Signature provincial coordinator

Signature project manager

Signature service provider

Date:

Date:

APPENDIX 3 – ENVIRONMENTAL MANAGEMENT PROGRAMME TEMPLATE

ENVIRONMENTAL MANAGEMENT PROGRAMME TEMPLATE

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
Infrastructure development	;			
Erecting fences (grazing camps/crops protection/boundary fence/erosion sites)	Soil disturbance and erosion	Minimise soil disturbance and erosion	Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	
	Pollution due to cement and concrete batching	Avoid contamination of the soil and water resulting from cement and concrete batching	Comply with impact management actions under General interventions section "General activities - Pollution due to cement and concrete batching"	
	Harm to animals due to excess and discarded material	No excess and discarded material are left behind	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
			Comply with impact management actions under General	

Signature provincial coordinator

5

Signature project manager

Signature service provider

Date:

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			interventions section "General activities - Waste pollution"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
Water pipe laying	Soil compaction due to vehicle access	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage - Soil compaction due to vehicle access"	
	Loss of topsoil	Conserve topsoil for use during re- vegetation and rehabilitation	Comply with impact management actions under General interventions section "General activities - Loss of topsoil"	
	Soil disturbance and erosion	Minimise soil disturbance and erosion	Comply with impact management actions under General	

Signature provincial coordinator

Date:

Date:

Signature project manager

Signature service provider

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			interventions section "General activities - Soil disturbance and erosion"	
			Back fill and compact the soil to avoid ponding and channelling	
			Shape the soil to be concave	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Impacts on fauna and flora	Prevent impacts on fauna and flora to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General	

 Signature provincial coordinator
 Date:

 Signature project manager
 Date:

 Signature project manager
 Date:

Signature service provider

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			activities - Occupational health and safety"	
Construction of concrete farm reservoirs and troughs - Concrete batching	Pollution due to cement and concrete batching	Avoid contamination of the soil and water resulting from cement and concrete batching	Comply with impact management actions under General interventions section "General activities - Pollution due to cement and concrete batching"	
 Material lay down/storage areas 	Soil compaction due to vehicle access	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage - Soil compaction due to vehicle access"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
- Soil excavation	Soil disturbance and erosion	Minimise disturbance and soil erosion	Comply with impact management actions under General	

Signature provincial coordinator

Date:

Signature project manager

Signature service provider

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			interventions section "General activities - Soil disturbance and erosion"	
	Loss of topsoil	Conserve topsoil for use during re- vegetation and rehabilitation	Comply with impact management actions under General interventions section "General activities - Loss of topsoil"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Impacts on fauna and flora	Prevent impacts on fauna and flora to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health	

Signature provincial coordinator

Signature project manager

Signature service provider

Date:

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			and safety"	
Drift construction on farm roads - Concrete batching	Soil compaction due to vehicle access	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage - Soil compaction due to vehicle access"	
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Pollution due to cement and concrete batching	Avoid contamination of the soil and water resulting from cement and concrete batching	Comply with impact management actions under General interventions section "General	

Signature provincial coordinator

Signature project manager

Signature service provider

Date:

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			activities - Pollution due to cement and concrete batching"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
	Noise pollution	Noise generation is minimised	Comply with impact management actions under General interventions section "General activities - Noise pollution"	
Infrastructure maintenance				
Removal of sediment from earthen dams, maintenance of spillway and dam wall	Erosion	Minimise soil erosion	Restrict soil disturbance to under full-water level	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	

Signature provincial coordinator

11

Signature project manager

Signature service provider

Date:

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Impacts on fauna and flora	Prevent impacts on fauna and flora to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Pollution due to cement and concrete batching	Avoid contamination of the soil and water resulting from cement and concrete batching	Comply with impact management actions under General interventions section "General activities - Pollution due to cement and concrete batching"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
	Noise pollution	Noise generation is minimised	Comply with impact management actions under General interventions section "General activities - Noise pollution"	

