

PROPOSED GUGULETHU PIGGERY

1st DRAFT

ENVIROMENTAL MANAGMENET PLAN

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Author : Slindile Ngubeni

Reviewer : Dan Mkhwanazi

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 <p>www.Environmental agency .co.za</p>	<p>NATURE'S ENVIRONMENTAL AGENCY</p> <p><i>"objective natural intelligence"</i></p>
<p>Postal & Physical Addresses: 27 Umkhamba Drive, LADYSMITH, 3370 Tel: 036 631 0806 Cell: 074 1414 157 Fax: 086 272 4442 Email Address: dan@environmentalAgency.co.za or enviroagency@gmail.com Web: www.environmentalagency.co.za</p>	

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1 INTRODUCTION AND BACKGROUND

Environmental Agency (Pty) Ltd has been appointed by Amagwane Development Trust as an independent environmental practitioner for the proposed Construction of Gugulethu Piggery.

An Environmental Management Programme (EMP) describes mitigation measures in detail, and is prescriptive, identifying specific individuals or organisations responsible for undertaking specific tasks to ensure that impacts on the environment are minimised during the development and operational activities.

This Farming Development Environmental Management Program (EMP) is intended to guide and manage the operation of the proposed Construction of Gugulethu (known as Ogade) Piggery for 600 sows, in Gugulethu under Okhahlamba Local Municipality, Uthukela District (Dc23). The Piggery shall consist of Piggery Houses, 60 cu.m fresh water storage in Jojo tanks, 40 cu.m of waste water temporal storage Jojo tanks.

This EMP is aimed to providing guidance/advice that ensures implementation of appropriate environmental management measures and adherence with environmental legislation/regulations issued by Department of Economic Development, Tourism and Environmental Affairs. Therefore it will ensure that all activities undertaken are properly managed in respect to environmental aspects, minimize the impacts on vegetation and faunal habitats and reduce risk of soil erosion.

2 LIST OF ACRONYMS USED

CARA	: Conservation of Agricultural Resource Act
DEDTEA	: Department of Economic Development, Tourism and Environmental Affairs - KwaZulu-Natal Province.
DWA	: Department of Water Affairs – National (Pretoria)
ECA	: Environmental Conservation Act
ECO	: Environmental Control Officer
EMP	: Environmental Management Plan
EMPR	: Environmental Management Programme
GN	: Government Notice
IAAPs	: Interested and Affected Parties
MSDS	: Material Safety Data Sheets
NEMA	: National Environmental Management Act
NWA	: National Water Act
NEM	: WA: National Environmental Management: Waste Act
OHSA	: Occupational Health and Safety Act

3 LIST OF TERMS USED

- **Contractor:** Persons/organisations contracted by the Developer to carry out parts of the work for the planned development.
- **Construction/Development Phase:** The Construction/Development Phase is the period of commencement of physical disturbance to the land,
- **Environment:** The surroundings within which humans live and that consist of:
 - a. the land, water and atmosphere of the earth;
 - b. micro-organisms, plant and animal life
 - c. any part or combination of (a) and (b) and the interrelationships among and between them; and the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being.
- **Environmental Audit:** A systematic, documented verification process of objectively obtaining and evaluating evidence to determine whether specified environmental activities, events, conditions, management systems, or information about these matters conform with audit criteria, and communicating the results of this process to the client.
- **Environmental Control Officer:** A person appointed and paid for by the Developer to ensure compliance with Environmental Authorisation and conditions, Duty of Care, and all other requirements as deemed fit by the Authorities charged with implementing environmental legislation, and the EMP.

