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

Signed:...

Date: 17/05/11

Licence No.: 04/B20G/AGJ/809
File No.: 16/2/7/B100/C250

   Postal Address of applicant: Zibulo Colliery
   P. Box 399
   Ogies
   2230

2. Water Uses

2.1 Section 21 (a) of the Act: Taking water from a water resource subject to the conditions as set out in Appendices I and II;

2.2 Section 21 (g) of the Act: Disposing of waste in a manner which may detrimentally impact on a water resource, subject to the conditions as set out in Appendices I and III;

2.3 Section 21 (j) of the Act: Removing, discharging or disposing of water found underground, subject to the conditions set out in Appendices I and IV.

3. Property on which the use will be exercised

3.1 Section 21 (a) of the Act: Anglo Operations Ltd. Oogiesfontein 4 IS Potion 39.
3.2 Section 21 (g) of the Act: Anglo Operations Ltd. Oogiesfontein 4 IS Potion 39.
3.3 Section 21 (j) of the Act: Anglo Operations Ltd. Oogiesfontein 4 IS Potion 39.

4. Registered owners of the Property

4.1 Anglo American Inyosi Coal (Pty) Ltd: Oogiesfontein 4 IS portion 39.

5. Licence and Review Period

5.1 This licence is valid for a period of fourteen (14) years from the date of issuance and it will be reviewed every two (2) years.
6. Definitions

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

"The Regional Head" means the Regional Head: Mpumalanga Region, Department of Water Affairs, Private Bag X 11259, Nelspruit, 1200.

"Report" refers to the report entitled Integrated Water Use License dated May 2009 for Anglo Coal Limited as compiled by Jones & Wagener for Zibulo Colliery as well as all other related documentations and communication (emails, letters, verbal, etc) thereto.

7. Description of the activities

Anglo American Inyosi Coal is in the process of expanding their mining operations at Klipspruit Opencast mine to include the Oogiesfontein opencast minpit (Zibulo Colliery) (2.03 km²). The opencast mining is intended to commence in the third quarter of 2009 and will augment the coal supply to the Klipspruit DMS Plant, situated at Klipspruit Opencast Mine. The Klipspruit DMS Plant is located to the west of the Oogiesfontein opencast.

The mining method implemented at the Opencast is strip mining and this method makes use of a series of trucks and shovels to extract the coal. A dragline is also be used in the stripping of overburden in order to expose the coal seam. The No 2 coal seam has been targeted for mining and the coal depths vary between 20 to 45 meters. The mined coal will be crushed at a crushing plant on site prior to transporting it to the Phola processing plant situated adjacent to Klipspruit Colliery. The production rate at Oogiesfontein will be an estimated 1 million tons per annum and the planned production life is 14 years.

The runoff of water from the workshops and offices, stockpiles areas will be collected in to storm water pollution control dams. The storm water pollution control dam has a total capacity of 9MI and will be lined with a 2mm thick HDPE liner. The majority of the water from pollution control dams will be used for dust suppression on the haul roads. Excess water will be pumped to the 41MI pollution control dam.

All clean water will be directed around the Oogiesfontein complex by a number of diversion berms. The workshop and office area is located along a watershed and therefore the volume of runoff towards this area is expected to be small.

Water make from the opencast workings will initially be pumped to the 41MI pollution control dam that is located immediately adjacent to the workshops and offices. As mining progresses, dirty water will be pumped to the 200MI pollution control dam located to the north east of the project area. The entire mentioned pollution control dam is to be equipped with a 2mm HDPE liner.

The pollution control dams will be located on the farms Oogiesfontein 41 IS portion 39. The water make from the opencast workings will be pumped initially to the 41 MI. Pollution control dam, located adjacent to the workshop and office complex and, as mining progress, eventually to the 200MI pollution control dam.

The dewatering will take place on the farm Oogiesfontein 41IS portion 39. As the opencast mining is located close to the watershed, it will be not be possible to sample water qualities upstream of the mining area; it is proposed to measure the impact on water quality at the unnamed tributary downstream of the mining area, by comparison with the background water quality.

