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NEAS Reference: DEA/EIA/0000498/2011 DEA Reference: 12/12/20/2403 Enquiries: Masina Litsoane

Telephone: 012-395-1778 Fax: 012-320-7539 E-mail: MLitsoane@environment.gov.za

Mr. Bashan Govender Department of Water Affairs Private Bag X995 PRETORIA 0001

Fax no: 012-392-1359

PER FACSIMILE / MAIL

Dear Mr Bashan

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R.543: IMMEDIATE AND SHORT TERM INTERVENTIONS FOR THE TREATMENT OF ACID MINE DRAINAGE IN THE WESTERN, CENTRAL AND EASTERN BASINSOF THE WITWATERSRAND GOLD FIELDS, GAUTENG PROVINCE

With reference to the above application, please be advised that the Department has decided to grant exemption and authorisation. The environmental authorisation (EA) and reasons for the decision are attached herewith.

In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2010 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 12 (twelve) days of the date of the EA, of the Department's decision in respect of your application as well as the provisions regarding the submission of appeals that are contained in the Regulations.

Your attention is drawn to Chapter 7 of the Regulations, which prescribes the appeal procedure to be followed. This procedure is summarised in the attached document. Kindly include a copy of this document with the letter of notification to interested and affected parties.

Should the applicant or any other party wish to appeal any aspect of the decision a notice of intention to appeal must be lodged by all prospective appellants with the Minister, within 20 days of the date of the EA, by means of one of the following methods:

By facsimile:

012 320 7561;

By post:

Private Bag X447,

Pretoria, 0001; or

By hand:

2nd Floor, Fedsure Building, North Tower,

Cnr. Lilian Ngoyi (Van der Walt) and Pretorius Streets,

Pretoria.

Children !

If the applicant wishes to lodge an appeal, it must also serve a copy of the notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection, should you intend to submit an appeal.

Please include the Department (Attention: Director: Integrated Environmental Authorisations) in the list of interested and affected parties, notified through your notification letter to interested and affected parties, for record purposes.

## Appeals must be submitted in writing to:

Mr T Zwane, Senior Legal Administration Officer (Appeals), of this Department at the above mentioned addresses or fax number. Mr Zwane can also be contacted at:

Tel:

012-310-3929

Email: AppealsDirectorate@environment.gov.za

Please note that the Minister may, on receipt of appeals against the authorisation or conditions thereof suspend the authorisation pending the outcome of the appeals procedure.

Yours sincerely

Mr Mark Gordon

Chief Director: Integrated Environmental Authorisations

Department of Environmental Affairs

Date: 07/01/2013

CC:	Mr S Horak Digby Wells		Tel: 011-789-9495	Fax: 011-789-9498	
	Mr H Nkosi	Ekurhuleni Metropolitan Municipality	Tel: 011-999-3316	Fax: 086-506-8177	
	Ms L Molefe	City of Johannesburg	Tel: 011-587-4238	Fax: 011-587-4228	
	Mr M Mokoena	Mogale City Local Municipality	Tel: 011-951-2101	Fax: 011-660-1507	
	Mr T Zwane	Appeals Authority (DEA)	Tel: 012-310-3929	Fax: 012-320-7561	
	Mr S Malaza	Compliance Monitoring (DEA)	Tel: 012-310-3397	Fax: 012-320-5744	

# APPEALS PROCEDURE IN TERMS OF CHAPTER 7 OF THE NEMA EIA REGULATIONS, 2010 (THE REGULATIONS) AS PER GN R. 543 OF 2010 TO BE FOLLOWED BY THE APPLICANT AND INTERESTED AND AFFECTED PARTIES UPON RECEIPT OF NOTIFICATION OF AN ENVIRONMENTAL AUTHORISATION (EA)