- **Hazardous substance:** A substance which can have a deleterious effect on the environment, as defined in the Regulations for Hazardous Biological Agents, 2001.
- **Inspector:** An official appointed and empowered to act in terms of section 31 of the National Environmental Management Act
- **Interested and Affected Parties (IAAP's):** Those individuals or organisations that have an interest in the proposed development or will be directly affected by the activities of the development, as identified in the environmental impact assessment process.
- **Incident:** An environmental incident as defined in section 30 of NEMA
- **Method Statement:** A method statement is a written submission by the Contractor to the Engineer in response to the specification or a request by the Engineer, setting out the plant, materials, labour and method the Contractor proposes using to carry out an activity, identified by the relevant specification or the Engineer when requesting a Method Statement. It contains sufficient detail to enable the Engineer to assess whether the Contractor's proposal is in accordance with the Specifications and/or will produce results in accordance with the Specifications.
- **Pollutant and Pollution:** a contaminant at a concentration high enough to endanger the environment or the human health.
- **Project:** Proposed Construction of Gugulethu Piggery for 600 saws, Okhahlamba Local Municipality, Uthukela District Municipality, KwaZulu-Natal
- **Risk:** Ability and/or potential to harm or cause damage in relation to known occurrence

4 OBJECTIVES OF THE EMP

Objectives of the EMP can be summarised in a list below:

- To outlines activities to be performed and their environmental impacts and determines migratory measures.
- Outlines frequencies, aspects and detail of reporting mechanism to be installed.
- Management of complaints and resolution mechanism
- Define relevant roles and responsibilities of partners
- Defines what and which documents must be available on site
- Defines what and by who must be measured and reported
- Provides yardstick to measure and ensure compliance
- Gives effect to Sustainable Development principles

5 LEGAL COMPLIANCE OF THE PROJECT

5.1 The Constitution (section 24 Bill of Rights)

Guarantees every person's right to an environment that is not detrimental to health. Further it enables measures such as legislation to be implemented.

5.2 National Environmental Management Act, 107 of 1998 (as amended)

Defines and specifies environmental management practices that contribute and implements section 24 of the Constitution. Section 28 (1) of NEMA places an obligation to the person/s to exercise Duty of Care when dealing with activities detrimental to the Environment and to take reasonable measures to avoid degradation. Failure to do so is a criminal offense.

5.3 KwaZulu-Natal Planning and Development Act No 5 of 1998

This act Deals with planning and related issues and is implemented by Local Municipalities. This act defines planning so as to achieve coherent and compatibility in land uses in the Municipal area concerned.

5.4 Conservation of Agricultural Resources Act, No 43 of 1983

This legislation deals with utilisation and conservation of agricultural land and activities that impact on agricultural resources. It regulates the unsustainable utilisation of Agricultural Natural Resources and changes in Agricultural lands which may lead to unsuitable land uses and/or loss of viability of Agricultural lands and resources.

5.5 National Heritage Resources Act, No. 25 of 1999

Regulates the management of National heritage as identified or found on site during construction of the project. It specifies relevant authorities and measures to be taken when such occurrences are unearthed on site.

5.6 National Water Act, No 36 of 1998

The National Water Act regulates the management of water resources by specifying measures to be taken to protecting and conserving them.

6 DETAILED SCOPE OF EMP

The EMP is divided into four categories Establishment of the site, Construction, Operation and Decommission phase.

6.1 Conditions of Contract / Roles and Responsibilities

The Developer and Contractor will be responsible for ensuring compliance with the provisions contained in the EMP, and must be held accountable in terms of the EMP.

6.2 Duties and powers of the Developer

The Developer has overall responsibility for compliance with the EMP as it is a fundamental component of the authorisation requirements for the project. This means that the Developer must:

- Ensure that the professional team and the Contractors are appropriately briefed and that their appointment includes environmental requirements as relevant.
- Ensure that he is kept fully informed of the performance of the project against the requirements of the EMP.
- Ensure that appropriate action is taken where consistent incidents of non-compliance are taking place.
- Ensure that any corrective action required by the authorities is implemented.

