

## APPENDIX E: DETAILED EMPR PERFORMANCE ASSESSMENT PROCEDURE

# FINAL AUDIT PROCEDURE

## APPENDIX A: AUDIT PROCEDURE

AUDIT PROCEDURE		
Stage	Step	Detail
Pre-assessment	Clarify the assessment objectives and criteria	The assumed objectives and criteria are presented in the main body of the report.
	Define the scope of the assessment	<p><b>The client is:</b> Inkosi Platinum (Pty) Ltd.</p> <p><b>The “auditee” is:</b> Inkosi Greater prospecting operations</p> <p><b>Assumed key performance areas are:</b> environmental management as defined in Sections F and G of the standard environmental management programme (EMPr).</p>
	Review available information	The information listed below needs to be reviewed. EMPr report Department of Mineral Resources and Energy letter of approval Site layout Specialist reports Correspondence from the public Monitoring records and reports Other environmental approvals, if applicable
	Planning	Make logistical arrangements for the assessment.

CORRESPONDING SCHEDULE	
Weeks	Activities
0	<p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>• Check and refine assessment objectives and criteria; and</li> <li>• Make preliminary logistical arrangements for the meetings and site visits.</li> </ul> <p><b>Review of relevant information</b></p> <ul style="list-style-type: none"> <li>• Commence with review of relevant information.</li> </ul>
1	<p><b>Pre-assessment meeting with relevant Managers</b></p> <ul style="list-style-type: none"> <li>• Pre-assessment meeting with managers to confirm objectives and criteria and logistical arrangements; and</li> <li>• Finalise assessment plan.</li> </ul> <p><b>Orientation site visit</b></p> <ul style="list-style-type: none"> <li>• Brief orientation site visit for assessment team members; and</li> <li>• Collect outstanding information for review.</li> </ul> <p><b>Review of relevant information</b></p> <ul style="list-style-type: none"> <li>• Continue review of relevant information.</li> </ul>

<b>AUDIT PROCEDURE</b>		
<b>Stage</b>	<b>Step</b>	<b>Detail</b>
Assessment process at each operational unit	Opening meeting	The purpose of the meeting is outlined below. <ul style="list-style-type: none"> <li>• Present the assessment aims, objectives and criteria to operations management; and</li> <li>• Confirm logistical arrangements the assessment.</li> </ul>
	Collection of assessment evidence	This will involve interviews with staff members, verification of statements on site, review of available monitoring data and environmental management system documentation.
	Conclusions	The assessment conclusions will be directly linked to the assessment objectives.
	Closing meeting	The preliminary assessment findings and conclusions will be presented and discussed with operations management.
Reporting	First draft	Submit the draft report to operational unit for review and comment.
	Final report	Submit the final report to relevant Managers.

<b>CORRESPONDING SCHEDULE</b>	
<b>Weeks</b>	<b>Activities</b>
1	<b>Assessment</b> <ul style="list-style-type: none"> <li>• Opening meeting;</li> <li>• Collection of assessment evidence;</li> <li>• Processing of assessment evidence to draw assessment conclusions;</li> <li>• Preparation for the closing meeting;</li> <li>• Closing meeting;</li> <li>• Begin compilation of the assessment report; and</li> <li>• Planning meeting with assessment team (to make arrangements for completion of the report).</li> </ul>
2	<b>Reporting</b> The final report will be submitted in April 2020.