12

Signature service provider

Signature project manager

Date:

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Disturbance or loss of important species and their habitat due to rock collection	Minimal habitat and species disturbance during and after activity	Comply with impact management actions under General interventions section "Removal of rock, sand or soil for construction of soil conservation works - Disturbance or loss of important species and their habitat"	
Farm infrastructure maintenance (e.g. fences, roads, firebreaks, soil conservation structures)	Minimise soil disturbance and erosion	Minimise soil disturbance and erosion	Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	
			Stabilise (reshape and re-seed) disturbed soil as a result of maintenance works where needed	
	Impacts on fauna and flora	Prevent impacts on fauna and flora to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	

Signature provincial coordinator

Date:

Signature project manager

Signature service provider

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Harm to animals due to excess and discarded material	No excess and discarded material are left behind	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
			Comply with impact management actions under General interventions section "General activities - Waste pollution"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Noise pollution	Noise generation is minimised	Comply with impact management actions under General interventions section "General activities - Noise pollution"	
	Increased fire risk	Prevent runaway fires	Comply with impact management actions under General	

Signature provincial coordinator

Date:

Signature project manager

Date:

Signature service provider

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			interventions section "General activities - Fire damage to surrounding environment"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
Erosion control structures				
Silt fencing	Channelling and erosion	Minimise erosion	Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	
Erosion control blankets (bio-degradable or artificial	Erosion and landslides	Ensure intended function of intervention is achieved	Strictly follow instructions according to technical drawings	
mats)			Ensure proper sloping, compaction and seeding have been done prior to laying of blankets	

Signature provincial coordinator

Date:

Date:

Signature project manager

Signature service provider

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	
	Plastic pieces left in the environment due to trampling of artificial	Natural environment is not contaminated with non-degradable material	Pack brush to protect intervention and to keep livestock from fenced off area	
	mats		Pick up degraded or damaged plastic pieces	
Rock masonry structures	Soil compaction due to vehicle access	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage - Soil compaction due to vehicle access"	
	Dust generation	Reduce dust generation and dispersal	Comply with impact management actions under General interventions section "Access to site and vehicle usage - Dust generation"	

Signature provincial coordinator

Date:

Signature project manager

Signature service provider

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	
	Waste pollution	Minimise waste pollution	Comply with impact management actions under General interventions section "General activities - Waste pollution"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Pollution due to cement and concrete batching	No pollutable materials are left after construction is completed	Ensure proper clean-up of waste material after construction	
			Comply with impact management actions under General interventions section "General activities - Waste pollution"	

17

Date:

Signature service provider

Signature project manager

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
		Prevent contamination of ecologically sensitive environments	Comply with impact management actions under General interventions section "General activities - Waste pollution"	
	Disturbance of cultural and archaeological heritage resources	Prevent the disturbance of any cultural and archaeological heritage resources	Comply with impact management actions under General interventions section "General activities - Disturbance or damage to archaeological and heritage resources"	
	Disturbance or damage to paleontological resources	Prevent the disturbance of any fossils	Comply with impact management actions under General interventions section "General activities - Disturbance or damage to paleontological resources"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	

Signature provincial coordinator

Date:

Signature project manager

Signature service provider

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Disturbance or loss of important species and their habitat due to rock collection	Minimal habitat and species disturbance during and after activity	Comply with impact management actions under General interventions section "Removal of rock, sand or soil for construction of soil conservation works - Disturbance or loss of important species and their habitat"	
Gabions structures	Soil compaction due to vehicle access	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage - Soil compaction due to vehicle access"	
	Waste pollution	Minimise waste pollution	Comply with impact management actions under General interventions section "General activities - Waste pollution"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General	

19

Signature project manager

Signature service provider

Date:

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Impacts on fauna and flora	Prevent impacts on fauna and flora to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Disturbance of cultural and archaeological heritage resources	Prevent the disturbance of any cultural and archaeological heritage resources	Comply with impact management actions under General interventions section "General activities - Disturbance or damage to archaeological and heritage resources"	
	Disturbance or damage to paleontological resources	Prevent the disturbance of any fossils	Comply with impact management actions under General interventions section "General activities - disturbance or damage to paleontological resources"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General	

Signature provincial coordinator

Date:

Signature project manager

Signature service provider

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			activities - Occupational health and safety"	
Rock packs	Channelling and erosion	Minimise erosion	Construct according to project manager instructions	
			Only use durable rock types	
			Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	
	Disturbance or loss of important species and their habitat due to rock collection	Minimal habitat and species disturbance during and after activity	Comply with impact management actions under General interventions section "Removal of rock, sand or soil for construction of soil conservation works - Disturbance or loss of important species and their habitat"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General	

Signature provincial coordinator

Date:

Signature project manager

Signature service provider

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			activities - Occupational health and safety"	
Brush packing	Restricting movement of animals	Animals have sufficient access to grazing and water after intervention	Leave enough space between packed brushwood for animal movement	
	Introduction of alien invasive species	Prevent seeding of alien invasive vegetation through brush packing	If brush packing is done with alien vegetation, ensure that no seeds are left on branches	
	Limited results and financial loss due to poor execution	Successful establishment of grazing/grasses after intervention	Strictly follow farm management plan in terms of breaking of soil crust, reseeding and density of brush packing	
			Strictly follow the business plan document for follow-up vegetation control to prevent resurgence of targeted woody species	
Water diversion and imped	ding			
Construction of earthen berms on farm road	Soil erosion	Prevent soil erosion	Ensure soil on berms is well compacted after construction	
		22		
Signature provincial coordinator	Date:			
Signature project manager	Date:			
Signature service provider	Date:			

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			Ensure runoff water freely drains into non-sensitive areas	
			Follow construction and spacing specifications as indicated by the project manager	
			Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	
Weirs - Concrete, masonry and gabions	Soil compaction due to vehicle access	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage - Soil compaction due to vehicle access"	
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	

Signature provincial coordinator

Signature project manager

Signature service provider

Date:

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Back flooding	Minimise loss of vegetation	Build according to the engineering drawings	
	Erosion, sedimentation and watercourse damming	Reduce impacts to watercourses	Comply with impact management actions under General interventions section "General actions – Erosion, sedimentation and watercourse damming"	
	Waste pollution	Minimise waste pollution	Comply with impact management actions under General interventions section "General activities - Waste pollution"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Pollution due to cement and concrete batching	Avoid contamination of the soil and water resulting from cement and concrete batching	Comply with impact management actions under General interventions section "General	

Signature provincial coordinator

Signature project manager

Date:

Signature service provider

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			activities - Pollution due to cement and concrete batching"	
	Impacts on fauna and flora	Prevent impacts on fauna and flora to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Disturbance of cultural and archaeological heritage resources	Prevent the disturbance of any cultural and archaeological heritage resources	Comply with impact management actions under General interventions section "General activities - Disturbance or damage to archaeological and heritage resources"	
	Disturbance or damage to paleontological resources	Prevent the disturbance of any fossils	Comply with impact management actions under General interventions section "General activities - Disturbance or damage to paleontological resources"	
	Disturbance or loss of important species and	Minimal habitat and species disturbance during and after activity	Comply with impact management actions under General interventions section "Removal of	

Signature provincial coordinator

Date:

Signature project manager

Date:

Signature service provider

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	their habitat due to rock collection		rock, sand or soil for construction of soil conservation works - Disturbance or loss of important species and their habitat"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
Construction of contour banks, grassed waterways and storm water drains on	Soil disturbance and erosion	Prevent concentration of storm water runoff that can cause soil erosion and redirect runoff for	The intervention strictly follows instructions as indicated in the engineering drawings	
croplands	plands storm water management	storm water management	Temporary access to use already disturbed areas as far a possible	
			As far as possible restrict the disturbance to the vegetation cover	
			Do not construct during extended periods of wet weather	