6.3 Duties and Powers of the Environmental Control Officer

The Environmental Control Officer (ECO):

- Must be appointed by the Developer to visit the site from time to time once the first activities start on site.
- Undertake induction training and briefs the Site Manager and the Contractor about the requirements of the Environmental Management Plan.
- Advises the Site Manager about the interpretation, implementation and enforcement of the Environmental Specification and other related environmental matters.
- Advises and Attends site meetings, as necessary.
- Monitors the Contractor's compliance with the EMP by undertaking an environmental audit at the start of the construction phase, then monthly thereafter until all works on site have been completed, and then a close-out audit is to be undertaken.
- Reports on the performance of the project in terms of environmental compliance with the EMP to be submitted to the Site Manager, Local Municipality, DWAF and DEDTEA.

- Provides technical advice relating to environmental issues to the Site Manager.
- Acts as liaison with DEDTEA, and other environmental organisations or stakeholders as necessary.

6.4 Extent of the Contractor's Obligations

The Contractor is required to:

- Supply method statements and management plans for all activities requiring special attention as specified and/or requested by the Site Manager or Environmental Control Officer during the duration of the Contract.
- Be conversant with the requirements of the Environmental Management Plan.
- Brief staff about the requirements of the Environmental Management Plan.
- Comply with directives/instructions of the Environmental Control Officer in terms of this EMP.
- Ensure any sub-contractors/ suppliers who are utilised within the context of the contract comply with the environmental requirements of the EMP.
- Take full responsibility and be held responsible for non-compliance on their behalf.
- Bear the costs of any damages/ compensation resulting from non-adherence to the EMP or written site instructions.
- Ensure that the Site Manager is timeously informed of any foreseeable activities that will require input from the Environmental Control Officer.
- The Contractor will conduct all activities in a manner that minimises disturbance to directly affected residents and the public in general, and foreseeable impacts on the environment.

7 PROJECT DESCRIPTION AND LOCATION

The proposed Construction of Gugulethu (known as Ogade) Piggery located on Farm no. 17601 Oliviershoek, Gugulethu rural area in Bergville, Okhahlamba Local Municipality, Uthukela District Municipality, KwaZulu-Natal. The Gugulethu Piggery shall house of 600 saws in 3 separate sheds namely Farrowing and Weaner house, Gestation house and Grower house. Piggery shall consist of Piggery Houses, 60 cu.m fresh water storage in Jojo tanks, 40 cu.m of waste water temporal storage Jojo tanks. The property is approximately 61.582615 ha in extent and the area is agricultural zoned.

Refer to Figure 1 below:



8 PRE-CONSTRUCTION

Pre-construction activities are those relating to the preparation of the site prior to the start of the Construction Phase.

8.1 Site Establishment

The contractor must demarcate the boundary/portion of the site targeted for piggery farming.

8.2 Site Clearance

- a. Before any site clearance take place, the contractor must ensure that non-organic material is removed from the area to be cleared.
- b. The applicant must only clear the targeted area for farming activities and infrastructure to prevent disruptions and loss of habitat.
- c. The ECO must be informed in advance of any vegetation that will be removed, irrespective of whether or not the vegetation is alien or indigenous.
- d. Disturbance to fauna and their habitats must be kept to the absolute minimum.

8.3 No-Go Areas

- a. Areas where clearing of vegetation is prohibited must be demarcated.
- b. The demarcation of No-Go/sensitive areas must be done prior to commencing of work and entry without permission will result to penalty.
- c. Sensitive features that may be harmed must be marked to avoid any severe impacts to the environment.

8.4 Access to the Site

- a. This site must have strict access to reduce traffic associated with delivering trucks in and out of the farm.
- b. All access road must maintained in good working condition by attending to potholes as soon as they appear.
- c. No stockpiling of any material may be done along the roads to avoid any disruptions.

8.5 Preparation of Method Statements and/or Management Plans

Method Statements and/or Management Plans must be submitted by the Contractor and must be adhered to by the Contractor and Site Manager. These relate to water and storm water management requirements, traffic requirements, solid waste management requirements, fuel storage and filling and dispensing of fuel (diesel and

petrol), hydrocarbon spills, contaminated water treatment, the storage of hazardous materials, standard emergency procedures, and biohazard control. The Environmental Control Officer must monitor the implementation of the Statements and Management Plans. All copies of the statements and plans must be submitted to the appointed Environmental Control Officer.