The opencast mine is not located on any streams, and therefore, the only risk would be that of spillage or seepage to the environment.
APPENDIX I

General conditions for all water uses

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

4. If the property in respect of which this licence is issued is subdivided or consolidated, the Licensee must provide full details of all changes in respect of the properties to the Regional Head of the Department within 60 days of the said change taking place.

5. If a water user association is established in the area to manage the resource, membership of the Licensee to this association is compulsory.

6. The Licensee shall be responsible for any water use charges or levies imposed by a responsible authority.

7. While effect must be given to the Reserve as determined in terms of the Act, where a desktop determination of the Reserve has been used in issuance of a licence, when a comprehensive determination of the Reserve has finally been made; it shall be given effect to.

8. When compulsory licensing is implemented for the water resource in respect of which this licence was issued, the water use authorized in this licence could be subject to appropriate reduction.

9. The licence shall not be construed as exempting the Licensee from compliance with the provisions of any other applicable Act, Ordinance, Regulation or By-law.

10. The licence and amendment of this licence are also subject to all the applicable procedural requirements and other applicable provisions of the Act, as amended from time to time.

11. The Licensee shall conduct an annual internal audit on compliance with the conditions of licence. A report on the audit shall be submitted to the Regional Head within one month of the finalisation of the audit.

12. The Licensee shall appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence. The first audit must be conducted within 3 (three) months of the date this licence and a report on the audit shall be submitted to the Regional Head within one month of finalisation of the report.

13. Flow metering, recording and integrating devices shall be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than two years. Calibration certificates shall be available for inspection by the Regional Head or his representative upon request.

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

Specific Conditions

Section 21(a) of the Act: taking water from a water resource

1. This Licence authorizes the taking of a maximum quantity of 216 445 m³/a (two hundred and sixteen thousand, four hundred and forty five cubic metres per annum) from an opencast pit (Zibulo 20 ml dewatering dam) on portion RE/1 of the Farm Rietvlei for reuse in the mine.

2. The quantity of water authorised to be taken in terms of this licence may not be exceeded without prior authorisation by the Minister.

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 abovementioned 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 or apply technique for the efficient use of water containing waste, in an endeavour to conserve water at all times.

6. All water taken from the resource shall be measured 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; and

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

7. No water taken may be pumped, stored, diverted, or alienated for purposes other than intended in this licence, without written approval by the Responsible Authority.

8. The Licensee shall install and monitor appropriate water measuring devices to measure the amount of water abstracted, received and/or consumed, as applicable to the infrastructure.

9. 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.

10. The Department accepts no liability for any damage, loss or inconvenience, of whatever nature, suffered as a result of:

10.1 Shortage of water
10.2 Inundations or flood
10.3 Siltation of the resource; and
10.4 Required reserve releases.

11. 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.

12. The Licensee shall establish a programme of formal Information Management System, which maintains a database on water supply, distribution and delivery infrastructure.
13. The Licensee shall establish and implement a continual process of raising awareness amongst itself, its workers and stakeholders with respect to Water Conservation/Water Demand Management initiatives.
APPENDIX III

Specific Conditions

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 listed below in Table 1, according to the Report and according to the final plans submitted with the Integrated Water Use Licence Application as approved by the Regional Head: Mpumalanga.

Table 1: Geographical positions of all the waste water management facilities

<table>
<thead>
<tr>
<th>Facility</th>
<th>Farm Name</th>
<th>Geographic Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>41ML Pollution Control Dam</td>
<td>Oogiesfontein 41 IS Portion 39</td>
<td>S 26°02'22.6&quot;  E 29°02'23.7&quot;</td>
</tr>
<tr>
<td>9 ML Pollution Control Dam</td>
<td>Oogiesfontein 41 IS Portion 39</td>
<td>S 26°02'22.6&quot;  E 29°02'23.7&quot;</td>
</tr>
<tr>
<td>1 ML Pollution Control Dam</td>
<td>Oogiesfontein 41 IS Portion 39</td>
<td>S 26°02'22.6&quot;  E 29°02'23.7&quot;</td>
</tr>
</tbody>
</table>

1.2 The construction of the dams listed in Table 1 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 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 16/2/7/B100/C250, inform the Regional Head: Mpumalanga 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 water 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 Regional Head: Mpumalanga after the completion of the waste facilities listed in Table 1.