 Signature provincial coordinator
 Date:

 Signature project manager
 Date:

 Signature service provider
 Date:

26

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			Establish grass cover on waterways and on contour banks as soon as possible after construction	
			Do not use alien invasive plant species as cover	
			Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	
	Noise pollution	Noise generation is minimised	Comply with impact management actions under General interventions section "General activities - Noise pollution"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	

Signature provincial coordinator

Date:

Signature project manager

Date:

Signature service provider

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Impacts on fauna and flora	Prevent impacts on fauna and flora to minimise disturbance	Comply with Impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
Vegetation Management		·	·	
Control of alien invasive plants (AIP)	Soil disturbance and erosion	Minimise soil disturbance and erosion	The project is implemented according to the pre-compiled farm management plan	
 Mechanical AIP control (e.g. chain saws, brush cutters, hand cutters) 			Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	

28

-----Signature project manager

Signature service provider

Date:

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	
	Loss of biodiversity and non-targeted plant species	Minimise loss of biodiversity and prevent impacts on natural resources including flora and fauna	The service provider must ensure all operators are able to correctly identify targeted species	
		to minimise disturbance	The project manager shall provide supervision	
			The project manager must stop operations during unfavourable weather conditions	
			Comply with impact management actions under General interventions section "General	

Signature provincial coordinator

Date:

Date:

Signature project manager

Signature service provider

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			activities - Impacts on fauna and flora"	
	Noise pollution	Noise generation is minimised	Comply with impact management actions under General interventions section "General activities - Noise pollution"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
 Chemical AIP control (herbicides/arboricides) 	Water and soil pollution by chemicals	Avoid spillage onto soil or into water while mixing or using chemicals	Comply with impact management actions under General interventions section "General activities - Water and soil pollution by chemicals"	
	Loss of biodiversity and non-targeted plant species (damage to indigenous trees)	Minimise loss of biodiversity and prevent impacts on natural resources including flora and fauna to minimise disturbance	Do not apply foliar chemical applications under conditions where chemical drift may impact non-targeted species	

Signature provincial coordinator

Date:

Signature project manager

Date:

Signature service provider

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			Mix and apply herbicides according to manufacturer's instruction	
			Only use herbicides and arboricides registered for a specific target species under the FFFSRA	
			Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
			Comply with impact management actions under General interventions section "General activities – Water and soil pollution by chemicals"	
			Use approved and provided PPE	

31

Date:

Signature service provider

Signature project manager

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
 Biological AIP control (bio-control agents) 	Incorrect application of bio-control agents	Correct application and result of bio-control agents	Biological control agents are released/applied in accordance with the farm management plan	
- General AIP control	Poor control or re- emergence of targeted	Minimise re-emergence	Supervision by project manager at all times during clearing activities	
	species		Use integrated methods where identified on the farm management plan	
			Targeted species are listed on the manufacturer's herbicide label	
			Control methods are appropriate for the targeted species and density of infestations as identified in the business plan	

Signature provincial coordinator Signature project manager Date:

Signature service provider

32

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			When burning is used as a disposal method, burning must be managed and contained	
			Monitor and follow up according to the business plan	
	Vegetation debris accumulation that may cause a fire hazard	Prevent fire risks	Debris is not piled but spread out in such a manner that it would not cause a fire hazard	
			Comply with impact management actions under General interventions section "General activities - Fire damage to surrounding environment"	
	Spreading of seeds	Minimise the spreading of seeds	Minimise handling and movement of seed containing debris	
Control of bush encroachment	Soil disturbance and erosion	Minimise soil disturbance and erosion	The project is implemented according to the pre-compiled farm management plan	

33

_ .

