

Private Bag X313, Pretoria, 0001, Sedibeng Building, 185 Schoeman Street, Pretoria, Tel: (012) 336-7500, Fax: (012) 326-4472/ (012) 326-2715

# LICENCE IN TERMS OF CHAPTER 4 OF THE NATIONAL WATER ACT, 1998 (ACT NO 36 OF 1998) (THE ACT)

I, **Maxwell Sirenya**, in my capacity as the Director-General in the Department of Water Affairs and acting under authority of the powers delegated to me by the Minister of Water and Environmental Affairs, hereby authorise the following water use in respect of this licence.

DATE: 02/05/2017

LICENCE NO: 03/A21C/CI/1758

FILE NO: 16/2/7/A210/N89

1. Licensee:

Postal Address:

Dry Creek Properties (Pty) Ltd

P.O. Box 3921

Dainfein 2055

2. Water Uses

2.1 Section 21(c) of the Act:

Impeding or diverting the flow of water in a watercourse, subject

to the conditions set out in Appendixes I and II.

2.2 Section 21(i) of the Act:

Altering the bed, banks course or characteristics of a

watercourse, subject to the conditions set out in Appendices I

and II

- 3. Property in respect of which this licence is issued
- 3.1. Portion 401 (a portion of portion 19) of the Farm Zevenfontain no 407
- 4. Registered owner of the Property
- 4.1 Dry Creek Properties (Pty) Ltd

**B** 05126

#### 5. Licence and Review Period

5.1 This licence is valid for a period of twenty (20) years from the date of issuance and it may be reviewed every five (5) years.

#### 6. Definitions

Any terms, words and expressions as defined in the National Water Act, 1998 (Act 36 of 1998) shall bear the same meaning when used in this licence.

"The Regional Head" means the Chief Director: North West Region, Department of Water Affairs, Private Bag X 5, Pretoria, Mmabatho, 2735.

# 7. Description of the activity

This licence authorises Dry Creek Properties for the canalization of a drainage channel and construction of a bridge with internal Culverts within a wetland that will be crossing Holding 33 of Kengies extension 40 Agricultural Holding.

Director-Genera

#### APPENDIX I

#### General conditions for the licence

- 1. This licence is subject to all applicable provisions of the National Water Act, 1998 (Act 36 of 1998).
- 2. The responsibility for ensuring compliance with the provisions of the licence is vested in the Licensee and not any other person or body.
- 3. The Licensee must immediately inform the Regional Head of any change of name, address, premises and/or legal status.
- 4. If the property in respect of which this licence is issued is subdivided or consolidated, the Licensee must provide full details of all changes in respect of the properties to the Regional Head of the Department within 60 days of the said change taking place.
- 5. If a water user association is established in the area to manage the resource, membership of the Licensee to this association is compulsory.
- 6. The Licensee shall be responsible for any water use charges or levies imposed by a responsible authority.
- 7. While effect must be given to the Reserve as determined in terms of the Act, where a desktop determination of the Reserve has been used in issuance of a licence, when a comprehensive determination of the Reserve has finally been made; it shall be given effect to.
- 8. When compulsory licensing is implemented for the water resource in respect of which this licence was issued, the water use authorized in this licence could be subject to appropriate reduction.
- 9. The licence shall not be construed as exempting the Licensee from compliance with the provisions of any other applicable Act, Ordinance, Regulation or By-law.
- 10. The licence and amendment of this licence are also subject to all the applicable procedural requirements and other applicable provisions of the Act, as amended from time to time.
- 11. The Licensee shall conduct an annual internal audit on compliance with the conditions of licence. A report on the audit shall be submitted to the Regional Head within one month of the finalisation of the audit.
- 12. The Licensee shall appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence. The first audit must be conducted within 3 (three) months of the date this license and a report on the audit shall be submitted to the Regional Head within one month of finalisation of the report.
- 13. Flow metering, recording and integrating devices shall be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than two years. Calibration certificates shall be available for inspection by the Regional Head or his representative upon request.
- 14. Any incident that causes or may cause water pollution shall be reported to the Regional Head or his/her designated representative within 24 hours

Director Genera

#### **APPENDIX II**

Section 21(c) of the Act: Impeding or diverting the flow of water in a watercourse and Section 21(i) of the Act: Altering the bed, banks, course or characteristic of a watercourse

#### 1. GENERAL

1.1 This licence authorises the Section 21(c) and (i) water use activities as set out in Table 1 for the canalization of a tributary of the Juskey River and the construction of a bridge on a wetland.