AP	APPLICANT		INTERESTED AND AFFECTED PARTIES (IAPs)		
1.	Receive EA from the relevant Competent Authority (the Department of Environmental Affairs [DEA]).	1.	Receive EA from Applicant/Consultant.		
2.	Within 12 days of date of the EA notify all IAPs of the EA and draw their attention to their right to appeal against the EA in terms of Chapter 7 of the Regulations.	2.	N/A.		
3.	If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA with the Minister of Water and Environmental Affairs (the Minister).	3.	If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA. with the Minister of Water and Environmental Affairs (the Minister).		
4.	After having submitted your notice of intention to appeal to the Minister, provide each registered IAP with a copy of the notice of intention to appeal within 10 days of lodging the notice.	4.	After having submitted your notice of intention to appeal to the Minister, provide the applicant with a copy of the notice of intention to appeal within 10 days of lodging the notice.		
5.	<ul> <li>The Applicant must also serve on each IAP:</li> <li>a notice indicating where and for what period the appeal submission will be available for inspection.</li> </ul>	5.	<ul> <li>Appellant must also serve on the Applicant within 10 days of lodging the notice,</li> <li>a notice indicating where and for what period the appeal submission will be available for inspection by the applicant.</li> </ul>		
6.	The appeal must be submitted in writing to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.	6.	The appeal must be submitted to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.		
7.	Any IAP who received a notice of intention to appeal may submit a responding statement to that appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.	7.	An Applicant who received notice of intention to may submit a responding statement to the appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.		

#### NOTES:

#### 1. An appeal against a decision must be lodged with:-

- a) the Minister of Water and Environmental Affairs if the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
- b) the Minister of Justice and Constitutional Development if the applicant is the Department of Water Affairs and the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;

#### 2. An appeal lodged with:-

- a) the Minister of Water and Environmental Affairs must be submitted to the Department of Environmental Affairs;
- b) the Minister of Justice and Constitutional Development must be submitted to the Department of Environmental Affairs;

#### 3. An appeal must be:-

- a) submitted in writing;
- b) accompanied by:
- · a statement setting out the grounds of appeal;
- · supporting documentation which is referred to in the appeal; and
- a statement that the appellant has complied with regulation 62 (2) or (3) together with copies of the notices referred to in regulation 62.

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# Integrated Environmental Authorisation Issued in terms of

# The National Environmental Management Act, 1998 and the Environmental Impact Assessment Regulations 2010

and

The National Environmental Management: Waste Act, 2008 and Government Notice 718 of 2009

# Immediate and short term interventions for treatment of acid mine drainage in the Western, Central and Eastern Basins of the Witwatersrand Gold Fields, Gauteng Province

# West Rand District Municipality, Ekurhuleni and City of Johannesburg Metropolitan Municipalities

Authorisation register number:	12/12/20/2403
Last amended:	First Issue
Holder of integrated authorisation:	Department of Water Affairs
Location of activities:	GAUTENG PROVINCE: Western Basin -
	Krugersdorp, Witpoortjie and Randfontein
	Central Basin – From Durban Roodepoort
	Deep to East Rand Proprietary Mines
3	Eastern Basin - Boksburg, Brakpan,
	Springs and Nigel within Ekurhuleni
	Metropolitan Municipality, Randfontein and
	Mogale City Local Municipalities.

This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

### DECISION

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this integrated environmental authorisation ("the environmental authorisation") that the applicant should be authorised to undertake the NEMA EIA and NEMWA listed activities specified below.

Details regarding the basis on which the Department reached this decision are set out in Annexure "I" to this environmental authorisation.

### **NEMA EIA AND NEMWA ACTIVITIES AUTHORISED**

By virtue of the powers conferred on it by NEMA, the NEMA EIA Regulations, 2010, NEMWA and Government Notice 718 of 3 July 2009 the Department hereby authorises –

#### **DEPARTMENT OF WATER AFFAIRS**

with the following contact details -

Mr. Bashan Govender

Deparment of Water Affairs

Private Bag X995

#### **PRETORIA**

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Tel:

(012) 392-1306

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(082) 807-3522

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govenderb@dwa.gov.za

( moder)

to undertake all activities required for the commission of the works as described in the scoping report dated November 2012 at:

Alternative S1	Latitude	Longitude
Western Basin Site	26°8'23.074"S	27°42'13.018"E
Central Basin Site	26°13'3.277"S	28°10'56.877"E
Eastern Basin Site	26°15'5.173"S	28°29'19.461"E

