

water affairs

Department: Water Affairs **REPUBLIC OF SOUTH AFRICA**

Private Bag X313, Pretoria 0001, 185 Schoeman Street, Sedibeng Building, Pretoria., Tel: 012 336 7500 Fax (012) 323 4472/ (012) 326 2715. www.dwa.gov.za

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

I, Trevor Balzer, in my capacity as Director-General (Acting) in the Department of Water Affairs acting under authority of the powers delegated to me by the Minister of Water and Environmental Affairs hereby authorise the following water uses in respect of this licence.

SIGNED: Jew berger DATE: 22/00 Jury

LICENCE NO: 04/B20G/CI/2246 FILE NO: 16/2/7/B200/C528

1. Licensee:

Postal Address:

Anglo American Inyosi Coal (Pty) Ltd: New Largo **Colliery R545 Provincial Road Re-alignment**

P.O BOX 61587 Marshalltown Johannesburg 2017

- 2. Water Uses
- 2.1 Section 21(c) of the Act:
- 2.2 Section 21(i) of the Act:

Impeding or diverting the flow of water in a watercourse; subject to the conditions set out in Appendices I, II and III.

Altering the bed, banks, course or characteristics of a watercourse; subject to the conditions set out in Appendices I, II and III.

B 04605

Property Name Title Deed Number Registered Property Owne			
rioperty name			
Remaining Extent Farm Honingkrantz 536 JR	T7182/2011	Anglo American Inyosi Coal (Pty) Ltd	
Portion 16 Farm Roodepoortje 326 JS	T25499/2003	Truter Boerdery Trust	
Portion 24 (Portion of Portion 1) Farm Roodepoortje 326 JS	T5940/2012	Anglo American Inyosi Coal (Pty) Ltd	
Portion 23 (Portion of Portion 1) Farm Roodepoortje 326 JS	T7182/2011	Anglo American Inyosi Coal (Pty) Ltd	
Portion 29 Farm Vlakfontein 569 JR	T115593/2004	JC Van Den Heever	
Portion 5 Farm Eenzaamheid 534 IR	T43927/2004	AC Van Niekerk	

3. Properties in respect of which the licence is issued

4. Licence and Review Period

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

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".

"Provincial Head" The Provincial Head" means the Regional Chief Director: Mpumalanga Region, Department of Water Affairs, Private Bag X11259, Nelspruit, 1200.

6. Description of the activity

The licence authorises Anglo American Inyosi Coal (Pty) Ltd water uses consisting of impeding or diverting the flow of water and altering the bed, banks, course or characteristics of an unnamed valley bottom wetland and unnamed seepage wetlands during the re-alignment of the R545 Provincial Road. The activity is located in catchment B20G within Olifants Water Management Area.

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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 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 the Association is compulsory. Rules, regulations and water management stipulation of such association must be adhered to.
- 6. While effect must be given to the Reserve as determined in terms of the Act, where a lower confidence determination of the Reserve has been used in issuance of this licence, the licence conditions may be amended shall a higher confidence reserve be conducted.
- 7. 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.
- 8. The licence and amendment of this licence are also subject to all the applicable procedural requirements and other provisions of the Act, as amended from time to time.
- 9. 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 within one month of the finalization of the audit.
- 10. The Licensee shall appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence.
- 11. Any incident that causes or may cause water pollution shall be reported to the Provincial Head or a designated representative within 24 hours.
- 12. If the water use described in this licence is not exercised within 3 years of the date of the licence, the authorization will be withdrawn. Upon commencement of the water use, the Licensee must inform the relevant Provincial Head in writing.

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- 13. The Licensee shall establish and implement a continual process of raising awareness amongst itself, its workers and stakeholders for the need for Water Conservation/Water Demand Management.
- 14. Notices prohibiting unauthorized persons from entering water use premises must be displayed.
- 15. The Department accepts no liability for any damage, loss or inconvenience, of whatever nature, suffered as a result of / amongst other things.
 - 15.1 Any force majeur event;
 - 15.2 Siltation of the river or dam basin; and
 - 15.3 Required Reserve releases.

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APPENDIX II

Section 21(c) of the Act: Impeding or diverting the flow of water in a watercourse

Section 21(i) of the Act: Altering the bed, banks, course or characteristic of a watercourse

- 1. This licence authorises
- 1.1 This licence authorises Anglo American Inyosi Coal (Pty) Ltd, to re-align of the R545 Provincial Road in terms of Section 21(c) and (i) water use activities as set out in Table 1.