Table 1: Water Use Activities

Water Use	Property	Description	Water Resource	Co-ordinates
Section 21 (c) and (i)	Portion 401 (Portion of portion 19 of the Farm Zevenfontein no 407	Canalisation of a stream	Un named tributary of the Juskei River	Start S: 26° 04' 94" E:27°59'48.76" End S: 25° 59'59.97" E: 27° 59'50.44"
Section 21 (c) and (i)	Portion 401 (Portion of portion 19 of the Farm Zevenfontein no 407	Construction of Armco bridge with culverts	Un named Wetland	Start S: 26° 02' 35" E:27° 59' 49.36" End S: 26° 02' 02" E: 27° 59' 49.36

- 1.2 The Licensee must carry out and complete all the activities listed under condition 1.1 according to the following:
- 1.2.1. Reports submitted to the Responsible Authority, specifically:
  - 1.2.1.1. Geohydrological Assessment study for a bioengineerd storm water corridor for holding 33 kengies Agricultural Holding (Kengies Ext 40)
  - 1.2.1.2. Hydrological Assesment Report by MSA Environmental dated November 2009
  - 1.2.1.3. Rehabilitation plan of the Drainage channel dated June 2007
  - 1.2.1.4. Storm water Management and Erosion Prevention and Sediment Control dated July 2008
- 1.1.1 Environmental Authorisation dated 07 June 2011 and
- 1.1.2 Any other written direction issued by the Regional Head in relation to this licence.
- 1.2 No activity must take place within the extent of a watercourse, unless authorised by this licence.
- 1.3 The conditions of the authorisation must be brought to the attention of all persons (employees, sub-consultants, contractors etc.) associated with the undertaking of these activities and the Licensee must take such measures that are necessary to bind such persons to the conditions of this licence.
- 1.4 A copy of the water use licence and reports set out in condition 1.2.1 must be on site at all times.

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1.5 A suitably qualified person/s, appointed by the Licensee, and approved in writing by the Regional Head must be responsible for ensuring that the activities are undertaken in compliance with the specifications as set out in reports submitted to the Department or the Responsible Authority and the conditions of this licence.

#### 2. FURTHER STUDIES AND INFORMATION REQUIREMENTS

2.1 No fundamental alterations of the work method statements, site plan/s and drawings are allowed, unless a modification is requested and granted by the Regional Head in writing.

### 3. PROTECTIVE MEASURES

# 3.1 Storm Water Management

- 3.1.1 Stormwater management plan must be submitted to the Regional Head for approval before construction starts.
- 3.1.2 Stormwater management practices must be constructed, operated and maintained in a sustainable manner throughout the project and for the water use activities set out in condition 1.1.
- 3.1.3 Increased runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that storm water does not lead to bank instability and excessive levels of silt entering the watercourse/s;
- 3.1.4 Stormwater must be diverted from construction works and roads and must be managed in such a manner as to disperse runoff and to prevent the concentration of storm water flow,
- 3.1.5 The velocity of stormwater discharges must be attenuated and the banks of the watercourses protected.

#### 3.2 Structures, Construction Plant and Materials

- 3.2.1 Master Plan of construction camp and layout areas must be compiled and submitted to the Regional Head approval before construction starts.
- 3.2.2 The height, width and length of structures must be limited to the minimum dimension necessary to accomplish the intended function.
- 3.2.3 The necessary erosion prevention measure must be employed to ensure the sustainability of all structures.
- 3.2.4 Structures must not be damaged by floods exceeding the magnitude of floods occurring on average once in every 100 years.
- 3.2.5 Structures must be non-erosive, structurally stable and must not induce any flooding or safety hazard.
- 3.2.6 Structures must be inspected regularly for accumulation of debris, blockage, erosion of abutments and overflow areas - debris must be removed and damages must be repaired and reinforced immediately.