Signature project manager

Signature service provider

Date:

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
 Mechanical bush encroachment control (tractor, brush cutters, 			Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	
chain saws, etc.)	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Loss of biodiversity and non-targeted plant species	Minimise loss of biodiversity and prevent impacts on natural resources including flora and fauna	The service provider must ensure all operators are able to correctly identify targeted species	
		The project manager shall provide supervision		
			The project manager must stop operations during unfavourable weather conditions	

Signature provincial coordinator	Date:
Signature project manager	Date:
Signature service provider	Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Noise pollution	Noise generation is minimised	Comply with impact management actions under General interventions section "General activities - Noise pollution"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
- Fire control	Run away fires	Prevent run away fire	Do not burn during windy conditions	
			Outsource to Working for Fire	
			Comply with impact management actions under General	

Signature provincial coordinator

Date:

Signature project manager

Signature service provider

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			interventions section "General activities - Fire damage to surrounding environment"	
 Chemical bush encroachment control (herbicides/arboricides) 	Water and soil pollution by chemicals	Avoid spillage onto soil or into water while mixing or using chemicals	Comply with impact management actions under General interventions section "General activities - Water and soil pollution by chemicals"	
	Loss of biodiversity and non-targeted plant species (damage to indigenous trees)	Minimise loss of biodiversity and prevent impacts on natural resources including flora and fauna to minimise disturbance	Do not apply foliar chemical applications under conditions where chemical drift may impact non-targeted species	
			Mix and apply herbicides according to manufacturer's instruction	
			Only use herbicides and arboricides registered for a specific target species under the FFFSRA	

Signature provincial coordinator	Date:
Signature project manager	Date:
Signature service provider	Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
			Comply with impact management actions under General interventions section "General activities – Water and soil pollution by chemicals"	
			Use approved and provided PPE	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
	Vegetation debris accumulation that may cause a fire hazard	Prevent fire risks	Debris is not piled but spread out in such a manner that it would not cause a fire hazard	

37

0

Signature service provider

Signature project manager

Date:

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			Comply with impact management actions under General interventions section "General activities - Fire damage to surrounding environment"	
Construction of fire breaks - Chemical vegetation clearing (herbicides)	Environmental pollution by chemicals	Avoid spillage of chemicals during intervention	Comply with impact management actions under General interventions section "General activities - Water and soil pollution by chemicals"	
			Comply with National Veld and Forest Fire Act in terms of erosion control	
			Implement according to the business plan set for intervention	
			Comply with impact management actions under General interventions section "General activities - Fire damage to surrounding environment"	

Signature provincial coordinator Date: Signature project manager Date: Signature service provider Date: 38

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Loss of biodiversity and non-targeted plant plants	Minimise loss of biodiversity and prevent impacts on natural resources including flora and fauna to minimise disturbance	Do not apply foliar chemical applications under conditions where chemical drift may impact non-targeted species as indicated on the manufacturer's directions for use on the herbicide label	
			Do not use herbicides with long- term residual effects which may subsequently impact non- targeted species	
			Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
- Mechanical vegetation clearing (Graders,	Soil disturbance and erosion	Minimise soil disturbance and erosion	Temporary access to use already disturbed areas as far a possible	
Slasher, etc.)			As far as possible restrict the disturbance to the vegetation cover to the area of intervention	

Signature provincial coordinator

Date:

Date:

Signature project manager

Signature service provider

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			Do not use mechanical grading on slopes	
	Loss of large indigenous trees	Prevent loss of large indigenous trees	Do not remove large indigenous trees along the fire break	
	Noise pollution	Noise generation is minimised	Comply with impact management actions under General interventions section "General activities - Noise pollution"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Impacts on fauna and flora	Prevent impacts on fauna and flora to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General	

Signature provincial coordinator

Signature project manager

Signature service provider

Date:

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			interventions section "General activities - Occupational health and safety"	
 Other mechanical methods (hand-held) 	Soil disturbance and erosion	Minimise soil disturbance and erosion	Temporary access to use already disturbed areas as far a possible	
			As far as possible restrict the disturbance to the vegetation cover	
	Loss of large indigenous trees	Prevent loss of large indigenous tree	Do not remove large indigenous trees along the fire break	
	Noise pollution	Noise generation is minimised	Comply with impact management actions under General interventions section "General activities - Noise pollution"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	

Signature provincial coordinator

Date:

Signature project manager

Signature service provider

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Impacts on fauna and flora	Prevent impacts on fauna and flora to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
- Burning	Run away fires	Prevent run away fires	Only burn with permission from the FPA	
			Comply with impact management actions under General interventions section "General activities - Fire damage to surrounding environment"	

42

Signature service provider

Date:

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Injury to workers	No injuries or deaths occur	Comply with Impact management actions under General interventions section "General activities - Occupational health and safety"	
Water harvesting				1
Ponding	Soil erosion	Ensure intended function of intervention is achieved	Strictly follow instructions (e.g. size and spacing of ponds, slope of working area and after management practices, etc.) as indicated on the business plan Actions for accompanied/secondary interventions, such as brush packing, re-vegetation and silt fencing, are complied with	
Swales	Erosion at spillways	Prevent erosion	Construction according to the specification in business plan	
	Overtopping of the contour	Prevent damage to contour	Construction according to business plan	

Signature provincial coordinator

Date:

Signature project manager

Date:

Signature service provider

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
Cultivation of virgin land				
Cultivation of virgin land - Initial vegetation	Impacts on fauna and flora	Prevent impacts on fauna and flora to minimise disturbance	Obtain CARA permit for cultivation of virgin land	
clearing			Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
- Initial soil cultivation	Soil disturbance and erosion	No soil erosion occurs	Obtain CARA permit for cultivation of virgin land	
			Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	
		Construction of contour banks, grassed waterways and storm water drains on croplands for storm water management	Construction according to engineering plans where relevant	

Signature provincial coordinator

Date:

Signature project manager

Date:

Signature service provider

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Noise pollution	Noise generation is minimised	Comply with impact management actions under General interventions section "General activities - Noise pollution"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Impacts on fauna and flora	Prevent impacts on fauna and flora to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Loss of large indigenous trees	Prevent loss of large indigenous trees	Do not remove large indigenous trees along the fire break	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General	

45

Date:

Signature service provider

Signature project manager

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			activities - Occupational health and safety"	

General interventions: impacts, impact management outcomes and impact management actions

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
Access to site and	Soil compaction due to vehicle	Maintain soil characteristics	Use existing roads or firebreak for access roads
vehicle usage	access and avoid or minimise the degradation of vegetation		In the location of temporary routes ensure the optimal use of already disturbed areas to minimise vegetation destruction and soil compaction
			Routing of new temporary access to follow contours where possible
	Dust generation	Reduce dust generation and	Implementing the speed limit on dirt roads
		dispersal	Reduce speed where activities and roads are close to buildings and/or dwellings
	Loss of topsoil		Remove topsoil and store separately from sub-soil

Signature provincial coordinator

46

-----Signature project manager

r

Signature service provider

Date:

Date:

General activities (within the working area)		Conserve topsoil for use during re-vegetation and rehabilitation	Use topsoil for areas to be re-vegetated if removed and stored prior to rehabilitation
	Soil disturbance and erosion	Minimise soil disturbance and erosion	All activities remain strictly within working areas
			The intervention strictly follows instructions as indicated in the business plan
			Do not do work during periods of extended rain
			Confine activities such as lay down and working areas to previously impacted areas where possible
	Erosion, sedimentation and	ming in watercourse watercourses	Install temporary erosion protection measures
	damming in watercourse		Reinstate areas eroded due to work undertaken
			Remove cut AIP material (biomass) at least 30m away from a flood zone to prevent damming and secondary erosion
			Apply stream diversion according to the engineering drawings and work instructions if any work will be conducted in the river- stream bed with surface flow present
			Deactivate diversion channels after implementation
	Downstream siltation	Minimise downstream siltation	Do not work in extended periods of rain
			Ensure proper sloping and compaction have been done