Activity	Property	Name of	Coordinates
		Watercourse	
New road crossing on	<u>8</u>	х.	Start
watercourse (RCR1)			S 25°53'19.56"
2			E 28°59'20.07 ["]
			End
ж.			S25°53'19.73"
	-	=	E28°59'17.06"
New road crossing on			Start
watercourse (RCR2)			S 25°53'46.36"
			E 28°59'42.66 ["]
	Remaining Extent Farm	Unnamed valley	End
	Honingkrantz 536 JR	bottom wetland	S25°53'51.89"
			E28°59'45.22"
New road crossing on watercourse (RCR3)			Start
			S25º54'31.43"
			E29º00'05.71"
New road crossing on watercourse (RCR4)			End
			S25°54'31.75"
			E29°00'06.11"
			Start
			S25°55'41.65"
		÷	E29º00'00.87"
			End
			S25°54'44.41"
			E28°59'57.10"
New road crossing on watercourse (RCR5)	Portion 23 (Portion of Portion 1) Farm		Start

Table 1: Water Use Activities

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Activity	Property	Name of	Coordinates
12.5		Watercourse	
	Roodepoortje 326 JS		S25°56'25,22"
New road crossing on watercourse (RCR6a) New road crossing on watercourse (RCR6b)	Portion 24 (Portion of Portion 1) Farm Roodepoortje 326 JS		E28°59'01.32"
			End
			S25º57'17.18"
			E28°58'44.16"
			220 00 44.10
New road crossing on	Portion 16 Farm Roodepoortje 326 JS	Unnamed valley bottom wetland	Start
watercourse (RCR7)			S25°57'48.29"
		bottom wetland	E28°59'12.77"
			End
			S25°57'54.39"
			E28°59'20.19"
New road crossing on watercourse (RCR8)	Portion 19 Farm Vlakfontein 569 JR	Unnamed Seepage Wetland	Start
			S25°57'54.39"
			E28°59'20.19"
			End
			S25°58'46.60"
			E28°59'35.80"
New road crossing on	Portion 5 Farm Eenzaamheid 534 IR		Start
watercourse (RCR9)			S25°53'02.67"
		Ephemeral drainage line	E28°58'15.83"
			End
			S25°52'58.20"
			E28°58'36.63"
	Remaining Extent Farm Honingkrantz 536 JR		Start
			S25°53'30.18"
			E28°59'29.78"
			End
			S25°53'30.24"
			E28°59'33.33"

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:
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- 1.2.1.1. Water Use Licence Application dated 31 July 2012;
- 1.2.1.2. Wetland and River Crossing Report, dated July 2012;
- 1.2.1.3. Engineering Designs, compiled by Sesame Consulting Engineers dated March 2012;
- 1.2.1.4. Environmental Management Programme, compiled by Synergistics Environmental Services; and
- 1.2.1.5. Social and Labour Plans, compiled by Synergistics Environmental Services.
- 1.2.2. Conditions of this licence; and
- 1.2.3. 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 at all times.
- 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 1:
- 2.1.1. Work method statements, site plan(s) and detailed design drawings for the construction of all infrastructure impeding and/or diverting flow of watercourses as well as alterations to watercourse(s) on the property(ies) must be submitted to the Provincial Head for 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; and
- 2.1.3. No site activities must occur beyond the proposed site location of the erosion and sedimentation controls and marked limits of disturbance.
- 2.1.4. Revised master plan must be submitted to the Provincial Head before the commencement of the activity 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 and rehabilitation plan for the decommissioning of any of the water use activities listed in Table 1 must be submitted five (5) years before commencing with closure to the Provincial Head for written approval.
- 2.3 For all the activities listed under condition 1.1, Table 1, "as-built" plan(s) and engineering drawing(s) prepared by a registered professional engineer, must be submitted to the Provincial Head within six (6) months of completion of new activities and for existing water uses within six (6) months of the date of issuing of this licence. These plan(s) and drawing(s) must indicate the watercourse(s) including wetland boundaries and layout and structure location(s) of all infrastructure impeding and/or diverting flow of watercourses as well as alterations to watercourse(s) on the property(ies).