Director-Genera

- 3.2.7 The construction plant and materials must be recovered and removed one month after construction has been completed.
- 3.2.8 During the construction and operation phase erosion and siltation measures should be implemented.
- 3.2.9 The construction camp, plant and material stockpiles must be located outside the extent of the watercourse/s and must be recovered and removed within a period of one (1) month after completion of construction phase.

#### 3.3 Instream and riparian habitat

- 3.3.1 Activities must start up-stream and proceed into a downstream direction, so that the recovery processes can start immediately, without further disturbance from upstream works.
- 3.3.2 Operation and storage of equipment within the riparian habitat must only take place within the approved limits of disturbance indicated in the approved site plans and work method statements.
- 3.3.3 Diversions must be protected to not cause erosion and sedimentation and turbidity in the streams.
- 3.3.4 Indigenous riparian vegetation, including dead trees, outside the limits of disturbance indicated on the site plans, may not be removed from the area.
- 3.3.5 The vegetation of the surrounding catchment should also be managed to prevent erosion and siltation of the watercourse.
- 3.3.6 Alien and invasive vegetation must not be allowed to further colonise the area, and all new alien vegetation recruitment must be eradicated or controlled in an environmentally sustainable manner.
- 3.3.7 Existing vegetation composition must be maintained or improved by maintaining the natural variability in flow fluctuations.
- 3.3.8 The indiscriminate use of machinery within the instream and riparian habitat may lead to compaction of soils and vegetation and must therefore be strictly controlled.
- 3.3.9 Soils that have become compacted through the water use activities must be loosened to an appropriate depth to allow seed germination.
- 3.3.10 Stockpilling of removed soil and sand must be stored outside of the 1:100 flood line or riparian habitat, whichever is the greater, to prevent being washed into the river and must be covered to prevent wind and rain erosion.
- 3.3.11 Additional disturbances from temporary coffer dams or diverting flows around the work site, vehicle and machinery accessing and crossings and material stockpile must be minimised.
- 3.3.12 Adequate bank stabilization measures must be implemented.

Director-General

# 3.4 Hydraulic and hydrology

- 3.4.1 The water use must not result in a potential, measurable or cumulative detrimental change in the quality, velocity, pattern, timing, water level and assurance of flow in a watercourse.
- 3.4.2 The activities must be conducted in a manner that does not negatively affect catchment yield, hydrology and hydraulics. The Licensee must ensure that the overall magnitude and frequency of flow in the watercourse/s does not decrease, other than for natural evaporative losses and authorised attenuation volumes.
- 3.4.3 Where flow in watercourse is permanent, the trench must be staged across part of the channel to maintain flows. Flows must not be stopped unless essential, if necessary to stop flows it must be for a minimal time only.

### 3.5 Water Quality

3.5.1 In-stream water quality must be analysed on a two-weekly basis during construction otherwise monthly at monitoring points both upstream and downstream of the activities for the following variables as set out in Table 2.

Table 2: showing variables to be monitored

Variable	Limit <10% variation		
Temperature (°C)			
pH	6.0 - 8.5		
Electrical conductivity (EC) (mS/m)	<50		
Suspended solids (SS) (mg/l)	<25		
Dissolved oxygen (mg/l)	>6		
Turbidity (NTU)	<3		
Alkalinity (mg CaCO <sub>3</sub> /ℓ)	<100		

The variables may be amended on discretion of the Responsible Authority. Only an accredited (SANS 17025) laboratory to be used for analysis.

- 3.5.2 Monitoring must be undertaken as set out in condition 4 of Appendix II.
- 3.5.3 Monitoring must continue for three (3) years after the cessation of the activities listed in condition 1.1 of Appendix II.
- 3.5.4 Turbidity, sedimentation and chemical changes to the composition of the water must be limited and monitored both upstream and downstream of the development.
- 3.5.5 Activities that lead to elevated levels of turbidity of any watercourse must be prevented, reduced, or otherwise remediate.
- 3.5.6 Construction, operation and maintenance activities must be scheduled to take place during the dry seasons when flows are lowest where reasonably possible. If this is not possible and if management measures have not been provided for in the reports submitted to the Department or the Responsible Authority, the Licensee must submit such to the Regional Head for written approval before these activities commence. Natural in stream hydrology is to be used to determine which months constitute the low flow months.
- 3.5.7 The Licensee must ensure that the quality of the water to downstream water users does not decrease because of the of the water use activities listed under condition 1.1 of Appendix II.