47

------Signature project manager

Signature service provider

Date:

Date:

		Construct temporary berms up-slope to divert runoff around work site and temporary sediment traps (sandbags / hay-bales / bio-engineered structures)
		Construct temporary berms immediately downstream of work area to trap the sediment collected from the work area
		Excavated soil is not deposited directly into a watercourse
		Where applicable, remove sediment traps after intervention has been constructed and work area is stabilised
Water and soil pollution by chemicals	Avoid spillage onto soil or into water while mixing or using	Staff using chemicals are trained by the appointed pest control officer and aware of the risks of using chemicals
	chemicals	Chemicals are mixed on impermeable and level surfaces
		Chemicals are mixed as per the manufacturer's instructions
		All waste and containers are removed from site daily
		Designate and train two workers per site for chemical mixing
		Only workers identified and trained may mix chemicals on site
		No chemicals disposed into the environment
		Containers or equipment are not to be washed on site
		Use approved and provided PPE

Signature provincial coordinator Date: Signature project manager Date: Signature service provider Date: 48

		Prevent contamination of ecologically sensitive environments	Chemicals are stored daily and mixed in demarcated areas
	Waste pollution	Minimise waste pollution	Provide waste containment
			The site is cleaned of litter on a daily basis
			No burying or burning of waste on site
			Remove all unused material which can cause pollution
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Only vehicles and machinery without fluid leaks are to be used on site
			Vehicles and machinery are checked for fluid leaks daily and leaking equipment is removed from site to facilitate repair
			Provide temporary drip trays where fluid leaks are detected
			Use ground protection such as drip trays if on-site refuelling is required
			No scheduled maintenance may take place on site
			Emergency repairs must make use of ground protection
	Pollution due to cement and	soil and water resulting from	Store sand, stone and cement in pre-identified areas
	concrete batching		Do not handle dry material during extremely windy conditions
			Mix cement on a level impermeable surface (e.g. shutter board)

Signature provincial coordinator

Date:

Signature project manager

Date:

Signature service provider

		Only mix cement intended to be use on the day
		The mixing of cement or concrete is to be done at pre-identified sites outside drainage lines or riparian areas to contain run-off
		Water used to clean cement mixing and handling equipment is to be contained and disposed of safely
		Secure empty cement bags to prevent spread of cement dust prior to disposal
		All empty cement packaging is stored in a pre-identified area and removed from the site for disposal at an appropriate waste facility
		Do not construct with, or lay, concrete when extended rain periods is expected
		Do not leave any cement spills or unused hardened cement at the work location
Impacts on fauna and flora	Prevent impacts on fauna and	Stay within the work area as per farm management plan
	flora to minimise disturbance	Ensure that activities avoid large indigenous trees
		Ensure the optimal use of already disturbed areas to minimise vegetation destruction and soil compaction
		Do not deface natural features (e.g. don't paint on rock faces, or carve trees)

Signature provincial coordinator Signature project manager

50

Signature service provider

Date:

Date:

			Do not use watercourses for recreational or other personal purposes
			Check excavations daily for trapped animals and release them
			Fill open excavations as soon as possible after excavation
			Health and safety representative must inspect the site and notify the workers if there are dangerous or problem animals
			No collection of firewood
			No littering on the site or surrounding areas
			Keep food and rubbish out of reach of scavengers, e.g. monkeys and birds
			Poaching/hunting/intentional killing of any animal is strictly forbidden as is trapping of animals
		No fire damage to take place on site due to project-related activities	There shall be no disturbance to nests or roosts
			Clean the site of all excess and discarded/waste material that can harm animals after construction
	Fire damage to surrounding environment		No cooking or other fires allowed on site
			Develop a ERAP, and communicate it to land owner and the local Fire Protection Agency if one exists in the specific area

