



ENVIRONMENTAL CONSULTANTS
CK 2002/095452/23

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To/As: Hennie Grobler

From/ Christine

Van : Enviroworks

Fax/ 086 515 5157

Pages/ 18

Faks:

Bladsye

Tel: 082 808 6102

Date 26-10-09

Datum:

Re: Goedkeuring: EA Gariep Fish Hatchery

CC:

- 1.4 Any changes to, or deviations from, the project description set out in this authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further authorisation in terms of the regulations.
- 1.5 This environmental authorisation is valid for a period of 2 (two) years from the date of issue. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for an Environmental Authorisation (EA) must be made.
- 1.6 This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

Appeal of authorisation

- 1.7 The holder of the authorisation must notify all registered interested and affected party, in writing and within 7 (seven) calendar days, of the Department's decision to authorise the activity.
- 1.8 The notification referred to in 1.7 must –
- 1.8.1 specify the date on which the authorisation was issued;
 - 1.8.2 inform the interested and affected party of the appeal procedure provided for in regulation 62; and
 - 1.8.3 advise the interested and affected party that a copy of the authorisation and reasons for decision will be furnished on request.

Read at the August
TOURISM AND ENVIRONMENTAL
AUTHORITY MEETING
23 JAN 2009
Blenheim 10:00

23 JAN 2009

ENVIRONMENTAL IMPACT MANAGEMENT

1. The Department of Tourism, Environmental and Economic Affairs
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Management of the activity

- 1.9 An Environmental Management Plan ("EMP") which fulfils the requirements of this authorisation must be compiled and submitted to the Department for approval within 14 (fourteen) calendar days, of the Department's decision to authorise the activity. The EMP must –
 - 1.9.1 contain all the information specified in regulation 385 Section 34; and
 - 1.9.2 must specifically allude to detailed descriptions and measures for rehabilitation of the environment after construction activities are completed.
- 1.10 The EMP must be included in all contract documentation for the construction phase of the development.
- 1.11 The Department must be notified, within 30 days thereof, of any change of ownership and/or project developer. Conditions imposed in this EA must be made known to the new owner and/or developer and are binding on the new owner and/or developer.

Monitoring

- 1.12 Records related to compliance/ non-compliance with conditions of this authorisation must be kept in good order. Such records should be made available to this Department within seven (7) days from the date of written request from this Department.
- 1.13 Non-compliance with or any deviation from the conditions of this authorisation as set out in the EA is regarded as an offence, and after reasonable provision has been given for remedial action, will be dealt with in terms of Section 24F of the National Environmental Management Act (Act No. 107 of 1998) as well as any other appropriate legal mechanisms.

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Recording and reporting to the Department

1.14. The holder of the authorisation must submit an environmental audit report to the Department, after construction activities are completed. The environmental audit report must –

1.14.1 Contain the following:

- Activity;
- Targets;
- Conformance/Non conformance;
- Performance indicator;
- Comments.

1.14.2 This environmental audit report must be compiled by an independent auditor.

1.15. An Environmental Control Officer must also be appointed to monitor construction activities during the construction phase.

1.16. The Department hereby confirms that an audit of compliance with procedures mentioned can be conducted at any time. Records of monitoring and/or auditing must be made available for inspection to any relevant authority inspecting the development.

Commissioning of the activity

1.17. Seven (7) days prior written notice must be given to the Department that the activity will commence. The notice must include a date on which it is anticipated that the activity will commence.

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Construction of the activity

1.18 Possible contamination of storm water runoff with suspended solids:

- 1.18.1 Provide suitable and sufficient ablution facilities.
 - 1.18.2 Do not locate any site toilet, sanitary convenience, septic tank or French drain within the 1:100 year floodline, or within a horizontal distance of 100m (whichever is greater) of a watercourse or drainage line.
 - 1.18.3 Combine drinking water facilities with hand washing facilities near site toilet.
 - 1.18.4 Provide containment and settlement facilities for effluents from concrete mixing facilities.
 - 1.18.5 Concrete mixing to be carried out away from sensitive areas and on impermeable surfaces.
 - 1.18.6 Provide spill containment facilities for hazardous materials like fuel and oil.
- 1.19 Construct and operate the necessary collection facilities and storm water management systems such as diversion berms, ditches, drains, oil separation sumps, gross water way and sedimentation ponds to prevent contamination of the environment and dispose of collected materials as approved by the Engineer and Environmental Control Officer (ECO). Storage and stockpiling of topsoil should not be near stormwater management points.