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- 3.5.8 Pollution of and disposal/spillage of any material into the watercourse must be prevented, reduced, or otherwise remediate through proper operation, maintenance and effective protective measures.
- 3.5.9 Vehicles and other machinery must be serviced well above the 1:100 year flood-line or outer edge of the riparian habitat whichever is the greatest. Oils and other potential pollutants must be disposed off at an appropriate licensed site, with the necessary agreement from the owner of such a site.
- 3.5.10 Any hazardous substances must be handled according to the relevant legislation relating to transport, storage and use of the substance.
- 3.5.11 All reagent storage tanks and reaction units must be supplied with a banded area built to the capacity of the facility and provided with sumps and pumps return the spilled material back into the system. The system must be maintained in a state of good repair and standby pumps must be provided.

# 3.6 Biota

- 3.6.1 The Licensee must take all reasonable steps to allow movement of aquatic species, including migratory species.
- 3.6.2 All reasonable steps must be taken not to disturb the breeding, nesting and/or feeding habitats and natural movement patterns of aquatic biota.
- 3.6.3 The current level of diversity of biotopes and communities of animals, plants and micro organisms must be maintained.

# 3.7 Rehabilitation and Management

- 3.7.1 A comprehensive and appropriate rehabilitation and management programme to restore the watercourse/s to environmentally acceptable and sustainable conditions after construction must be developed and submitted to the Regional Head for written approval within (1) months from the date of issuance of this licence.
- 3.7.2 The Licensee must embark on a systematic long-term rehabilitation programme to restore the watercourse/s to environmentally acceptable and sustainable conditions after completion of the activities, which must include, but not be limited to the rehabilitation of disturbed and degraded riparian areas to restore and upgrade the riparian habitat integrity to sustain a bio-diverse riparian ecosystem.
- 3.7.3 Rehabilitation must be concurrent with construction.
- 3.7.4 Trench is to be open for minimal length of time.
- 3.7.5 Top soil must be stripped and redistributed.
- 3.7.6 The Regional Head must sign a release form indicating that rehabilitation was done satisfactory.
- 3.7.7 All disturbed areas must be re-vegetated with indigenous plants in consultation with an indigenous plant expert, ensuring that during rehabilitation only indigenous shrubs, trees and grasses are in restoring the biodiversity.



- 3.7.8 An active campaign for controlling invasive species must be implemented within disturbed zones to ensure that it does not become a conduit for the propagation and spread of invasive exotic plants.
- 3.7.9 Rehabilitation structures must be inspected regularly for the accumulation of debris, blockages instabilities and erosion with concomitant remedial and maintenance actions.

#### 4. MONITORING AND REPORTING

4.1 The Regional Head must be notified in writing one week prior to commencement of the licensed activity (ies) and again upon completion of the activity (ies).

Table 3: REC for the impacted watercourses by the authorized activities.

Watercourse	REC
Unnamed drainage Channel and wetland	D

- 4.2 An Environmental Control Officer must be appointed and he/she will be responsible for monitoring of the affected areas.
- 4.3 Six (6) monthly monitoring reports must be submitted to the Regional Head until otherwise agreed in writing with the Regional Head.
- 4.4 A qualified environmental management specialist must be retained by the Licensee who must give effect to the various licence conditions and to ensure compliance thereof pertaining to all activities impeding and/or diverting flow of watercourses as well as alternations to watercourses on the property/ies as set out in condition 1.1 of Appendix II.
- The Licensee must conduct on a two yearly basis an internal audit on compliance with the conditions in this licence. A report on the audit must be submitted to the Regional Head within one month of the finalisation of the audit. A qualified independent auditor must undertake this audit.
- 4.6 The audit reports must include but are not limited to:
- 4.6.1 Reporting in respect of the monitoring programme referred to in condition 4.2 of Appendix II;
- 4.6.2 A record of implementation of all mitigation measures and implementation of the watercourse rehabilitation and management plan including a record of corrective actions; and
- 4.7 The applicant must apply in writing to the Regional Head for alternative monitoring and reporting arrangements for which written approval must be provided.

