water & sanitation
Department
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Private Bag X313, Pretoria 0001, Sedibeng Building, 185 Francis Baard Street, Pretoria, Tel: 012 336 7500 Fax (012) 323 4472/ (012) 326 2715

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

I, ***Sifiso Mkhize***, in my capacity as Director–General (Acting) in the Department of Water and Sanitation acting under authority of the powers delegated to me by the Minister of Water and Sanitation, hereby authorise the following water uses in respect of this licence.

SIGNED: .....

DATE: 28/08/2017

LICENCE NO: 04/B20E/ABCEGI/3888.
FILE NO: 27/2/2/B520/13/9

1.	**Licensee:** **Postal Address:**	**Eskom Holdings SOC LTD: Kendal Power Station** P.O. Box 1091 **Johannesburg** 2000
2.	**Water Uses**	
2.1	Section 21 (a) of the Act:	Taking water from a water resource, subject to conditions set put in Appendices I and II.
2.2	Section 21 (b) of the Act:	Storing water, subject to conditions set out in Appendices I and III.
2.3	Section 21 (c) of the Act:	Impeding and diverting the flow of water in a watercourse, subject to conditions set out in Appendices I and IV
2.4	Section 21 (e) of the Act:	Engaging in controlled activity, subject conditions set out in Appendices I and V
2.6	Section 21 (g) of the Act:	Disposing of waste in a manner which may detrimentally impact on a water resource, subject to the conditions set out in Appendices I and VI.

B 07945

2.7 Section 21 (i) of the Act: Altering the bed, banks, course or characteristics of water course I and IV.

3. Properties and registered owners on which the use will be exercised

Table 1: Properties where water uses occur:

Water Uses	Property Name	Title Deed Number	Registered Property Owner
Section 21 (a)	Portion 39 of farm Schoongezicht	T12144/1991	Eskom Holdings SOC LTD
Section 21 (b)	Portion 43 of farm Schoongezicht	T16930/2008	
	Portion 17 of farm Leeuwfontein	T46829/1988	
	Portion 39 of farm Schoongezicht	T12144/1991	
Section 21 (c) & (i)	Portion 39 of farm Schoongezicht	T12144/1991	
	Portion 43 of farm Schoongezicht	T16930/2008	
	Portion 17 of farm Leeuwfontein	T46829/1988	
	Portion 25 of farm Schoongezicht Portion 27 of farm Schoongezicht	T16930/2008	
Section 21 (e)	Portion 39 of farm Schoongezicht	T12144/1991	
	Portion 5 of farm Leeuwfontein	T57492/1981	
	Portion 43 of farm Schoongezicht	T16930/2008	
	Portion 25 of farm Schoongezicht Portion 27 of farm Schoongezicht	T16930/2008	
Section 21 (g)	Portion 5 of farm Leeuwfontein	T57492/1981	
	Portion 25 of farm Schoongezicht Portion 27 of farm Schoongezicht	T16930/2008	
	Portion 39 of farm Schoongezicht	T12144/1991	
	Portion 44 of farm Schoongezicht	T16929/2008	
	Portion 43 of farm Schoongezicht	T16930/2008	
	Portion 17 of farm Leeuwfontein	T46829/1988	

4. Licence and Review Period

This licence is valid for a period of forty (40) years from the18 December 2015 and, it may be reviewed every five (5) years.

5. 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 Provincial Head" means the Head of Provincial Operation: Mpumalanga, Department of Water Affairs and Sanitation, Private Bag X11259, Mpumalanga, 1200.

"Report" refers to Water Use Licence Application Report compiled by Zitholele Consulting, dated September 2014, and all documentations submitted in support of the application as well as related specialist investigations, all other related documents/submissions and communication (email, letters, verbal, etc.) related thereto.

6. Description of activity

This licence authorises Eskom Holdings SOC LTD: Kendal Power Station for Section 21 (a), (b), (c), (e), (i) and (g) water uses in terms of Section 40 of the National Water Act, 1998 (Act 36 of 1998). The Kendal Continuous Project comprises the following project activities: Continuation of the existing ADF in a north westerly direction, increase the storage capacity of the existing Emergency-Dump (hereafter referred to as the E-Dump), construction of Pollution Control Dams, Clean Water Dams and Storm Water Management infrastructure, diversion of a natural stream to accommodate the continuous ADF footprint and remedial works to an existing in-stream farm dam within Eskom's property boundary, to address the mixing of flow from the final voids of the adjacent mining operations. The construction of the ash disposal facility will be taking place in Quaternary Catchment B20E in the Olifants Water Management Area in Mpumalanga Region.

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 complying 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 Provincial Head of any change of name, address, premises and/or legal status.

4. If the property/ies 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 Provincial Head of the Department within sixty (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. 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.

9. 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.

10. The Licensee must conduct an annual internal audit on compliance with the conditions of the licence. A report on the audit shall be submitted to the Provincial Head within one (1) month of the finalization of the audit.

11. The Licensee must 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 three (3) months of the date this licence is issued and a report on the audit shall be submitted to the Provincial Head within one month of finalisation of the report.

12. 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 Provincial or his/her representative upon request.

13. Any incident that causes or may cause water pollution shall be reported to the Provincial Head or his/her designated representative within 24 hours.

14. **This licence supersedes the licence number 04/B20E/ABCEGI/3888 issued 18 December 2015.**

APPENDIX II

Water use section 21(a): Taking water from a water resource

1. This licence authorises Eskom Holdings SOC Ltd: Kendal Power Station the taking of water per as indicated in Table 2

Table 2: Section 21 (a) Water Use:

Use of water	Maximum per annum (m^3)	Property Description	Coordinates
Water will be abstracted from the Clean Water Dam for use in the power station, to irrigate the lawns or for dust suppression of clean areas.	Volume: 603 922 m^3/a	Portion 39 of farm Schoongezicht	S 26° 05'37.4 E 28° 57'22.7

2. The quantity of water authorised to be taken in terms of this licence may not be exceeded.

3. This licence does not imply any guarantee that the said quantities and qualities of water will be available at present or at any time in the future.