Basin	Farm Name	Portion Number	
	AMD Abstraction		
Western	Uitvalfontein 244 IQ	Remainder	
Central	Driefontein 87 IR	Remainder of portion 1	
Eastern	Grootvally Small Holdings	Holdings 100 - 106	
	Treatment Plants		
Western	Randfontein 247 IQ	Portion 1 R/E	
Central	Driefontein 87 IR	Remainder of portion 1	
Eastern	Grootvally Small Holdings	Holdings 100 - 106	
	Discharge Points		
Western	Waterval 174 IQ	Remaining Extent	
Central	Driefontein 682 IR	Remainder	
Eastern	Grootvally Small Holdings	Holdings 100 - 106	

- for the implementation of emergency works aimed at mitigating acid mine drainage in the Witwatersrand Gold Fields, within Mogale City and Randfontein Local Municipalities; City of Johannesburg and Ekurhuleni Metropolitan Municipalities hereafter referred to as "the property".

## The interventions proposed will include of the following activities:

## Immediate term interventions - Western Basin

Immediate AMD mitigation measures can be implemented practically in the Western Basin based on the following:

 Upgrading and retrofitting of the existing Rand Uranium Treatment Plant as the best opportunity in terms of treatment capacity and ease of implementation.



- Bringing the Rand Uranium Treatment Plant's additional treatment trains back into operation, after appropriate mechanical and electrical equipment has been installed.
- The potential AMD treatment capacity, including the existing single operational treatment train is estimated to be 26-32 Ml per day.

#### Short term interventions

#### Western Basin

The site of the proposed Western Basin AMD water treatment plant for the short term intervention is near to the existing Rand Uranium treatment plant. Short term intervention activities planned for the Western Basin will include:

- · Abstraction of AMD via pumps in Shaft No. 8 at a depth to achieve the ECL of 1550 mamsl;
- The lowering of the current water table in the old mine workings to 165 m below surface by pumping an average of 53 MI/day (peak of 60 MI/day) from Shaft No. 8;
- Construction and operation of a new HDS treatment plant on the Randfontein Estates site;
- Construction of a treated water pipeline to a suitable discharge point on the Tweelopiespruit within the Krugersdorp Game Reserve; and
- Construction of waste sludge disposal pumps and pipeline to the West Wits Pit for the disposal
  of the sludge from the treatment process.

#### **Central Basin**

The proposed Central Basin AMD treatment plant is to be situated on the western portion of the ERPM South West Vertical (SWV) Shaft area. Activities will include:

- Abstraction of AMD via pumps in the SWV Shaft to keep the water from rising above the ECL at 150 m below the ERPM Cinderella East Shaft collar level (1 617 m) or 1467 mamsl;
- Pumping and treating an average of 72 MI/day (peak of 84 MI/day);
- · Construction of a new HDS plant adjacent to the SWV shaft;
- Construction of a waste sludge pipeline to the Crown Knights Gold processing plant;
- Construction of a treated water pipeline to a suitable discharge point on the Elsburgspruit; and
- Investigation and planning for a possible future waste sludge pipeline to the ERGO Brakpan Tailings Storage Facility (TSF).

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#### **Eastern Basin**

The proposed Eastern Basin AMD water treatment plant will be situated at the Grootvlei Mine Shaft No. 3. Activities will include:

- Abstraction of AMD via installed pumps in Grootvlei No. 3 shaft at a pump depth to achieve the ECL level of 1280 mamsl;
- Pumping and treating at an average of 106 MI/day and a peak of 110 MI/day;
- Construction of a new HDS treatment plant adjacent to the Grootvlei No. 3 shaft;
- Investigation and planning for the possible construction of a waste sludge pipeline to the Daggafontein, Brakpan and/or Grootvlei TSFs; and
- Construction of a treated water pipeline to a suitable discharge point on the Blesbokspruit

### **EXEMPTIONS**

Further, the Department hereby exempts -

The Department of Water Affairs from the requirements of the Environmental Impact Assessment Regulations 2010 in terms of sub-regulations (50), (51) and (52), for the development of the immediate and short term interventions for the treatment of acid mine drainage in the western, central and eastern basins as identified in the application for exemption dated 27 November 2012 – and authorises the Department of Water Affairs to undertake all activities required for the undertaking of the works as described in the scoping report dated November 2012 on the footprint as identified above.