3. PROTECTIVE MEASURES

3.1 Stormwater Management

- 3.1.1. Storm water 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 storm water 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 shall be put in place.
- 3.1.1.3. Stormwater must be diverted from activities such as construction works, mining areas, and roads and must be managed in such a manner as to disperse runoff and to prevent the concentration of storm water flow;
- 3.1.1.4. The velocity of storm water 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. Drainage next to the construction works and mining area must be diverted away from the water course(s) to ensure that any contaminated runoff does not flow directly into the watercourse(s) as a storm water discharge;
- 3.1.1.7. Erosion down verges shall be minimised by including frequent discharge points with energy dissipaters before discharging stormwater into the adjacent grasslands;
- 3.1.1.8. Infiltration down the verges of the roads rather than surface runoff shall be encouraged;

3.2 Structures, Construction Plant and Materials

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

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- 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, plant and material stockpiles 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. During construction erosion berms shall be installed to prevent gully formation, according to the slope.
- 3.2.8. 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 seednets is recommended to prevent erosion.
- 3.2.9. During the construction phase no vehicles shall be allowed to indiscriminately drive through any wetland areas.

3.3 Water Quality

3.3.1 The Licensee shall sample the water quality weekly (during construction) and monthly (during operation) for the mentioned variables (Table 2) at monitoring points both upstream and downstream of the activities and report to the Provincial Head within thirty (30) days after the results of each sampling event is received:

Variable	Limit
Flow (ℓ/s)	Not applicable
Temperature (°C)	<10% variation
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 ₃ /ℓ)	<100

Table 2: Water quality parameters relevant for sampling.

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

- 3.3.2 Monitoring must continue for three (3) years after the cessation of the activities listed in condition 1.1 of this Appendix.
- 3.3.3 Monitoring must be undertaken as set out in section 5.
- 3.3.4 Activities that lead to elevated levels of turbidity, sedimentation and chemical changes of any watercourse(s) must be prevented, reduced, or otherwise remediated. 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 the Licensee must submit such to the Provincial 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.

- 3.3.5 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.
- 3.3.6 A qualified person must be appointed to assess the quality of water both upstream and downstream of the activities prior to commencement of construction.
- 3.3.7 Pollution of and disposal/spillage of any material into the watercourse must be prevented, reduced, or otherwise remediated through proper operation, maintenance and effective protective measures.
- 3.3.8 The possibility of spillages shall be catered for in the design of the roads.
- 3.3.9 Vehicles and other machinery must be serviced well above the 1:100 year flood line or delineated 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.
- 3.3.10 Any hazardous substances must be handled according to the relevant legislation relating to transport, storage and use of the substance.
- 3.3.11 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 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.
- 3.3.12 The Licensee must submit a plan to the Provincial Head within sixty (60) days after issuance of this licence on the strategic placement of bio-swale, bio-filters, silt, litter and hydrocarbon (oil) traps to minimise the risk of pollutants entering the natural drainage system of the area.

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 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 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 to 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.
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- 3.4.5 Without compromising the safety of structures, bridge designs shall aim towards the construction of as few as possible instream pillars, where the pillars that do occur instream shall have rounded edges to aid in the prevention of the build-up of debris.
- 3.4.6 The development may not impede natural drainage lines.
- 3.4.7 The diversion structures may not restrict river flows by reducing the overall river width or obstructing river flow.
- 3.4.8 Bank filling must restore the channel shape and bed level to pre-construction condition.
- 3.4.9 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 Instream 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 license.
- 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 The necessary erosion prevention mechanisms must be employed to ensure the sustainability of all structures and activities and to prevent instream 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.
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- Slope/bank stabilisation measures must be implemented with a 1:3 ratio or flatter and 3.5.14 vegetated with indigenous vegetation immediately after the shaping.
- Stockpiling of removed soil and sand must be stored outside of the 1:100 flood line or 3.5.15 delineated riparian habitat, whichever is the greater, to prevent being washed into the river and must be covered to prevent wind and rain erosion.
- The indiscriminate use of machinery within the instream and riparian habitat will lead to 3.5.16 compaction of soils and vegetation and must therefore be strictly controlled.
- The overall macro-channel structures and mosaic of cobbles and gravels must be maintained 3.5.17 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 As much indigenous vegetation growth as possible shall be promoted within the proposed development area in order to protect soil and to reduce the percentage of the surface area which is paved.
- 3.5.19 Run-off from paved surfaces shall be slowed down by the strategic placement of berms.
- Adequate measures must be implemented to prevent instream siltation during the 3.5.20 construction phase.
- 3.5.21 Unless authorised by this licence, access roads must not encroach into the extent of the watercourse(s).