4. The above mentioned volume may be reduced when the licence is reviewed.

5. The Licensee shall continually investigate new and emerging technologies and put into practice water efficient devices in an endeavour to conserve water at all times.

6. The Licensee shall install appropriate water measuring devices to measure the amount of water abstracted. The Licensee shall ensure that all measuring devices are properly maintained and in good working order and must be easily accessible. This shall include a programme of checking, calibration, and/ or renewal of measuring devices. All water taken from the resource shall be measured, recorded and reported as follows:

   6.1 The daily quantity of water taken must be metered or gauged and the total recorded at the last day of each month;

   6.2 The Licensee shall keep record of all water taken and a copy of the records shall be forwarded to the Provincial Head on or before 25 January and 25 July of each year.

7. No water taken may be used for purposes other than intended in this licence, without written approval by the Provincial Head or his/her delegated nominee.

8. Notices prohibiting unauthorised persons from entering the certain areas, as well as internationally acceptable signs indicating the risks involved in case of an unauthorised entry must be displayed along the boundary fence of these areas.

9. The Licensee shall establish a programme of formal Information Management System, which maintains a database on water supply, distribution and delivery infrastructure.

10. The Licensee shall establish and implement a continual process of raising awareness amongst itself, its workers and stakeholders with respect to Water Conservation and Water Demand Management initiatives.

ANNEXURE III

Section 21 (b) of the Act: Storing of water

1. STORING OF WATER

1.1 The licence authorises Eskom Holdings SOC Ltd: Kendal Power Station the storage of water per annum as indicated in Table 3

Table 3: Section 21 (b) Water Use:

Use of water	Maximum per annum (m^3)	Property Description	Coordinates
Three 3 dams (Dam2, 3 and 4) will be constructed around the ADF to collect water running off of the ADF rehabilitated areas. Should the water in the dams meet the discharge water quality standards, it could be released. If not, these dams will act as dirty water facilities, and the water in them will be irrigated back onto the rehabilitated areas of the ADF, or utilized in the station water balance if possible.	Capacity: 257 000m^3	Portion 43 of farm Schoongezicht	Dam 2: S 26°05'15.3" E 28°55'43.3"
	Capacity: 76 000 m^3	Portion 17 of farm Leeuwfontein	Dam 3 S 26°06'59.1" E 28°56'59.3"
	Capacity: 36 000 m^3	Portion 39 of farm Schoongezicht	Dam 4 S 26°5'45.98" E28°57'12.12"

1.2 The Licensee must obtain any proprietary rights or servitudes at their own cost.

1.3 The Licensee is not exempted from compliance with any applicable Dam Safety Regulations.

2. MONITORING REQUIREMENTS

2.1 The Licensee shall monitor the quantity of water transferred to and from each of the dams set out in Condition 1 on a daily basis and submit this to the Provincial Director bi-annually.

2.2 The Licensee shall use this information to compile a water balance to manage the use of water optimally.

2.3 The Licensee shall provide information on the method on the flow measurement within one year from the date of issuing the licence.

2.4 All flow gauging devices as provided in Condition 2.1 shall be maintained in a sound state of repair.

2.5 All flow gauging devices shall be calibrated by flow balancing by a competent and capable person, at intervals not exceeding one year.

2.6 The installation of flow meters shall comply with the specifications of the manufacturer with regard to distance from obstructions in the pipeline upstream and downstream of the meter to ensure accurate measurements.

2.7 Records confirming proof of the calibration must be kept and made available to the Provincial Director upon request.

3. DAM SAFETY REQUIREMENTS:

3.1 The raising of any dam wall, operation, and maintenance of the Kendal Power Station: Continuous Ash Disposal Facility Dams which is classified as dams with a safety risk, shall be carried out under supervision of a Professional Civil Engineer, registered under the Engineering Profession of South Africa Act, 1990 (Act 114 of 1990).

3.2 The Operating Manual of the dam facilities shall include a water management plan that describes capacity and operating methods for the components of the water management system such as the minimum freeboard.

3.3 The Licensee shall manage and operate the facility in accordance with the design plans and specifications. Notwithstanding these specifications, the operator of the facility should advise the professional person on any circumstances or aspect of the facility that, according to his operating experience, might either endanger the integrity of the dam facility or present a risk to the public or the environment.

3.4 Increased runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that stormwater does not lead to bank instability and excessive levels of silt entering the watercourse.

3.5 Soils that have become compacted through the activities during the raising of the dam wall must be loosened to an appropriate depth to allow seed germination.

3.6 All dam facilities shall be audited on an annual basis in line with other auditing requirements of this licence.

APPENDIX IV

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. CONSTRUCTION, OPERATION AND MAINTENANCE

1.1 The licence authorises Section 21 (c) and (i) water use activities as indicated in Table 4 and in the water use licence application Reports submitted to the Department:

Table 4: Section 21 (c) & (i) water use activities:

Use of water	Title Deeds	Property	Coordinates
The following activities within or near Wetlands created by unnamed tributary of Wilge River or streams will be undertaken: □□Stream diversion (North of ADF) □□Lowering of water level (farm dam) □□Any facilities placed on top of, or within 500 m from a wetland; ADF extension, E-dump, Dam 1, Dam 2, Dam3, Dam 4 and Dam 5	T12144/1991	Portion 39 of farm Schoongezicht	ADF extension S 26°05'33.1" E 28°56'24.06"
	T16930/2008	Portion 43 of farm Schoongezicht	Dam 1 S 26°05'7.2 E 28°55'41.9
			Dam 2 S 26°05'15.3 E 28°55'43.3
	T46829/1988	Portion 17 of farm Leeuwfontein	Dam 3 S 26°06'59.1 E 28°56'59.3
	T12144/1991	Portion 39 of farm Schoongezicht	Dam 4 S 26° 5'45.98" E28°57'12.12"
			Dam 5 S 26°05'34.9 E 28°56'59.4
			E-Dump S 26°05'12.0 E 28°57'31.6
	T16930/2008	Portion 43 of farm Schoongezicht	Lowering of Farm Dam wall S 26° 6'21.80"E 28°56'5.62"E 26° 5'41.16"S E 28°55'50.68"E
	T12144/1991	Portion 39 of farm Schoongezicht	Stream diversion north of ADF S 26°04'56.3 E 28°55'44.9
	T16930/2008	Portion 25 of farm Schoongezicht	S 26°05'36.2 E 28°57'11.9