8.6 Permits required

The necessary permits must be obtained by the Developer prior to the commencement of construction and sufficient time must be allowed to obtain such permits, for activities such as:

- a. Abstraction of water (ground or from a river), and for stream flow reduction activities, from the Department of Water Affairs.
- b. The relocation, removal or pruning of protected trees from the Department of Water Affairs.
- c. The applicant must apply for the permit of Breaking of Virgin Land.

8.7 Provision of Water

- a. The applicant must comply with the provisions of the National Water Act and its Regulations for taking water from the water source (rivers, dams, lakes etc)
- b. The applicant must provide safe drinking fit for human consumption (drinking water for farm workers).
- c. Ensure improved water use efficiency.

8.8 Soil Management

- a. The cleared natural vegetation and rocks must not be stockpiled /dumped on adjacent natural vegetation.
- b. Ensure soil moisture is well maintained to avoid overutilization of water and soil erosion by occasionally doing soil moist monitory.
- c. The time that stripped areas are exposed must be minimised wherever possible. Care must be taken to ensure that lead times are not excessive.
- d. All hazardous materials such as petrol, oils for agricultural tractors must be stored on impermeable storages to avoid spillages. If pillages occur they must be removed immediately to avoid any excessive pollution to soil and underground water.

8.9 Conservation of Natural Resources

- a. The conservation of natural resources is applicable to areas outside the perimeter of the property and governs the behaviour of contractors and employees.

- b. No natural vegetation may be cleared during the site establishment without the prior permission of the Department of Economic Development, Tourism and Environmental Affairs after a motivation from the ECO.
- c. Care must be taken to avoid the introduction of alien plant species to the site and surrounding areas.

8.10 Cultural Heritage Environment

- a. The archaeological component and any other applicable heritage components. Amafa KZN Heritage therefore requires the appointment of an Amafa accredited Heritage practitioner to assist in the provision of recommendations and mitigation procedures.
- b. Any archaeological or historical assets found prior and during constructing must be protected and Amafa AkwaZulu-Natal be notified of such findings. No development must continue at such area.

9 CONSTRUCTION/DEVELOPMENT PHASE

The construction phase covers all activities during construction. There may be overlaps between pre-construction and construction phases.

9.1 Construction Goals

- a. Ensures that the proposed activity does not impact negatively on the environment, but protect the natural environment from harm and degradation. To ensure long term environmental management of the farms
- b. All relevant authorities to comply with the legislation
- c. Ensures best agricultural and production practices to promote socio-economic benefits.

9.2 Waste Management

- a. Waste generated on the site must be handled appropriately using appropriate receptacles, bin liners, and skips.
- b. Regular trips to the Bergville Disposal Site must be made for general waste.
- c. All hazardous waste must be sent to a Hazardous Disposal Site. Hazardous wastes include but not limited to manures, oil contaminated material, etc.
- d. Records of waste generated must be kept and be produced on request.
- e. Burning and burying of waste is prohibited.
- f. No servicing of vehicles is permitted on site.

9.3 Water Quality Management

- a. The proximity of, and the distances to all surface water bodies in the vicinity must be established.
- b. No polluted water or grey water must be disposed-off to the natural environment.
- c. The contractor must ensure that no water contamination occur and that strict measures are instituted when such pollution occur.
- d. Polluted water must not come into contact with clean water.
- e. The Environmental Control Officer will be responsible for reporting the storage/use of any other potentially harmful materials to the relevant authority.

9.4 Air Pollution

- a. Ventilation points on the piggery houses must be as high as possible so that the exiting gases enter the air column as high as possible.
- b. Covering the wastewater collection pond/lagoon can reduce odorous emissions.
- c. Wind rows for drying the solid fraction should be located as far as possible.
- d. Disposal of wastewater on agricultural land should be avoided on weekends and public holidays, as far as possible.