#### 5. OTHER WATER USERS

The Licensee must attempt to prevent adverse affect on other water users. All complaints must be investigated by a suitable qualified person and if investigations prove that the Licensee has impaired the rights of other water users, the Licensee must initiate suitable compensative measures.

Director-General

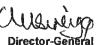
# 6. POLLUTION PREVENTION, INCIDENTS AND MALFUNCTIONS

- 6.1 Pollution incidents shall be dealt with in accordance with the Act.
- 6.2 Any incident that may cause pollution of any water resource shall immediately be reported to the Responsible Authority.
- 6.3 If surface and/or groundwater pollution has occurred or may possibly occur, the Licensee must conduct, and/or appoint specialists to conduct the necessary investigations and implement additional monitoring, pollution prevention and remediation measures to the satisfaction of the Responsible Authority.
- The Licensee shall keep all records relating to the compliance or non-compliance with the conditions of this licence in good order. Such records shall be made available to the Responsible Authority within 14 (fourteen) days of receipt of a written request by the Department for such records.
- 6.5 The Licensee shall keep an incident report and complaints register, which must be made available to any external auditors and the Department.

#### 7. BUDGETARY PROVISIONS

- 7.1 The Licensee must ensure that there is a budget sufficient to complete and maintain the water use and for successful implementation of the rehabilitation programme as set out in this licence.
- 7.2 The Regional Head may at any stage of the process request proof of budgetary provisions for rehabilitation and closure of project.

[END OF LICENCE]





Private Bag X313, Pretoria, 0001, Sedibeng Building, 185 Francis Baard Street, Pretoria Tel: (012) 336-6817 Fax: (012) 326-4472/ (012) 326-2715

# AMENDED LICENCE OF DRY CREEK IN TERMS OF SECTION 50 AND 158 OF THE NATIONAL WATER ACT, 1998 (ACT NO 36 OF 1998)

I, *Trevor Balzer*, in my capacity as Acting Director-General in the Department of Water and Sanitation and acting under authority of the powers delegated to me by the Minister of Human Settlements, Water and Sanitation, hereby authorises the amendment of licence dated 02 May 2012, licence no. 03/A21C/CI/1758

SIGNED:

DATE:

The above mentioned licence is amended as follows:

#### **Amendment of Section 1**

1. Section 1. of the licence is hereby amended-Licensee: Lumal Projects (Pty) Ltd

> Postal Address: P.O Box 996 Sunninghill 2157

#### **Amendment of Section 3**

- 2. Section 3. of the licence is hereby amended-
- 3. Properties in respect of which this licence is issued
- 3. Section 3.1 of the licence is hereby amended-
- 3.1 Portion 401(a portion of portion 19) of the Farm Zevenfontein no 407 JR and Holding 30 of Kengies AH JR

#### **Amendment of Section 4**

- 4. Section 4. of the licence is hereby amended-
- 4 Registered owner of the Property
- 4.1 Lumal Projects (Pty) Ltd

# **Amendment of Section 7**

- 5. Section 7. of the licence is hereby amended-
- 7. This licence authorises Lumal Projects for the canalization of a drainage channel and construction of a bridge with internal Culverts within a wetland that will be crossing Kengies Extension 35 and 40.

# Amendment of Section 1.1: Table 1 of Appendix II

8. Section 1.1 of the licence is hereby amended

**Table 1: Water Use Activities** 

Page 2 of 2

Water Use	Property	Description	Water Resource	Coordinates
Section 21 (c) and (i)	Portion 401 (a portion of Portion 19) of the Farm Zevenfontein 407 JR and Holding 30 of Kengies Agricultural Holdings JR		Unnamed tributary of the Jukskei River	Start S:26 <sup>0</sup> 00'04.94" E:27 <sup>0</sup> 59'48.76" End S:25 <sup>0</sup> 59'57.84" E:27 <sup>0</sup> 59'51.55"
Section 21 (c) and (i)	Portion 401 (a portion of Portion 19) of the Farm Zevenfontein 407 JR	Construction of Armco bridge with culverts	Unnamed wetland	Start S:26 <sup>0</sup> 00'02.35" E:27 <sup>0</sup> 59'49.36" End S: 25 <sup>0</sup> 00' 02.02' E: 27 <sup>0</sup> 59' 49.36'