1.20 Fuel storage

- 1.20.1 Fuel storage tanks and associated infrastructure required during construction must be:
 - 1.20.1.1 Temporary and above ground;
 - 1.20.1.2 Designed and installed in accordance with the relevant oil industry and South African National Standards (SABS 089, 1535 and 0131), including an impervious bunding with 110% capacity;
 - 1.20.1.3 Remove at the expense of the applicant after the relevant construction activities have been completed.

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- 1.21 Pollution of the environment with waste materials and hazardous substances:
- 1.21.1 Provide adequate waste bins on-site equipped with a lid to ensure no pollution,
 - 1.21.2 Set up a system for regular waste removal to an approved land fill site,
 - 1.21.3 Workers from the immediate area need to be encouraged to take their waste with them at the end of each day,
 - 1.21.4 Minimise waste by sorting wastes into recyclable and non-recyclable waste,
 - 1.21.5 Dust nuisance from the excavated and stockpiled materials:
 - 1.21.6 Implement dust suppression measures e.g. regular watering.
- 1.22 Noise nuisance from construction equipment:
- 1.22.1 Limit working hours of noisy equipment to daylight hours,
 - 1.22.3 Fit silencers to equipment,
 - 1.22.4 Ensure that employees and staff conduct themselves in an acceptable manner while on site, both during work hours and after hours.
- 1.23 Loss of existing vegetation.
- 1.23.1 Minimize the extent of removal of vegetation,
 - 1.23.2 Do not remove any large trees without the permission of the ECO,
 - 1.23.3 No open fires permitted under trees,
 - 1.23.4 Protection should be assured to the *Aloe* and *Haworthia* species present at the site, as these species are protected in the Free State Province.
- 1.24 Uncontrolled fire break:
- 1.24.1 Establish and maintain fire breaks around the work sites if as and when specified by the ECO and as required by applicable legislation and the local authority,
 - 1.24.2 Ensure the work site is equipped with adequate fire fighting equipment. This includes at least rubber beaters when working in veldt areas, and at least one fire extinguisher of the appropriate type irrespective of the site,

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1.24.3 No open fires are permitted anywhere on site, restrict contained fires for heating and cooking (i.e. in a fire drum) to designated areas on site.

1.24.4 Prevent employees from creating fires randomly outside designated areas.

1.25 Soil erosion:

1.25.1 Proper planning of the alignment of all temporary access road needs to be done.

1.25.2 Rehabilitate denuded areas especially slopes with appropriate species and erosion protection measures i.e. geotextiles, rocks, topsoil mixtures as per specifications.

1.26 Hazardous working conditions for workers:

1.26.1 Ensure that personal protection equipment (PPE) is available to workers.

1.26.2 Adhere to the Occupational Health and Safety Act,

1.26.3 Keep a first aid room stocked,

1.26.4 Issue all workers with necessary health and safety items.

Operation of the activity

1.27 Soil erosion:

1.27.1 Ensure correct drainage of areas,

1.27.2 All the areas disturbed during the construction work needs to be landscaped to a standard similar or better than previously, on completion of the works,

1.27.3 Rehabilitate areas with appropriate species as per ECO specifications.

1.28 Aesthetic view of the area:

1.28.1 Demolition of all temporary infrastructure should be done,

1.28.2 Ripping of compacted areas,

1.28.3 Removal of all waste materials,

1.28.4 Soils to be reinstated in reverse order to ensure correct drainage and rehabilitation.

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1.29 Weed and invader plant control;

1.29.1 A weed and invader control program needs to be implemented.

1.30 Alien fish (a species that is not an indigenous species; or an indigenous species translocated or intended to be translocated to a place outside its natural distribution range in nature, but not an indigenous species that has extended its natural distribution range by natural means of migration or dispersal without human intervention (National Environmental biodiversity Act, Act 10 of 2004)) species control:

1.30.1 A risk assessment should be done and approved by the appropriate competent authority prior to any introduction of alien fish species at the site,

1.30.2 Proper prevention systems should be incorporated to ensure that no natural water sources are contaminated with alien fish eggs/species. Examples of such secondary treatment systems to be considered consist out of:

- Ultraviolet light (UV) irradiation,
- Heat treatment,
- High-powered ultrasound,
- Chlorine, ozone, and hydrogen peroxide applications.