- e. Keep wastewater drains clean.
- f. Avoid excessive build-up of manure within the houses and below the floor area.
- g. The bio-digester or mortality/compost pit must be monitored for abnormal fly populations and odours.
- h. All reasonable measures must be taken to ensure that dust generation is minimised.
- i. Dust suppression by regular water spraying must be done.
- j. Shade cloths properly fastened must be used to prevent dust escaping the property.
- k. No fires are to be permitted on site except for the burning of firebreaks.

9.5 Noise Pollution

- a. Activities that will generate the most noise must be scheduled during times of the day that will result in least disturbance to neighbours.
- b. Noise reducing instruments such as silencers and side flaps must be installed on vehicles and machinery.
- c. Site workers and contractors will adhere to the requirements of the Occupational
- d. Health and Safety Act, 1993 (Act No. 85 of 1993) regarding hearing protection and noise control measures.

9.6 Hazardous Chemical Storage and/or Handling

- a. Storage of fuel, oils, or hazardous chemicals or substances is prohibited, unless in small daily used up quantities. Such storage is limited to fuels and oils used by heavy machinery or mobile tools which cannot readily move in and out of the site.
- b. Storage of limited hazardous substances must be clearly demarcated, bundled and installed with safety considerations, and installations approved by the Town Engineer or Fire Department.
- c. The bund must at least have a concrete plinth with a containment capacity 110% to the container being bundled.

9.7 Soil Erosion

- a. Soil clearing must be undertaken with great care to avoid unnecessary vegetation destruction on site.
- b. The contractor must avoid removal of vegetation groundcover on steep slopes and inclined.
- c. Cleared areas should be exposed for the minimum time possible.
- d. An adequate cover crop must be available at all times to prevent any erosion or mulch must be applied between rows to protect open soil.
- e. Remediation of exposed areas must be undertaken as soon as those areas are no longer required for use.

9.8 Storm water Control

- a. Contaminated water must be treated prior to disposal to the natural water system.
- b. Clean and dirty water must be separated and not allowed to mix.
- c. Material such as soils, stones, rubble etc. must not obstruct natural waterways.
- d. Storm water attenuation must be practiced on site.
- e. Measures to ensure a net zero increase in run-off as a result of the Project, must be implemented.

9.9 Fire Control Measures

- a. Fire Management Plan must be produced when required and be approved/ accepted by the Municipality's Fire Department.
- b. Smoking is not permitted onsite to avoid wild fires.
- c. Fire extinguisher is required on the farm storage.

10 OPERATIONAL PHASE

An operational EMPr must be used prior to the operation of the proposed Gugulethu Piggery Farm. This operational EMPr must be approved by the Competent Authority prior to the commencement of operations.

10.1 Water Quality Management

- a. NO pigs are allowed to be disposed of to land due to the toxic leachate causing a contamination risk to groundwater, surface water and soil conditions.
- b. Clean stormwater must be prevented from flowing onto the composting facility area and diverted away by berms.
- c. The proximity of, and the distances to all surface water bodies in the vicinity of the site must be established.
- d. Ensure the effluent dam is suitably lined (concrete/cement) and that the lining is being maintained during the operational phase to ensure that no spillage or leakage takes place.
- e. To prevent the surface water in the stream from being polluted no treated waste water must be discharged into the stream because it is not possible for a biologically active double lagoon to achieve purification to the degree whereby lagoon overflow would be clean enough to permit direct discharge into the stream.
- f. The contractor must ensure that no water contamination occur and that strict measures are instituted when such pollution occur.
- g. Polluted water must not come into contact with clean water.
- h. All infrastructures must be checked monthly for leaks / cracks.
- i. The Environmental Control Officer will be responsible for reporting the storage/use of any other potentially harmful materials to the relevant authority.