Signature provincial coordinator

Signature project manager

Signature service provider

Date:

Date:

		Basic fire-fighting equipment must be available at the work site
		Retain numbers of all emergency services at the site in an accessible location
		All staff are aware of the risk of run-away fires and informed on the actions needed to prevent and control run-away fires
Occupational health and safety	No injuries or death occur	Comply with the OHSA
		Before construction takes place, induction training must be provided to all staff working on the site which covers the following:
		Description of the environment;
		Responsibility of all people to the environment;
		 how construction activities can impact on the environment, and what measures can be taken to mitigate against these impacts
		 measures to prevent pollution and litter control
		 social responsibility (no excessive noise, a "clean site" policy, no alcohol / drugs and no firearms permitted on site, no harvesting of fruit or firewood from the site or from areas adjacent to it)

Signature provincial coordinator	Date:
Signature project manager	Date:
Signature service provider	Date:

 procedure to be followed should heritage resources be uncovered during all phases of the development Details of the EMPr Use of relevant PPE Use of the necessary safety equipment e.g. when climbing ladders, fuel operated equipment and chainsaws etc. Handling herbicides and hazardous substances for the safe use of the substance and awareness of the potential impacts and follow safety measures Ensure that MSDS is available for all hazardous materials Basic fire safety Emergency and response procedures First aid Snake awareness training General health and safety
Document training sessions and maintain a training register
All unattended open excavations are to be demarcated
A first aid kit must be accessible on site at all times and must include the number of the local emergency service

Signature provincial coordinator	Date:
Signature project manager	Date:
Signature service provider	Date:

		A fire control officer and first aider who is a certified first aider must be appointed and the names document in the site file with a copy of the certification
		A designated eating area must be identified with access to a refuse containment
		Temporary toilet facilities must be provided and maintained throughout the construction period
		No temporary toilet facility must be placed within 100m from any watercourse
		Drinking water must be available to the workforce on site at all times
		Implement the following restrictions on all staff operating on the site:
		 No work may be done without the use of PPE No alcohol or illegal substance use on site No firearms permitted on site
Noise pollution	Noise generation is minimised	Minimise noise impacts through keeping operations to working hours
		Machinery to have mufflers
		Limit unnecessary noise, especially loud talking, shouting or

Signature provincial coordinator

Date:

Signature project manager

Signature service provider

Date:

			whistling, radios, sirens or hooters and motor revving
			Maintain all vehicles and machinery in a good working order to reduce noise pollution
	Disturbance or damage to archaeological and heritage resources	Conserve national heritage resources	Demarcate known and potential heritage resources as identified during the site visit and indicated on the business plan
			Report any finds of human remains to the nearest police station and cease work immediately
			Should any archaeological artefacts be exposed during construction activities, work in the area where the artefacts were found must cease immediately and the local SAHRA authorities informed within 24 hours
			Do not apply herbicides within any of the demarcated heritage resources burial grounds or rock art sites
			Under no circumstances must archaeological artefacts be destroyed or interfered with
			Where relevant, obtain permits from SAHRA / the PHA prior to commencing an intervention action within a heritage resources
	Disturbance or damage to paleontological resources	Prevent the disturbance of any fossils	Demarcate known fossil sites and prevent all staff from accessing this area
			Under no circumstances must a fossil be destroyed or interfered with

Signature service provider

Date:

55

			Should a fossil be found, all construction activities in the vicinity must be stopped, contact SAHRA within 24 hours
Removal of rock, sand or soil for construction of soil	Disturbance or loss of important species and their habitat	Minimal habitat and species disturbance during and after activity	Minimise impact of rock removal through spreading the extent of collection area
conservation works		Minimise disturbance of soil	Only collect loose rocks

56

Signature project manager

Date:

Date:

Signature service provider

APPENDIX 4 – METHOD STATEMENTS