3.6 Biota

- The Licensee must take all reasonable steps to allow movement of aquatic species, including 3.6.1 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 microorganisms 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.
- An active campaign for controlling invasive species must be implemented within disturbed 4.3 zones to ensure that it does not become a conduit for the propagation and spread of invasive exotic plants.
- 4.4 The Regional Head must check if the rehabilitation was done satisfactory.

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- 4.5 Rehabilitation must be concurrent with construction.
- 4.6 Topsoil must be stripped and redistributed.
- 4.7 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.
- 4.8 The Provincial Head must sign a release form indicating that rehabilitation was done satisfactory according to specifications as per this license.
- 4.9 A photographic record must be kept as follows and submitted with reports as set out in section 5:
- 4.9.1 Dated photographs of all the sites to be impacted before construction commences;
- 4.9.2 Dated photographs of all the sites during construction on a monthly basis; and
- 4.9.3 Dated photographs of all the sites after completion of construction, seasonally.
- 4.10 Rehabilitation structures must be inspected regularly for the accumulation of debris, blockages instabilities and erosion with concomitant remedial and maintenance actions.
- 4.11 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 written approval within one (1) month from the date of issuance of this licence.
- 4.12 A Wetland Management and Rehabilitation Plan must be compiled by a wetland specialist where wetlands are affected and submitted to the Provincial Head for written approval.
- 4.13 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 week prior to commencement of the licensed activity(ies) and again upon completion of the activity(ies).
- 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 as well as compliance to these water use licence conditions must be developed and submitted to the Provincial Head for 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 the various licence conditions and to ensure compliance thereof pertaining to all activities

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impeding and/or diverting flow of watercourses as well as alterations to watercourses on the property(ies) 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 Affairs, 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 license pertaining to impacts on wetlands and provide specialist advise 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 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.

7. POLLUTION PREVENTION, INCIDENTS AND MALFUNCTIONS

- 7.1 Pollution incidents shall be dealt with in accordance with the Act.
- 7.2 Any incident that may cause pollution of any water resource shall immediately be reported to the Provincial Head.
- 7.3 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 Provincial Head.
- 7.4 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

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

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

9. SITE SPECIFIC CONDITIONS

- 9.1 Alternative road alignments for an amended Mine Plan 7 must be addressed and submitted to the Department. The wetlands in the north east can be missed if the road is slightly moved to the west;
- 9.2 A typical master plan for a crossing must be submitted to the Department three (3) months after the issuance of the Licence indicating all temporary and permanent infrastructures.
- 9.3 Side slopes of inter alia culvert flanks, stormwater channels/ drains/ berms must be made 1:3 and the slopes must be protected, topsoiled and vegetated;
- 9.4 Topsoil must be separated from sub-soil and stockpiled separately;
- 9.5 Erosion must be strictly monitored after each rain even to determine damage to wetlands;
- 9.6 The ECO (Environmental Control Officer) must be involved during the actual crossing work and rehabilitation of the crossings;
- 9.7 The local realignment of the road route Option 1 must be submitted to the Department three (3) months after the issuance of the Licence;
- 9.8 The typical Drainage Master Plan submitted must be amended and then submitted to the Department after the issuance of the Licence to include box and pipe culverts depending on flow hydrology and animal migration requirements. The plans must be actual design drawing of a crossing/s;
- 9.9 The drainage/ crossing Master Plan (actual design drawing indicating temporary and permanent infrastructure, work areas, watercourses, buffers and boundaries of wetlands) must be submitted to the Department Provincial Head for approval before construction commences; and

Director-General

9.10 Anglo American Inyosi Coal (Pty) Ltd shall notify the DWA of the transfer of the road to the Mpumalanga Department of Public Works, Roads and Transport (DPWRT).

[END OF LICENCE] Anglo American Inyosi Coal (Pty) Ltd: New Largo Colliery R545 Provincial Road Re-alignment

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