	T16930/2008	Portion 27 of farm Schoongezicht	
	T16930/2008	Portion 43 of farm Schoongezicht	

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 Department, specifically:

1.2.1.1 Eskom Holdings SOC Ltd Kendal Power Station Water Use Licence Application for The Proposed Continuous Ash Disposal Facility Project – Compiled by Zitholele Consulting (Pty) Ltd, dated 11 September 2014;
1.2.1.2 Wetland Report – Compiled by Wetland Consulting Services (Pty) Ltd, dated June;
1.2.1.3 Hydrogeology Report – Compiled by Golder Associates Africa (Pty) Ltd, dated May 2014;
1.2.1.4 Surface and Groundwater Monitoring Report – Compiled by GHT Consulting Scientists (Pty) Ltd, dated June 2014;
1.2.1.5 Engineering Design Report – Compiled by N Rajasakran, dated September 2014

1.2.2 Conditions of this licence and any other written direction issued by the Provincial Head in relation to this licence.

1.3 No activity must take place within the 1:100 year flood line or the delineated riparian habitat, whichever is the greatest, or within 500 m radius from the boundary of any wetland unless authorised by this licence.

1.4 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.

1.5 A copy of the water use licence and Reports set out under condition 1.2 must be on site during construction.

1.6 A suitably qualified person(s), appointed by the Licensee, and approved in writing by the Provincial 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 and the conditions of this licence.

2. FURTHER STUDIES AND INFORMATION REQUIREMENTS

2.1. For water use activities in Table 2:
2.1.1 Work method statements, site plan(s) and detailed design drawings for the construction of all infrastructures of impeding and/or diverting flow of watercourses as well as alterations to watercourse(s) on the properties must be submitted to the Provincial Head for a written approval before construction and implemented as directed.
The foregoing must indicate the regulated activities, marking the limits of disturbance in relation to the impacted watercourse(s); morphology of the watercourse(s); site specific impacts; and environmental management, particularly erosion and sediment, controls and measures;

2.1.2 No fundamental alterations of the work method statements, site plan(s) and drawings are allowed, unless a modification is requested and granted by the Provincial Head in writing;

2.1.3 No site activities must occur beyond the proposed site location of the erosion and sedimentation controls and marked limits of disturbance; and

2.1.4 Revised master plan must be submitted to the Provincial Head before the commencement of the activities incorporating the following: the 1:100 year floodline, riparian zones, buffer zones, all affected water courses, wetlands, borrow-pits, bridges and stormwater infrastructure.

2.2 An Environmental Management Plan (EMP) and rehabilitation plan for the decommissioning of any of the water use activities listed in Table 3 must be submitted five (5) years before commencing with closure to the Provincial Head for a written approval.

3. PROTECTIVE MEASURES

3.1 Stormwater Management

3.1.1. 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 and must include but are not limited to the following:

3.1.1.1. Increased runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that stormwater does not lead to bank instability and excessive levels of silt entering the watercourse(s);

3.1.1.2. Where the stormwater enters the river systems, sediment and debris trapping, as well as energy dissipation control structures must be put in place.

3.1.1.3. Stormwater must be diverted from activities such as construction works and roads must be managed in such a manner as to disperse runoff and to prevent the concentration of stormwater flow;

3.1.1.4. The velocity of stormwater discharges must be attenuated and the banks of the watercourses protected;

3.1.1.5. Stormwater leaving the Licensee's premises must in no way be contaminated by any substance, whether such substance is a solid, liquid, vapour or gas or a combination thereof which is produced, used, stored, dumped or spilled on the premises;

3.1.1.6. Infiltration down the verges of the roads rather than surface runoff must be encouraged.

3.2 Structures, Construction Plant and Materials

3.2.1. Necessary erosion prevention measures must be employed to ensure the sustainability of all structures

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. Structures must not be damaged by floods exceeding the magnitude of floods occurring on average once in every 100 years.

3.2.4. Structures must be non-erosive, structurally stable and must not induce any flooding or safety hazard.

3.2.5. 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.

3.2.6. The construction camp must be located outside the extent of the watercourse(s) and must be recovered and removed one (1) month after construction has been completed.

3.2.7. All areas affected by construction shall be rehabilitated upon completion of the construction phase of the development. Areas shall be reseeded with indigenous vegetation species as required, and the use of seed nets is recommended to prevent erosion.

3.2.8. During construction phase no vehicles shall be allowed to indiscriminately drive through any wetland areas.

3.3. Water Quality

3.3.1 The in-stream water quality must be analysed on a monthly basis at the monitoring points for both upstream and downstream of the river diversion for the following variables: pH, Electrical conductivity (mS/m), suspended solids (mg/l), and total dissolved solids (mg/l).

3.3.2 Activities (such as maintenance) that lead to elevated levels of turbidity of any watercourse must be minimised.

3.3.3 The Licensee must ensure that the quantity of the water to downstream water users does not decrease because of the existence of the infrastructure.

3.4 Flow

3.4.1 The Licensee must determine flood lines (1:50 and 1:100 year) prior to construction to ensure risks are adequately managed. Flood lines must be clearly indicated on the site plan(s) and drawings along with all wetland boundaries.