#### SCOPE OF AUTHORISATION

- Authorisation is granted for the implementation of emergency works aimed at mitigating acid mine drainage in the Witwatersrand Gold Fields. The immediate and short term interventions for the treatment of acid mine drainage are hereby approved.
- The Department shall by written notice to the holder of an environmental authorisation and exemption suspend with immediate effect an environmental authorisation if suspension of the authorisation is necessary to prevent harm or further harm to the environment.
- 3. The activities must commence within a period of three (3) years from the date of issue. If commencement of the activity does not occur within that period, the environmental authorisation and exemption lapse and a new application for an environmental authorisation must be made for the activities to be undertaken. Commencement with one activity in terms of this decision constitutes commencement of all authorised activities.
- 4. The holder of the environmental authorisation and exemption shall be responsible for ensuring compliance with the conditions contained in this decision. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the decision.
- 5. Any changes to, or deviations from, the project description set out in this authorisation must follow the amendment processes as prescribed in Chapter 4 (Parts 1-3) of the NEMA EIA Regulations, 2010 and be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further authorisation in terms of the regulations.

#### Management of the activity

- The construction Environmental Management Programme (EMPr) integrated as part of the Application for EA is hereby approved. This EMPr must be implemented and adhered to.
- 6.1. The approved EMPr must be implemented and strictly enforced during all construction phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.



- Changes to the EMPr which are environmentally defendable, shall be submitted to this Department for acceptance before such changes may be effected.
- The Department reserves the right to request amendments to the EMPr should any impacts that were not anticipated be discovered.

#### **Environmental control officer**

- 9. The holder of this decision must appoint an independent Environmental Control Officer (ECO) with experience or expertise in the field for the construction phase of the development. The ECO will have the responsibility to ensure that the conditions referred to in this decision are implemented and to ensure compliance with the provisions of the EMPr.
- 10. The ECO must be appointed before commencement of any authorised activity.
- 11. Once appointed, the name and contact details of the ECO must be submitted to the Director: Compliance Monitoring of the Department.
- 12. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.
- 12.1. The ECO must:
- 12.2. Keep record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.
- 12.3. Keep and maintain a detailed incident (including spillage of bitumen, fuels, chemicals, or any other material) and complaint register on site indicating how these issues were addressed, what rehabilitation measures were taken and what preventative measures were implemented to avoid re-occurrence of incidents/complaints.
- 12.4. Keep and maintain a daily site diary.
- 12.5. Keep copies of all reports submitted to the Department.
- 12.6. Keep and maintain a schedule of current site activities including the monitoring of such activities.
- 12.7. Obtain and keep record of all documentation, permits, licences and authorisations such as waste disposal certificates, hazardous waste landfill site licences etc. required by this facility.
- 12.8. Compile a monthly monitoring report.

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#### Waste management control officer

- 13. The applicant must designate a Waste Management Control Officer (WMCO), who will monitor and ensure compliance and correct implementation of all conditions and provisions as stipulated in the environmental authorisation and approved EMP related to the authorised activities.
- 14. The WMCO must report any non-compliance with any environmental authorisation conditions or requirements or provisions of NEMWA to the Department through the means reasonably available.
- 15. The duties and responsibility of the WMCO should not be seen as exempting the holder of the environmental authorisation from the legal obligations in terms of the NEMWA.

#### Recording and reporting to the department

- 16. The holder of this authorisation must keep all records relating to monitoring and auditing on site and make it available for inspection to any relevant and competent authority in respect of this development.
- 17. All records and/or reports required or resulting from activities relating to this environmental authorisation must:
- 17.1. be legible;
- 17.2. be submitted as required and must form part of the external audit report;
- 17.3. if amended, the record and/or report must be amended in such a way that the original and any subsequent amendments remain legible and are easily retrievable; and
- 17.4. be retained in accordance with documented procedures which are approved by the Department.
- 18. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this authorisation, must be submitted to the Director: Compliance Monitoring at the Department.
- 19. The holder of the environmental authorisation must keep records and update all the information referred to in Annexure II and submit this information to the Department on an annual basis.

#### **Environmental audit report for construction**

20. The holder of the authorisation must submit an environmental audit report to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and within 30 days of completion of rehabilitation activities.