10.2 Soil Erosion

- a. The Centre Management must ensure that erosion causing activities are controlled in such a manner that prevents erosion setting off on site.
- b. Grounds must be maintained such that no soil loss occurs, thereby causing erosion of this natural resource.

10.3 Storm water Control

- a. Contaminated water must be treated prior to disposal to the natural water system.
- b. Clean and dirty water must be separated and not allowed to mix.
- c. Storm water attenuation must be practiced on site.

10.4 Diseases outbreak and mortality management

- a. Pig health institution must be catered for in the farm to avoid disease outbreak. The pig farm must also have the piglet's nursery.
- b. Ensure pigs' welfare (animal care) and bio-security to prevent disease outbreak.
- c. A specialist must be hired to conduct audits on regular basis to ensure highest health standards are maintained.
- d. Dead animals must be disposed /buried within a day to prevent odour and disease outbreak.

10.5 Pest and Insect Control

- a. Implement an effective pest and insect control management plan (such as use of pesticide and herbicides).
- b. Regular cleaning of sheds must be undertaken to minimise pests and insects

10.6 Management of Alien Invasive Plants

- a. Introduction of alien vegetation and animals is prohibited. Only indigenous trees must be used and these must mirror the natural vegetation of the surrounding environment.
- b. Alien invasive management plan to control and monitor the infestation of alien species.
- c. Alien invasive plants must be removed as soon as they appear.

11 OPERATIONAL WASTE MANAGEMENT REQUIREMENT

The Environmental Impact Assessment identified various issues and concerns that were addressed through the process. Many of the issues need to be mitigated by management procedures and therefore waste management actions/mitigation measures are described for the operation of the proposed Gugulethu Piggery.

11.1 Waste Management of Manure

- a. Ensure production and manure storage facilities are constructed to prevent urine and manure contamination of surface water and groundwater, such as use of concrete floors and use roof gutters in buildings to collect and divert clean stormwater.
- b. Grind feed to increase utilisation efficiency by the animals, allowing the use of less feed and thereby reducing the amount of manure generated.
- c. Use low-phosphorus diets with highly digestible inorganic phosphates.
- d. Reduce the amount of water used during cleaning.
- e. Keep waste as dry as possible by scraping wastes instead of, or in addition, to flushing with water to remove waste.

- f. Locate manure stacks way from water bodies, floodplains, or other sensitive habitats.
- g. Ensure that manure is applied to agricultural land only during periods that are appropriate for its use as fertiliser.

11.2 Waste Water Management

- a. Install surface water diversions to direct clean runoff around areas containing waste.
- b. No waste water to be disposed on 32m of water bodies.
- c. Implement buffer zones to surface water bodies, avoiding the application of manure within these areas.
- d. Implement a surface water and groundwater quality monitoring program.

11.3 Waste Feed Management

- a. Maintain feeding systems in good working condition to prevent spills and feed contact with the ground.
- b. Use covered and protected feeders to prevent feed from exposure to rain and wind.
- c. Promote efficient storage, handling and use of feed by maintaining records of feed purchases and livestock feed use.

11.4 Management of Air Emissions (Odours and Ammonia)

- a. Reduce emissions and odours during land application activities by applying a few centimetres below the soil surface and selecting favourable weather conditions.
- b. Increase the carbon to nitrogen ratio in feeds to reduce methane and nitrous oxide production.
- c. Control the temperature, humidity, and other environmental factors of manure storage to reduce emissions.
- d. The composting facility must be kept as dry as practically possible to prevent flies from breeding.
- e. Dispose of dead animals on site within one day to avoid odour, flies and severe health risk.
- f. Consider composting of manure to reduce odour emissions.
- g. Do not rely on odour control chemicals which are generally limited to short term application in particularly offensive areas.
- h. If complaints are received regarding odours this must be recorded in the complaints register on site and noted by an ECO in the Audit required.
- i. Good ventilation in the pig sheds is required.