3.4.2 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 Appropriate design and mitigation measures must be developed to minimise impacts on the natural flow regime of the watercourse i.e. through placement of structures/supports and to minimise turbulent flow in the watercourse.

3.4.4 Structures must be designed in a way to prevent the damming of stream/river water and not impact on the flow of the water, during the construction and operational phases of all developments.

3.4.5 The development may not impede natural drainage lines.

3.4.6 Bank filling must restore the channel shape and bed level to pre-construction condition.

3.4.7 Where flow in watercourse is permanent, the trench must be staged across part of the channel to maintain flows. Flows must not be stopped.

3.5 Riparian and In-stream Habitat (Vegetation and Morphology)

3.5.1 Activities (including spill clean-up) must start up-stream and proceed into a down-stream direction, so that the recovery processes can start immediately, without further disturbance from upstream works.

3.5.2 Operation and storage of equipment must not take place within the 1:100 year flood line or delineated riparian habitat, whichever is the greatest unless authorised in this licence.

3.5.3 Activities must not occur in sensitive riffle habitats.

3.5.4 Indigenous riparian vegetation, including dead trees, outside the limits of disturbance indicated in the site plans must not be removed from the area.

3.5.5 Alien and invader vegetation must not be allowed to further colonise the area, and all new alien vegetation recruitment must be sustainably eradicated or controlled.

3.5.6 Existing vegetation composition must be maintained or improved by maintaining the natural variability in flow fluctuations. Rehabilitated areas shall have vegetation basal cover of at least 15% at all times.

3.5.7 Recruitment and maintaining of a range of size classes of dominant riparian species in perennial channels must be stimulated.

3.5.8 Encroachment of additional exotic species and terrestrial species in riparian zones must be discouraged.

3.5.9 Accumulation of woody debris on terraces by periodic flooding must be discouraged.

3.5.10 Existing flood terraces and deposition of sediments on these terraces to ensure optimum growth, spread and recruitment of these species must be maintained.

3.5.11 All reasonable steps must be taken to minimise noise and mechanical vibrations in the vicinity of the watercourses.

3.5.12 Necessary erosion prevention mechanisms must be employed to ensure the sustainability of all structures and activities and to prevent in-stream sedimentation.

3.5.13 Soils that have become compacted through the water use activities must be loosened to an appropriate depth to allow seed germination.

3.5.14 Slope/bank stabilisation measures must be implemented with a 1:3 ratio or flatter and vegetated with indigenous vegetation immediately after the shaping.

3.5.15 Stockpiling of removed soil and sand must be stored outside of the 1:100 flood line or delineated riparian habitat, whichever is greater, to prevent being washed into the river and must be covered to prevent wind and rain erosion.

3.5.16 The indiscriminate use of machinery within the in-stream and riparian habitat will lead to compaction of soils and vegetation and must therefore be strictly controlled.

3.5.17 The overall macro-channel structures and mosaic of cobbles and gravels must be maintained by ensuring a balance (equilibrium) between sediment deposition and sediment conveyance maintained. A natural flooding and sedimentation regime must thus be ensured as far as reasonably possible.

3.5.18 Run-off from paved surfaces shall be slowed down by the strategic placement of berms.

3.5.19 Adequate measures must be implemented to prevent in-stream siltation during the construction phase.

3.5.20 Unless authorised by this licence, access roads must not encroach into the extent of the watercourse(s).

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.

4 REHABILITATION AND MANAGEMENT

4.1 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.

4.2 All disturbed areas must be re-vegetated with an indigenous seed mix in consultation with an indigenous plant expert, ensuring that during rehabilitation only indigenous shrubs, trees and grasses are used in restoring the biodiversity.

4.3 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.

4.4 Rehabilitation must be concurrent with construction.

4.5 Topsoil must be stripped and redistributed.

4.6 Compacted and disturbed areas must be shaped to natural forms and to follow the original contour. In general cut and fill slopes and other disturbed areas must not exceed 1:3 (v:h) ratio, it must be protected, vegetated, ripped and scarified parallel with the contour.

4.7 The Provincial Head must sign a release form indicating that rehabilitation was done satisfactory according to specifications as per this licence.

4.8 A photographic record must be kept as follows and submitted to the Provincial Head with reports as set out in Section 5:

4.8.1 Dated photographs of all the sites to be impacted before construction commences;
4.8.2 Dated photographs of all the sites during construction on a monthly basis; and
4.8.3 Dated photographs of all the sites after completion of construction, seasonally.

4.9 Rehabilitation structures must be inspected regularly for the accumulation of debris, blockages instabilities and erosion with concomitant remedial and maintenance actions.

4.10 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 Provincial Head for a written approval within one (1) month from the date of issuance of this licence.

4.11 A Wetland Management and Rehabilitation Plan must be compiled by a wetland specialist where wetlands are affected and submitted to the Provincial Head for a written approval.

4.12 Wetland crossing(s) must be visited by a wetland specialist prior to construction to determine baseline conditions. This shall be repeated during and after rehabilitation measures have been implemented to assess the success of rehabilitation and erosion control measures.

5. MONITORING AND REPORTING

5.1. The Provincial Head must be notified in writing one (1) week prior to commencement of the licensed activities and again upon completion of the activities.

5.2 A comprehensive and appropriate environmental assessment and monitoring programme (including bio-monitoring) to determine the impact, change, deterioration and improvement of the aquatic system associated with the activities listed under condition 1.1 (Appendix II) as well as compliance to these water use licence conditions must be developed and submitted to the Provincial Head for a written approval before commencement and must subsequently be implemented as directed.

The monitoring programme shall be compared against the Recommended Ecological Class (REC) of D for the road construction.

5.3 Six (6) monthly monitoring reports must be submitted to the Provincial Head until otherwise agreed in writing with the Provincial Head.