1.6 The waste facilities listed in Table 1 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 pollution control dam must be designed in such a manner that any spillage can be contained and reclaimed without any impact on the surrounding environment, a plan must be in place to stop overflowing in a dam in case of rainy seasons.

1.8 Geochemical assessment should be done on the discard material during the mining operation.

1.9 The Licensee shall at all times together with the conditions of this licence adhere to the Regulations on use of water for mining and related activities aimed at the protection of water resources (GN 704, 4 June 1999).
2. STORAGE OF WATER CONTAINING WASTE

2.1 The Licensee is authorised to dispose of a maximum quantity in cubic metres (m$^3$) of waste per month into the waste management facility on the farm described below in Table 2.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Volume in Cubic meters per annum (m$^3$/a)</th>
<th>Waste Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ML Pollution Control Dam 1</td>
<td>29930</td>
<td>mining waste</td>
</tr>
<tr>
<td>9 ML Pollution Control Dam 1</td>
<td>32120</td>
<td>Storm water</td>
</tr>
<tr>
<td>41 ML Pollution Control Dam 1</td>
<td>216445</td>
<td>Storm water, mining waste</td>
</tr>
</tbody>
</table>

3. QUALITY OF WASTE WATER TO BE DISPOSED

3.1 The quality of waste water disposed of into the dams specified below shall not exceed the following limits as specified in Table 3.

<table>
<thead>
<tr>
<th>Substance/Parameter</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>4.5-6.5</td>
</tr>
<tr>
<td>T Alkalinity (mg/l)</td>
<td>5-83</td>
</tr>
<tr>
<td>Aluminium (mg/l)</td>
<td>1-6</td>
</tr>
<tr>
<td>Calcium (mg/l)</td>
<td>17-400</td>
</tr>
<tr>
<td>Sulphate (mg/l)</td>
<td>20-1000</td>
</tr>
<tr>
<td>Total dissolved solids (mg/l)</td>
<td>140-2000</td>
</tr>
<tr>
<td>Magnesium (mg/l)</td>
<td>7-30</td>
</tr>
<tr>
<td>Potassium (mg/l)</td>
<td>4-20</td>
</tr>
<tr>
<td>Sodium (mg/l)</td>
<td>&lt;100</td>
</tr>
<tr>
<td>Lead</td>
<td>0.1-1</td>
</tr>
<tr>
<td>Manganese</td>
<td>0.1-1</td>
</tr>
<tr>
<td>Iron</td>
<td>&lt;0.1-1</td>
</tr>
<tr>
<td>Manganese</td>
<td>&lt;0.1-1</td>
</tr>
</tbody>
</table>

4. MONITORING

4.1 The Licensee shall monitor on monthly basis the water resources at surface water monitoring points (Table 4) and monitor on quarterly basis the water resources at groundwater monitoring points (Table 5) to determine the impact of the facility and other activities on the water quality by taking samples at the monitoring points.

<table>
<thead>
<tr>
<th>Locality</th>
<th>Description</th>
<th>X co-ordinate</th>
<th>Y co-ordinate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilger River</td>
<td>Downstream of the Zibulo</td>
<td>S 26$^0$ 13' 20.9&quot;</td>
<td>E 29$^0$ 27' 45.8&quot;</td>
</tr>
<tr>
<td>S 13</td>
<td>Downstream of mining activity in the stream</td>
<td>S 26$^0$ 12' 44.3&quot;</td>
<td>E 29$^0$ 27' 49.7&quot;</td>
</tr>
<tr>
<td>S 19</td>
<td>Pan</td>
<td>S 26$^0$ 12' 34.2&quot;</td>
<td>E 29$^0$ 28' 59.0&quot;</td>
</tr>
</tbody>
</table>