#### 21. The environmental audit report must:

- 21.1. Be compiled by an independent environmental auditor;
- 21.2. Indicate the date of the audit, the name of the auditor and the outcome of the audit;
- 21.3. Evaluate compliance with the requirements of the approved EMP and this environmental authorisation;
- 21.4. Include measures to be implemented to attend to any non-compliances or degradation noted;
- 21.5. Include copies of any approvals granted by other authorities relevant to the development for the reporting period;
- 21.6. Highlight any outstanding environmental issues that must be addressed, along with recommendations for ensuring these issues are appropriately addressed;
- 21.7. Include a copy of this authorisation and the approved EMP
- 21.8. Include all documentation such as waste disposal certificates, hazardous waste landfill site licences etc. pertaining to this authorisation; and
- 21.9. Include evidence of adherence to the conditions of this authorisation and the EMP where relevant such as training records and attendance records.

#### Commencement of activities

- 22. An appeal under section 43 of the National Environmental Management Act (NEMA), Act 107 of 1998 (as amended), does not suspend an environmental authorisation or exemption, or any provisions or conditions attached thereto, or any directive, unless the Minister, MEC or delegated organ of state directs otherwise.
- 23. Should you be notified by the Minister of a suspension of the authorisation pending appeal procedures, you may not commence with the activity until such time that the Minister allows you to commence with such an activity in writing.

#### Notification to authorities

24. Prior written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence.



#### Operation of the activity

- 25. Prior written notice must be given to the Department that the activity operational phase will commence.
- 26. The holder of this authorisation must compile an operational EMPr for the operational phase of the activity and submit to the Department for written approval prior to commencement of operations or alternatively, if the holder has an existing operational environmental management system, it must be amended to include the operation of the authorised activity.

#### Site closure and decommissioning

27. Should the activity ever cease or become redundant, the applicant shall undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

### Leasing and alienation of the site

28. Should the holder of the environmental authorisation want to alienate or lease the site, he/she shall notify the Department in writing of such an intention at least 120 days prior to the said transaction. Should the approval be granted, the subsequent holder of the environmental authorisation shall remain liable to compliance with all authorisation conditions.

#### Transfer of environmental authorisation

- 29. Should the holder of the environmental authorisation transfer holdership of this environmental authorisation due to a change of ownership [as provided for in terms of S24E(c) of NEMA], he/she must apply in terms of Section 52 of NEMWA.
- 30. Should the transfer of holder ship of this environmental authorisation mentioned above be for any reason other than the change of ownership in the property, the holder of this environmental authorisation must inform the Department of any change in ownership in the property and must request an amendment to this environmental authorisation to reflect such change in ownership.
- 31. Any subsequent holder of an environmental authorisation shall be bound by conditions of this environmental authorisation.

#### Investigations

32. If, in the opinion of the Department, pollution, nuisances or health risks may be or are occurring on the site, the holder of the environmental authorisation must initiate an investigation into the cause of the problem or suspected problem, including such investigations as identified by the Department related to the risks posed. Should the investigation carried out reveal any unacceptable levels of pollution, the holder of the environmental authorisation must submit mitigation measures to the satisfaction of the relevant Department.

#### Specific conditions

### Site Security and Access Control

33. The holder of the environmental authorisation must ensure effective access control to the construction sites to prevent unauthorised entry. Weather-proof, durable and legible signs in at least three official languages applicable in the area must be displayed at each entrance to the site. The signs must indicate the risks involved in entering the site, must include the person responsible for the operation of the site.

#### Permissible waste

- 34. Any portion of the site which has been constructed or developed in accordance with this environmental authorisation may be used for the storage of sludge before treated and disposed.
- 35. The classification, acceptance and disposal criteria as listed in the latest edition of the document "Minimum Requirements for Handling, Classification and Disposal of Hazardous Waste, Waste Management Series, Department of Water Affairs and Forestry or by the Department in future, (hereinafter referred to as the "Minimum Requirements Series"), must be conformed to.

#### Construction and commissioning of activities

36. The site construction (existing and new) must be approved by a registered professional engineer and compliant with recognised civil engineering standards and adequately lined to protect surface and ground water resources.