1.31 Contamination of soil and water courses due to diesel spillage:

1.31.1 The storage tank must be erected inside a bund wall with sufficient capacity to contain 110% of the volume of the contents of a full tank. The bund wall system must be impenetrable and be in accordance with SANS 10089:1,

1.31.2 All equipment on site must be inspected for diesel leaks before it is operated,

1.31.3 Leakages must be repaired as soon as possible and drip trays must be placed underneath machinery until such leakages have been repaired,

1.31.4 Soil contaminated with oil, diesel, petrol or other foreign matter must be excavated as far as contaminated and disposed of at a licensed hazardous waste disposal site,

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Approved By: 0865155157
Approved On: 23/01/2009
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Approved On: 23/01/2009

Minister of Tourism, Environmental and Economic Affairs
23 JAN 2009

Department of Tourism, Environmental and Economic Affairs Environmental Authorisation Reg. No. EME/11, 7, 18/06/2007

- 1.31.5 Topsoil and subsoil must be protected from contamination by means of proper site management, for example collect and recycle lubricants and avoid accidental spills of pollutants,
- 1.31.6 Vehicles and machinery may not be serviced on site,
- 1.31.7 Polluted runoff water must be isolated and not be allowed to enter drainage lines, wetland areas or storm water canals.
- 1.32 No general waste, or otherwise, may be stored for longer than a week, burnt or disposed of on site. General waste must be disposed of at a permitted landfill site
- 1.33 The applicant must notify the Department and any other relevant authority, within 24 hours and in writing, if any condition of this environmental authorization is not adhered to.
- 1.34 Health and Safety
- 1.34.1 Ensure that all applicable Regulations as included in the Occupational Health and Safety Act (Act 85 of 1993), SABS codes and other statutory requirements are complied with.

Site closure and decommissioning

1.35 Rehabilitation Phase

- 1.35.1 Before decommissioning of the development becomes evident a rehabilitation plan must be compiled and should be approved by this Department.

General

- 1.36 A copy of this authorisation must be kept at the property where the activity will be carried on. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.

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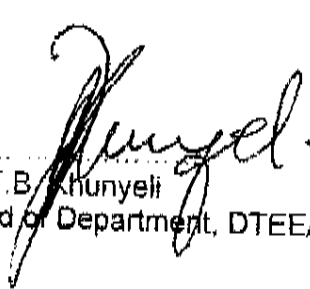
Department of Tourism, Environmental and Economic Affairs Environmental Authorisation Reg. No. EMB/11, 7, 10/06/2007

1.37 Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/ or telephonic details, the applicant must notify the Department as soon as the new details become known to the applicant.

1.38 The applicant is responsible for compliance with the provisions for Duty-of-Care and remediation of damage contained in Section 28 of the National Environmental Management Act, 1998.

Date of environmental authorisation:

Approved / Not Approved:


Mr. T.B. Khunyeli
(Head of Department, DTEEA)

20.01.2009,
Date

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Annexure 1: Reasons for Decision

1. Background

The applicant **Free State Provincial Department of Agriculture**, applied for authorisation to carry on the following activity:

Upgrading of the existing Gariep Fish Hatchery at Gariep Dam.

The applicant appointed Enviroworks Environmental Consultants to undertake a Basic Assessment Study for the activity as described under Regulation Notice 385, and 386.

2. Information considered in making the decision

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The information contained in the Basic Assessment Report completed by Enviroworks Environmental Consultants.
- b) The objectives and requirements of relevant legislation, policies and guidelines and section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998).
- c) Site inspection conducted on the 11th of October 2008. Present were Mr. Danie Kryhauw (DTEEA), Mr. Duart Hugo (DTEEA), Miss Elbi Bredenkamp (Enviroworks) and Dr. Kobus Dreyer (Kobus Dreyer Archaeologist/Heritage Specialist).

3. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

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- a) The centre will improve the level of aquaculture technology in South Africa
- b) The facility will improve breeding of indigenous fish.
- c) Auxiliary infrastructure is in place.
- d) Issues, as a result of the operational phase of the development were considered, including waste management, stormwater management, introduction of alien fish species and surface and groundwater management.

4. Findings

After consideration of the information and factors listed above, the Department made the following findings -

- a) Domestic waste removal must be to an appropriate permitted waste landfill site.
- b) Proper drainage systems of stormwater must be in place on site;
- c) If alien fish species are introduced, a risk assessment prior to introduction must be done.
- d) During the construction phase an environmental control officer must monitor construction activities

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated to acceptable levels. The application is accordingly granted.

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