5.4 A qualified and responsible scientist must be retained by the Licensee who must give effect to various licence conditions and to ensure compliance thereof pertaining to all activities of impeding and/or diverting flow of watercourses as well as alterations to watercourses on the properties as set out in condition 1.1.

5.5 The Licensee must conduct annual internal audit on compliance with the conditions this licence. A report on the audit must be submitted to the Provincial Head within one month of the finalisation of the audit. A qualified independent auditor must undertake this audit.

5.6 The audit reports must include but are not limited to:

5.6.1 Reporting in respect of the monitoring programme referred to in condition 5.2;
5.6.2 A record of implementation of all mitigation measures including a record of corrective actions; and
5.6.3 Compensation measures for damage where mitigation measures have failed to adequately protect the in-stream and riparian habitat or any other characteristic of the watercourses.

5.7 The Licensee must apply in writing to the Provincial Head for alternative reporting arrangements for which written approval must be provided.

5.8 An Environmental Management/Monitoring Committee (EMC) must be established consisting of, but not limited to, representatives of the Licensee, the Responsible Person(s) for ensuring compliance with this licence, the Department of Water and Sanitation , the relevant Department of Environmental Affairs, the Department of Minerals and Resources, and other stakeholders.

5.9 The EMC must in addition to monitoring compliance with the conditions of the Environmental Management Programme Report, monitor for the duration of its establishment compliance with the conditions of this water use licence.

5.10 A wetland specialist must be appointed to monitor the compliance to the wetland management and rehabilitation plan and conditions in this licence pertaining to impacts on wetlands and provide specialist advice for corrective actions and compile audit reports which must be submitted to the Provincial Head.

6. OTHER WATER USERS

6.1 The Licensee must attempt to prevent adverse effect 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.

7. POLLUTION PREVENTION, INCIDENTS AND MALFUNCTIONS

7.1 Pollution incidents shall be dealt with in accordance with the National Water Act (Act 36 of 1998)

7.2 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 Provincial Head.

7.3 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 Provincial Head within fourteen (14) days of receipt of a written request by the Department for such records.

7.4 The Licensee must keep an incident report and complaints register, which must be made available to any external auditors and the Department.

8. BUDGETARY PROVISIONS

8.1 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.

8.2 The Provincial Head may at any stage of the process request proof of budgetary provisions for rehabilitation and closure of project.

APPENDIX V

Section 21 (e) of the Act: Engaging in a controlled activity; irrigation of any land with waste or water containing waste

1. QUANTITY OF WATER CONTAINING WASTE FOR IRRIGATION

1.1 The licence authorises Eskom Holdings SOC Ltd: Kendal Power Station to engage in a controlled activity as indicated in Table 5

Table 5: Section 21 (e) Water Use:

Use of water	Maximum per annum (m^3)	Property Description	Coordinates
Water that run off of the rehabilitated areas of the ADF will be collected in Dams 2, 3 and 4 and will be irrigated back onto the rehabilitated areas of the ADF from Dams 2, 3 and 4, if they do not meet the discharge water quality standards.	720 968	Portion 25, 27 & 43 of farm Schoongezicht	S 26°05'12.7 E 28°55'49.9
		Portion 39 of farm Schoongezicht	S 26°06'33.8 E 28°56'17
		Portion 5 of Farm Leeuwfontein	S 26° 05' 46.5 E 28° 56' 52.9

1.2. The quantity of wastewater authorised to be irrigated in terms of this licence must not be exceeded.

2. QUALITY OF WATER CONTAINING WASTE

2.1 The effluent to be used for irrigation must meet the General Effluent discharge limits.

3. PIPELINES

3.1 The pipelines used for the conveyance of waste shall be painted in a conspicuous colour or manufactured of a coloured material distinctly different from the colour of the pipelines in which drinking water is flowing to avoid the possibility of any cross-connections of the different pipelines.

3.2 All stop-valves and taps on the pipelines conveying the effluent shall be of a type that can be opened and closed by means of a loose wrench. This wrench shall be in the safekeeping of a responsible member of the staff to prevent unauthorised use thereof.

3.3 Notices manufactured of a durable weather proof material warning against the use of water containing waste for drinking and washing purposes shall be displayed at prominent places where the waste is being reused and at all taps. Such notices shall be worded in the official languages applicable in the area.

4. MONITORING

4.1. The quantity of water containing waste to be used for irrigation shall be metered and recorded daily.

4.2 Monitoring for the quantity of the water containing waste for irrigation shall be done at the point where the effluent is piped into the irrigation dam.

4.3 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 (2) years. Calibration certificates shall be available for inspection by the Provincial Head or his/her representative upon request.

4.4 The monitoring point/s shall not be changed without prior notification to and written approval by the Provincial Head.

4.5 A monitoring program to determine compliance with the ground water quality reserve on the property/properties must be designed in consultation with the affected parties.

5. METHODS OF ANALYSIS

5.1 Analyses shall be carried out in accordance with methods prescribed by and obtainable from the South African Bureau of Standards (SABS), in terms of the Standards Act, Act 30 of 1982.

5.2 The methods of analysis shall not be changed without prior notification to and written approval by the Provincial Head.

6. GENERAL IRRIGATION PRACTICES

6.1 Irrigation shall be practised in accordance with the guidelines prescribed in the document titled "*Guide: Permissible Utilisation and Disposal of Treated Sewage Effluent*", issued by the former Department of Health under reference 11/2/5/3 and dated 30 May 1978, or in accordance with any relevant regulations promulgated under section 26 of the Act.

6.2. Irrigation with waste shall be practised in a systematic manner and precautions shall be taken so as to prevent -

6.2.1 Water logging and pooling of waste in any location
6.2.2 Pollution of underground water or surface water due to seepage or otherwise
6.2.3 Fly breeding, public health hazard, odour or secondary pollution
6.2.4 Runoff from the irrigation area because of wet weather or any other conditions whatsoever and
6.2.5 The site of the irrigation area shall be adequately fenced to prevent the entry of animals and unauthorised persons.