12 COMPLIANCE AND MONITORING

- a. The monitoring of works on site is necessary to demonstrate compliance with the specifications of the EMP and to allow for problems or issues of non-conformance to be identified and appropriate

- b. Monitoring must include visual checks by the Site Manager on a daily basis, checks on particular requirements for site activities by the ECO, as well as a review of site documentation.
- c. The ECO must complete the performance record at the end of each table above, as a record of transgressions or problems experienced on site, and how they were dealt with.
- d. Monitoring of activities on site by the ECO must be done on a weekly basis.

13 TRANSGRESSION AND PENALTIES

Transgressions relate to actions by the owner and operating team members whereby damage or harm is inflicted upon the environment or any feature thereof and where any of the conditions or specifications of the EMP are infringed upon.

In the instance of environmental damage, the damage where possible, is to be repaired and rehabilitated using appropriate measures, as specified and undertaken by appropriate specialists, for the account of the contractor or other guilty party.

Transgressions are most likely to occur with respect to litter on site, damage or the disturbance of sensitive areas, for example the indigenous vegetation, and erosion.

Issues of non-compliance noted by the ECO are to be communicated to the site operator, who holds the responsibility of ensuring that the relevant parties are made aware of the lack of compliance with EMP specifications, and that appropriate action is taken to rectify the situation. The ECO will advise on appropriate corrective actions when necessary. The Municipality is ultimately responsible for compliance of the EMP.

14 EMP VIOLATIONS

EMP violations are a violation of the Environmental Authorisation issued for the project, and are therefore a violation of NEMA provisions.

14.1 Contractor and/or Developer

The Contractor is deemed not to have complied with this generic EMP if:

- a. within the boundaries of the Project Area, during the Development Phase, adjacent areas and haul/ access roads there is evidence of contravention of EMP clauses, Environmental Authorisation conditions, or any legally issued directive or instruction;
- b. environmental damage ensues due to negligence;
- c. he fails to comply with corrective or other instructions issued by the Relevant Authority, Site Manager or Environmental Control Officer within a specified time,
- d. Failure to take any reasonable measure to protect the environment if there is a perceived or identified environmental risk associated with an activity that has not been defined in the EMP.

- e. Pollution of land surfaces and air pollution results from operation of the project and related activities.
- f. The Contractor fails to respond adequately to valid complaints from the public.

15 REPORTING ON EMP

15.1 Reporting Regime

The following reporting regime will be implemented.

	What	Details, Who, Outcomes	Frequency/ When
1	ECO appointment	The Developer/Contractor appoints ECO and informs DEDTEA in writing of the name and contact details.	At least 30 days prior to development activities
2	Baseline Audit	ECO conducts a baseline audit of all environmental assets, conditions, and landscapes. A Report is generated.	10 days prior to development
3	Inform Authorities of Intention to Commence with Development	The developer must inform DEDTEA in writing on date of starting development activities.	At least 5 days prior.

15.2 Environmental Audits

- a. A suitably qualified Environmental Auditor is to be appointed, at the expense of the Developer, to undertake audits of compliance with the EMP. This must happen every 6 months.
- b. Objectives must be to audit compliances with the key components of the EMP, to identify main areas requiring attention and recommend priority actions. The audit must cover across section of issues, including implementation of environmental controls, environmental management and environmental monitoring.
- c. Results of the audits must inform changes required to the specifications of the EMP or additional specifications to deal with any environmental issues which arise on site and have not been dealt with in the current document.

16 AMENDMENTS TO THE EMP

Any major issues not covered in the EMP as submitted must be addressed as an addendum to the EMP, submitted for approval by the Department of Economic Development and Environmental Affairs, prior to implementation.

17 CLOSURE

Decommissioning and/or closure of the Piggery Farm, should it be required, the Department of Water Affairs, and Department of Economic Development, Tourism and Environmental Affairs must be consulted for guidance. It is important that the farm have an effective Monitoring plan of water quality, soil and sludge facility.