- 37. The storage site must have a firm, impermeable, and chemical resistant floors and a roof to prevent direct sunlight and rain water from getting in contact with the sludge.
- 38. The holder of the environmental authorisation must construct and maintain on a continuous basis a drainage and containment system capable of collecting and storing all runoff water arising from the site, which could be expected as a result of the of the 1 in 100 years flood over a period of 24 hours to prevent such runoff water from coming into contact with waste. The system must under the said rainfall event, maintain a freeboard of half a metre.
- 39. The site plan must only be changed under the supervision of a registered professional engineer.

#### Environmental auditing and reporting

- 40. Internal Audits
- 40.1. Internal audits must be conducted annually by the holder of the environmental authorisation in order to audit compliance with conditions related to the treatment works of this environmental authorisation and the approved EMPr, and on each audit occasion an official report must be compiled by the relevant auditor to report the findings of the audits, which must be made available to the external auditor specified in condition below.

#### 41. External Audits

- 41.1. The holder of the environmental authorisation and approved EMPr must appoint an independent external auditor to audit the treatment works biannually subject to the environmental authorisation and this auditor must compile an audit report documenting the findings of the audit, which must be submitted by the holder of the environmental authorisation.
- 41.2. The audit report must-
- Indicate compliance to requirements related to the treatment works as included in the approved operational EMPr for the treatment works;
- (ii) Specifically state whether conditions related to the treatment works of this environmental authorisation are adhered to;
- (iii) Include an interpretation of all available data and test results regarding the operation of the site and all its impacts on the environment;
- (iv) Specify target dates for the implementation of the recommendations by the holder of the environmental authorisation to achieve compliance;
- (v) Contain recommendations regarding non-compliance or potential non-compliance and must specify target dates for the implementation of the recommendations by the holder of the environmental



- authorisation and whether corrective action taken for the previous audit non conformities was adequate;
- (vi) Show results graphically and conduct trend analysis; and
- (vii) Include the information required in Annexure II.
- 41.3. The holder of the environmental authorisation must carry out all tests required in terms of this environmental authorisation in accordance with published laboratory analysis methods or those prescribed by and obtainable from the South African Bureau of Standards (SABS), referred to in the Standards Act, 2008 (Act 08 of 2008).
- 41.4. Each external audit report referred to in *External Audits* above must be submitted to the Department within 30 days from the date on which the external auditor finalised the audit.

#### Reporting

- 42. The holder of the environmental authorisation must, within 14 days inform the Department from the occurrence or detection of any incident referred to hereunder, within 14 days period of time specified by the Department submit an action plan, which must –
- 42.1. Correct the impact resulting from the incident;
- 42.2. Prevent the incident from causing any further impact; and
- 42.3. Prevent a recurrence of a similar incident to the satisfaction of the Department.
- 43. In the event that measures have not been implemented within 21 days of the incident, or within the time period identified by the Department, or the measures which have been implemented are inadequate, the Department may implement the necessary measures at the cost and risk of the holder of the environmental authorisation.
- 44. The holder of the environmental authorisation must keep an incident report and complaints register, which must be made available to the external auditor, representatives of this Department and Department of Water Affairs for the purpose of audit.
- 45. The Department must be notified as soon as the holder of this environmental authorisation becomes aware of the following incidents:
- 45.1. Any malfunction, breakdown or failure of equipment or techniques, accident or fugitive emission which has caused, is causing or may cause significant pollution;
- 45.2. The breach of this environmental authorisation; and
- 45.3. Any significant adverse environmental and health effects.

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#### General operation and impact management of waste management activities

- 46. Waste, which is not sewage from the authorised development, must be dealt with according to relevant legislation or the Department's policies and practices.
- 47. The holder of environmental authorisation must prevent spillages. Where the spillages occur, the holder of authorisation must ensure the effective and safe cleaning of such spillages.
- 48. The treatment of effluent must not impact on a water resource or on any other person's water use, property or land and must not be detrimental to the health of the public in the vicinity of the activity.
- The holder of environmental authorisation must prevent the occurrence of nuisance conditions or health hazards.
- 50. The pipelines used for the conveyance of effluent must be painted in a conspicuous colour or manufactured of a coloured material distinctly different from the colour of the pipes in which drinking water is flowing to avoid the possibility of any cross-connection of the different pipelines.
- 51. The holder of environmental authorisation must ensure that all personnel who work with hazardous waste are trained to deal with these potential hazardous situations so as to minimise the risks involved. Records of training and verification of competence must be kept by the Authorisation Holder.
- 52. The holder of authorisation must ensure that the effluent treatment operates within its design parameters at all times.
- 53. The holder of environmental authorisation must ensure that non biodegradable solids and the sludge are disposed of at a Waste Management Facility licensed to accept such wastes.
- 54. The holder of environmental authorisation must take all reasonable steps to ensure that the integrity of the waterproof base and infrastructure used for the treatment of acid mine water are routinely monitored and corrective action must be taken before containment integrity is breached.
- 55. No effluent must be discharged into any storm water drain or furrow, whether by commission or by omission.