6.3 Notices manufactured of durable weather-proof material prohibiting unauthorised entry and warning against the use of water containing waste for drinking and washing purposes shall be displayed at prominent places along the fence and at entrance gates. Such notices shall be worded in the official languages applicable in the area.

APPENDIX III

Section 21(g) of the act: disposing of waste in a manner which may detrimentally impact on a water resource

1. CONSTRUCTION AND OPERATION

1.1 The Licensee shall carry out and complete all the activities, including the construction and operation of the facilities indicated in Table 6, according to the Report and according to the final plans submitted with the Integrated Water Use Licence Application as approved by the Provincial Head:

Table 6: Volumes of waste and water containing waste to be disposed at the waste disposal facilities

Water use(s)	Purpose	Capacity/ Volume (m^3, tonnes and/or m^3/annum)	Property Description
All facilities which contain "waste" or waste water. These include: ADF extension, E-dump, Dam 1, Dam 2, Dam 3, Dam 4, Dam 5, Coal Stock Yard (CSY) which include the attenuation basin, Dust suppression from Dam5	Volume: 6 200 000 m^3/a	ADF extension: Portion 5 of farm Leeuwfontein Portions 25, 27, 39 and 43 of farm Schoongezicht 218	S 26°05'33.1" E 28°56'24.06"
	Volume: 2 743 146 m^3/a	(CSY attenuation dam): Portion 39 of farm Schoongezicht	S 26° 06' 09.4" E 28 ° 58' 36.5" S 26° 06' 11.07" E 28° 58' 36.6" S 26° 06' 09.4" E 28° 58' 37.6" S 26° 06' 11.3" E 28° 58' 38.1"
	Volume: 174 000 m^3/a **Capacity = 120 000 m^3**	Dam 1 Portion 43 of farm Schoongezicht	S 26°05'7.2 E 28°55'41.9
	Volume: 553 000 m^3/a **Capacity = 257 000 m^3**	Dam 2 Portion 43 of farm Schoongezicht	S 26°05'15.3" E 28°55'43.3"
	Volume: 170 000 m^3/a **Capacity = 76 000 m^3**	Dam 3 Portion 17 of farm Leeuwfontein	S 26°06'59.1" E 28°56'59.3"

	Volume: 71 000 m^3/a **Capacity = 36 000 m^3**	Dam 4 Portion 39 of farm Schoongezicht	S 26° 5'45.98" E28°57'12.12"
	Volume: 2 766 105 m^3/a **Capacity = 89 000 m^3**	Dam 5 Portion 39 of farm Schoongezicht	S 26°05'34.9 E 28°56'59.4
	Volume: 6 470 929 m^3/a Capacity: 190 000 m^3	E-Dump Portion 39 of farm Schoongezicht	S 26°05'12.0 E 28°57'31.6
	Volume: 2 743 146 m^3/a	Dust suppression Portion 5 of farm Leeuwfontein Portions 25, 27, 39 and 43 of farm Schoongezicht 218	S 26°05'33.1" E 28°56'24.06"

1.2 The construction of the waste containment facilities listed in Table 6 must be carried out under the supervision of a professional Civil Engineer, registered under the Engineering Profession of South Africa Act, 1990 (Act 114 of 1990), as approved by the designer.

1.3 Within thirty (30) days after the completion of the activities referred here in accordance with the relevant provisions of this licence, the Licensee shall in writing, under reference 27/2/2/B520/13/9, inform the Provincial Head thereof. This shall be accompanied by a signature of approval from the designer referred to above that the construction was done according to the design plans referred to in the Report.

1.4 The Licensee must ensure that the disposal of the waste or water containing waste and the operation and maintenance of the system are done according to the provisions in the Report.

1.5 The Licensee shall as well submit a set of as-built drawings to the Provincial Head after the completion of the waste facilities listed in Table 7.

1.6 The waste facilities listed in Table 6 shall be operated and maintained to have a minimum freeboard of 0.8 metres above full supply level and all other water systems related thereto shall be operated in such a manner that it is at all times capable of handling the 1:50 year flood-event on top of its mean operating level.

1.7 The Licensee shall use acknowledged methods for sampling and the date, time and sampler must be indicated for each sample.

1.8 The Geo-membrane shall comply with SANS 1526 and GRI GM13.

1.9 The Pollution Control Dam protection layer of sand on the floor and geo-textile on the wall area shall be removed out as to reinstate the composite effect of the Barrier system.

.

2. STORAGE OF WATER CONTAINING WASTE

2.1 The Licensee is authorised to suppress dust on haul roads with a volume of water containing waste, not exceeding quantities given in Table 6.

3. MONITORING

3.1 The Licensee shall establish a groundwater monitoring plan which will include monitoring boreholes upstream of the activity, at the point of the activity and downstream of the activity. All boreholes used for the hydro-census should form part of the monitoring plan. This must submitted to the Provincial Head within one year of the date of issuance.

3.2 The date, time and monitoring points in respect of each sample taken shall be recorded together with the results of the analysis.

3.3 The Licensee shall use acknowledged methods for sampling and the date, time and sampler must be indicated for each sample.

3.4 Monitoring points shall not be changed prior to notification to and written approval by the Provincial Head.

3.5 Water quality tests to be performed on the monitoring boreholes on a quarterly basis in order to determine the risks to the receiving environment. The data gathered in the investigation must be reported annually to the Provincial Head. If any high water quality levels as specified is exceeded, the Licensee must institute an investigation to determine the cause of pollution.

3.6 Analysis shall be carried out in accordance with methods prescribed by and obtainable from the South African Bureau of Standards (SABS), in terms of the Standards Act, 1982 (Act 30 of 1982).

3.7 The methods of analysis shall not be changed without prior notification to and written approval by the Minister.

3.8 Water quality testing to be performed on the water containing waste containment facilities, to be done on a quarterly basis in order to determine the risks to the receiving environment. The data gathered in the investigation must be reported annually to the Provincial Head. If any concentrations levels as specified above are exceeded, the Licensee must institute an investigation to determine the cause of pollution.

4. INTEGRATED WATER AND WASTE MANAGEMENT

4.1 The Licensee must establish an *Integrated Water and Waste Management Plan (IWWMP),* which must together with the *Rehabilitation Strategy* and *Implementation Programme (RSIP),* be submitted to the Provincial Head: Mpumalanga for approval within one (1) year from the date of issuance of this licence.

4.2 The Licensee shall undertake geochemical assessment on all ash deposit which shall together with the IWWMP be submitted to the Provincial Head: Mpumalanga within a year after the issuance of the licence.

4.3 The IWWMP and RSIP shall thereafter be updated and submitted to the Provincial Head: Mpumalanga for approval, annually.

4.4 The Licensee must, at least 180 days prior to the intended closure of any facility, or any portion thereof, notify the Provincial Head: Mpumalanga of such intention and submit any final amendments to the IWWMP and RSIP as well as a final *Closure Plan,* for approval.

4.5 The Licensee shall make full financial provision for all investigations, designs, construction, operation and maintenance for a water treatment plant should it become a requirement as a long-term water management strategy.

5. REPORTING

5.1 The Licensee shall update the water balance annually and calculate the loads of waste emanating from the activities. The Licensee shall determine the contribution of their activities to the mass balance for the water resource and must furthermore co-operate with other water users in the catchment to determine the mass balance for the water resource reserve compliance point.

5.2 The Licensee shall submit the results of analysis for the monitoring requirements to the Provincial Head on a quarterly basis under Reference number 27/2/2/B520/13/9.

6. STORMWATER MANAGEMENT

6.1 Stormwater leaving the Licensee's premises shall in no way be contaminated by any substance, whether such substance is a solid, liquid, vapour or gas or a combination thereof which is produced, used, stored, dumped or spilled on the premises.

6.2 Increase 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 stream.

6.3 Stormwater shall be diverted from the mining area complex site and roads and shall be managed in such a manner as to disperse runoff and concentrating the storm-water flow.

6.4 Where necessary works must be constructed to attenuate the velocity of any storm-water discharge and to protect the banks of the affected watercourses.

6.5 Stormwater control works must be constructed, operated and maintained in a sustainable manner throughout the impacted area.

6.6 All stormwater that would naturally run across the pollution areas shall be diverted via channels and trapezoidal drains designed to contain the 1:50 year flood.

6.7 The polluted stormwater captured in the storm water control dams shall be pumped to the process water treatment plant for reuse and recycling.

7. PLANT AREAS AND CONVEYANCES

7.1 Pollution caused by spills from the conveyances must be prevented through proper maintenance and effective protective measures especially near all stream crossings.

7.2 All reagent storage tanks and reaction units must be supplied with a bunded area built to the capacity of the facility and provided with sumps and pumps to return the spilled material back into the system. The system shall be maintained in a state of good repair and standby pumps must be provided.

7.3 Any hazardous substances must be handled according to the relevant legislation relating to the transport, storage and use of the substance.

7.4 Any access roads or temporary crossings must be:

7.4.1 Non-erosive, structurally stable and shall not induce any flooding or safety hazard; and
7.4.2 Be repaired immediately to prevent further damage.

8. ACCESS CONTROL

8.1 Strict access procedures must be followed in order to gain access to the property. Access to the Dirty Water management Facilities (all dams) must be limited to authorized employees of the Licensee and their Contractors only.

8.2 Notices prohibiting unauthorized persons from entering the areas referred to in condition 9.1, as well as internationally acceptable signs indicating the risks involved in case of an unauthorized entry must be displayed along the boundary fence of these areas.

9. CONTINGENCIES

9.1 Accurate and up-to-date records shall be kept of all system malfunctions resulting in non-compliance with the requirements of this licence. The records shall be available for inspection by the Provincial Head: Mpumalanga upon request. Such malfunctions shall be tabulated under the following headings with a full explanation of all the contributory circumstances:

9.1.1 Operating errors;
9.1.2 Mechanical failures (including design, installation or maintenance);
9.1.3 Environmental factors (e.g. flood);
9.1.4 Loss of supply services (e.g. power failure); and
9.1.5 Other causes.

9.2 The Licensee must, within 24 hours, notify the Provincial Head: Mpumalanga of the occurrence or potential occurrence of any incident which has the potential to cause, or has caused water pollution, pollution of the environment, health risks or which is a contravention of the licence conditions.

9.3 The Licensee must, within 14 days, or a shorter period of time, as specified by the Provincial Head: Mpumalanga, from the occurrence or detection of any incident referred above, submit an action plan, which must include a detailed time schedule, to the satisfaction of the Provincial Head of measures taken to: –

9.3.1 Correct the impacts resulting from the incident;
9.3.2 Prevent the incident from causing any further impacts; and
9.3.2 Prevent a recurrence of a similar incident.

10. AUDITING

10.1 The Licensee shall conduct an annual internal audit on compliance with the conditions of this licence. A report on the audit shall be submitted to the Provincial Head: Mpumalanga within one month of finalisation of the audit. The report and shall be made available to an external auditor should the need arise. The first audit must be conducted within 3 (three) months of the date this licence was issued and a report on the audit shall be submitted to the Provincial Head within one month of finalisation of the report.

10.2 The Licensee shall appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence.

10.3 The first audit must be conducted within Three (3) months of the date this licence and a report on the audit shall be submitted to the Provincial Head: Mpumalanga within one(1) month of finalisation of the report.

12. SUMMARY OF SUGGESTED SPECIAL CONDITIONS

12.1 A geophysics study should precede the seven (7) pairs of additional monitoring boreholes that have been proposed; this will ensure that the boreholes are suitably and safely sited.