#### Water quality monitoring

- 56. Surface water monitoring shall be performed in all storm water drains on and adjacent to the Site at locations selected in conjunction with the Department of Water Affairs and at such a frequency as determined by the responsible authority.
- 57. A proper macro element groundwater quality monitoring program must be implemented as soon as possible to establish baseline prior to the installation of the new treatment facilities.
- 58. A water quality monitoring program should be developed by a suitably qualified (SACNASP registered) person to allow for groundwater and surface water contamination monitoring.

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- 59. Shallow monitoring wells must be installed around the treatment facilities.
- 60. Reasonable steps must be taken to ensure that the integrity of the waterproof base and infrastructure are routinely monitored and corrective action is taken before containment integrity is breached.

Date of environmental authorisation: 07/01/2013

Mr Mark Gordon

**Chief Director: Integrated Environmental Authorisations** 

**Department of Environmental Affairs** 

#### Annexure I: Reasons for Decision

#### 1. Key factors considered in making the decision

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

- a) The information contained in the FSR dated November 2012;
- b) Motivation Report in support of application for exemption dated November 2012;
- c) The mitigation measures included in the construction EMPr dated November 2012;
- d) The information contained in the Public Participation Process Report dated November 2012;
- e) The comments from interested and affected parties as included in the FSR dated November 2012;
   and in the Public Participation Process Report dated November 2012;
- f) The findings of the site inspection conducted on 02 November 2011; and
- g) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998).

#### 2. Findings

After consideration of the information and factors listed above the Department reached the following conclusions:

- a) The IMC Report indicated that these interventions are urgently required as the prevention of AMD decant in the basins is considered to be of national importance.
- b) The impacts on the environment of the activity have been considered and are regarded as being mitigatable. The consequences to the surrounding environment should the activity not go ahead is however the major area of concern.
- c) Allowing untreated mine water to enter into the environment in an uncontrolled manner is more likely to be detrimental to the environment than pre-treating the water and releasing it in a controlled manner.
- d) The procedure followed for impact assessment is adequate for the decision-making process.
- e) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.



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f) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA regulations, 2010, for public involvement.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the activity can be mitigated to acceptable levels. The application is accordingly granted.



# **ANNEXURE II**

# INFORMATION WHICH SHALL BE SUBMITTED ON AN BI-ANNUAL BASIS IN ACCORDANCE WITH THE "RECORDING AND REPORTING TO THE DEPARTMENT" ABOVE

* = Indicat	e with an X. Plea	ase print le	gibly.			
NAME OF S	SITE:			DATE OF RE	PORT:(y/m/d)	
1.	Registered own	er(s) of pr	operty on w	hich the treatm	ent facility is situate	d:
Name					Telephone	
Postal Ado	fress				Fax	
					Postal Code	
2.	Operator in con	itrol of the	treatment fa	acility:		
Name					Telephone	
Identity nu	mber				Tel. After hours	
Education	al Qualifications				•	
Other Rele	evant competencies:					
	months: ste (Specify)	<b>新疆</b> 赫	Quantity (m <sup>3</sup>	annum-1)		<b>有种类型</b>
TOTAL						
4.	Indicate the typ	uring the s	ix months:		es of sludge reused,	recycled, or
Type of was	ste	Quantity (m	3 annum-1)	reused, treated	or disposed	
TOTAL						
	the				to my knowledge a tro	ue reflection of the
ivanie.						( James of the state of the sta

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Capacity:	
Place:	Date
	This form may be obtained electronically from the Department.