12.2 Flow metres must be installed on the boreholes in order to monitor the intended abstraction from the aquifer; this will ensure that quantities of groundwater abstracted do not exceed the licensed amount. Readings on each flow metre must be taken on a monthly basis.

12.3 Should the monitoring data prove that the proposed activity is impacting on the private user's boreholes, the applicant must provide alternative water supply to these affected individuals. This response will be essential in the event that the water quality in the private user's boreholes is affected to such a degree that it is rendered unfit for its current application.

12.4 Mining infrastructure such as Coal Stock Yard, the two 2 proposed PCDs and the proposed continuous Ash Disposal Facility should not be placed on major fault lines or dykes, as well as any surface water resources including wetlands, streams and springs.L.

12.5 Pollution Control Dams should be properly lined with an impermeable HDPE layer to prevent seepage that could lead to groundwater contamination.

12.6 Master Plan to be updated and to be submitted to Provincial Head for approval. All infrastructure, watercourses, diversions, ash facility, farm dam, buffers, circulation, watercourse crossings, topsoil storage areas, construction camps to be shown.

12.7 Rehabilitation plan to be drawn by a landscape architect or other professional wetland expert and submitted to Provincial Head for approval that will inter alia include all wetlands and rivers impacted upon. With the diversion and lowering of the farm dam wall the emphasis must be to re-create the same permanent stream, dam/pools and wetland conditions in the affected stream in order for the Cape clawless otter, serval and other species to survive and have permanent water. Decant points/ open voids must be shown in relation to dam 1:100 year flood lines. The rehabilitation Plan must indicate what areas will be managed as no-go areas to protect fauna and flora.

12.8 Plant species Plans must be drawn up by a landscape architect, river ecologist, botanist, wetland specialist or combination of them as part of rehabilitation.

12.9 The newly created stream/wetland diversion must mimic the pre- diversion natural conditions and vegetation and enhanced biodiversity. Same materials and vegetation to be used. Designs to be submitted three (3) months after issuance of licence to enhance biodiversity like the creation of permanent water flows, permanent pools and discharge of ecological releases for the cape otter.

12.10 A wetland expert proposed 100 m stream diversion buffer must be implemented for ecological functioning and migration between the ash disposal facility and streams/wetlands. To be indicated on Master Plan and Rehabilitation Plan and submitted to the Provincial Head for approval before contraction starts.

12.11 The application through the wetland expert is to determine sufficient permanent ecological flow releases to the two streams and wetlands submitted to DWS Provincial Head and RDM Office for approval before construction starts. This is for Cape clawless otter and serval survival.

12.12 Clean water drains and diversions to be constructed as natural as possible to resemble natural streams.

12.13 Leak detection system to be implemented and submitted for approval.

12.14 Flows from the ash disposal facility to be measured.

12.15 Water loses from surface and sub- surface flow to the natural system must be modelled. Ecological flow releases must be submitted to Provincial Head for approval before construction starts.

12.16 Sensitive habitats must be kept as no- go areas. Plant and animal search and rescue must be implemented and monitored. Cape clawless otter and serval must be protected and reintroduced.

12.17 Ecological Management Class of rivers and wetlands must stay the same before and after. Special care must be taken with regards to managing sediment loads, erosion control and discharging ecological releases to maintain permanent water.

12.18 Diversions must be made as natural as possible via use of shaping to 1:3 or flatter, use of rock, rock mattresses, topsoil, grass and other vegetation. Harvest grass and wetland plants from surroundings.

12.19 Ash disposal facility side slopes to be vegetated and protected against erosion via geotextiles, rock or similar for aesthetics, to create habitat and for erosion control.

12.20 Rehabilitation of side slopes of ash facility must be concurrent with development of facility and no steeper than 1:5 as specifies. Side slopes must be protected against erosion, top soiled and re- vegetated as specified. Surrounding natural grass seeds to be harvested.

12.21 Cumulating impacts like dust, sediment load and erosion must be investigated further and reported to the Provincial Head within a year of licence being issued.

12.22 Dust and noise must be managed.

12.23 Sufficient topsoil must be stripped and stored correctly at designated areas.

12.24 Water quality and bio-monitoring must be on-going. Plan and programme to be detailed. Dust suppression and landscape rehabilitation must be implemented.

12.25 Stormwater Management Plan to be drawn up and submitted for approval.

12.26 Public participation and complaints register to be ongoing.

12.27 Specialist wetland studies to be implemented.

12.28 Environmental Authorization to be obtained and submitted to Provincial Head before construction starts.

12.29 Acceptance of proposal by Eskom to line their facilities within 4 years of issuance of Water Use Licences by the Department.

12.30 Construction and further development within the proposed waste disposal site must be carried out under the supervision of a registered Professional Engineer. Any development in the site must adhere to a Class C containment barrier design as described in Regulation 636, National Norms and Standards for Disposal of Waste to Landfill, dated 23 August 2013. **The design report, drawings and liner layers must be approved in writing by the Responsible Authority before construction may commence.**

12.31 The Licence Holder must ensure that Construction Quality Assurance (CQA) takes place during construction and geo-synthetic material must comply with relevant or standards which ensure equivalent performance. Details of quality assurance during construction must be supervised by a registered professional engineer.

12.32 After construction of the Site or further development within the Site, the Licence Holder shall notify the Responsible Authority thereof and the person referred to in condition 1. shall submit a certificate or alternatively a letter to the Responsible Authority that the construction of the Site or further development within the Site, as proposed by the Licence Holder and approved by the Responsible Authority, is in accordance with recognised civil engineering practice and the requirements in the licence, before disposal may commence on the Site. If the Responsible Authority is satisfied with the construction of the Site or any further development within the Site and has given written permission, the Licence Holder may use the site or any further development within the Site for the disposal of waste.

[END OF LICENCE]