## EMPR COMMITMENTS

<b>EMPr COMMITMENTS</b>	
<b>F 1</b>	<b>GENERAL REQUIREMENTS</b>
<b>F 1.1</b>	<b>MAPPING AND SETTING OUT</b>
<b>F 1.1.1</b>	<b>LAYOUT PLAN</b>
	A copy of the layout plan as provided for in Regulation 2.2 must be available at the prospecting/mining site for scrutiny when required. Plan must show co-ordinates of the area being applied for; north point; scale; name, number and location of the area covered by the application; size and shape of area; boundaries of area; layout of operations; surface structures and servitudes; and topography of the land.
	The plan must be updated on a regular basis with regard to the actual progress of the establishment of surface infrastructure, mining operations and rehabilitation (a copy of the updated plan shall be forwarded to the Regional Manager on a regular basis).
	A final layout plan must be submitted at closure of the mine or when operations have ceased.
<b>F 1.1.2</b>	<b>DEMARCATING THE MINING/ PROSPECTING AREA</b>
	The mining/ prospecting area must be clearly demarcated by means of beacons at its corners, and along its boundaries if there is no visibility between the corner beacons.
	Permanent beacons as indicated on the layout plan or as prescribed by the Regional Manager must be firmly erected and maintained in their correct position throughout the life of the operation.
	Mining/ prospecting and resultant operations shall only take place within this demarcated area.
<b>F 1.1.3</b>	<b>DEMARCATING THE RIVER CHANNEL AND RIVERINE ENVIRONMENT</b>
	The following is applicable if operations are conducted within the riverine environment (See F 3.2):
	Beacons as indicated on the layout plan or as prescribed by the Regional Manager must be erected and maintained in their correct position throughout the life of the operation.
	These beacons must be of a permanent nature during the operations and must not be easily removable, especially those in a river channel. The beacons must, however, be removed at the end of the operations.
	The mining of and prospecting for any mineral shall only take place within this demarcated mining area.
	If riverine vegetation is present in the form of reeds or wetland vegetation, the presence of these areas must be entered in Part C 1.45 of the EMPr and indicated on the layout plan.
	The holder of the mining permit/ prospecting right will also be required to permanently demarcate the areas as specified in F 1.1.2.
<b>F 1.2</b>	<b>RESTRICTIONS ON MINING/ PROSPECTING</b>
	On assessment of the application, the Regional Manager may prohibit the conducting of mining or prospecting operations in vegetated areas or over portions of these areas
	In the case of areas that are excluded from mining or prospecting, no operations shall be conducted within 5 m of these areas.

## EMPr COMMITMENTS

### F 1.3 RESPONSIBILITY

The environment affected by the mining/ prospecting operations shall be rehabilitated by the holder, as far as is practicable, to its natural state or to a predetermined and agreed to standard or land use which conforms with the concept of sustainable development. The affected environment shall be maintained in a stable condition that will not be detrimental to the safety and health of humans and animals and that will not pollute the environment or lead to the degradation thereof.

It is the responsibility of the holder of the mining permit/ prospecting right to ensure that the manager on the site and the employees are capable of complying with all the statutory requirements which must be met in order to mine, which includes the implementation of this EMP.

If operations are to be conducted in an area that has already been disturbed, the holder must reach specific agreement with the Regional Manager concerning the responsibilities imposed upon himself/herself pertaining to the rehabilitation of the area and the pollution control measures to be implemented.

### F 2 INFRASTRUCTURAL REQUIREMENTS

#### F 2.1 TOPSOIL

Topsoil shall be removed from all areas where physical disturbance of the surface will occur.

All available topsoil shall be removed after consultation with the Regional Manager prior to the commencement of any operations.

The topsoil removed, shall be stored in a bund wall on the high ground side of the mining/prospecting area outside the 1:50 flood level within the boundaries of the mining area/ prospecting.

Topsoil shall be kept separate from overburden and shall not be used for building or maintenance of access roads.

The topsoil stored in the bund wall shall be adequately protected from being blown away or being eroded.

#### F 2.2 ACCESS TO THE SITE

##### F 2.2.1 ESTABLISHING ACCESS ROADS ON THE SITE

The access road to the mining/prospecting area and the camp-site/site office must be established in consultation with the landowner/tenant and existing roads shall be used as far as practicable.

In the case of geological or soil sampling, mobile drilling (short term operation), existing tracks and roads shall be used where practicable.

Should a portion of the access road be newly constructed the following must be adhered to:

The route shall be selected that a minimum number of bushes or trees are felled and existing fence lines shall be followed as far as possible.

Water courses and steep gradients shall be avoided as far as is practicable.

Adequate drainage and erosion protection in the form of cut-off berms or trenches shall be provided where necessary.

Add 1

If imported material is used in the construction or upgrading of the access road this must be listed in C 2.17

The erection of gates in fence lines and the open or closed status of gates in new and existing positions shall be clarified in consultation with the landowner/tenant and maintained throughout the operational period.

No other routes will be used by vehicles or personnel for the purpose of gaining access to the site.

## **EMPr COMMITMENTS**

NOTE: The design, construction and location of access to provincial roads must be in accordance with the requirements laid down by the Provincial or controlling authority.

### **F 2.2.2 MAINTENANCE OF ACCESS ROADS**

In the case of dual or multiple use of access roads by other users, arrangements for multiple responsibility must be made with the other users. If not, the maintenance of access roads will be the responsibility of the holder of the mining permit/ prospecting right.

Newly constructed access roads shall be adequately maintained so as to minimise dust, erosion or undue surface damage.

### **F 2.2.3 DUST CONTROL ON THE ACCESS AND HAUL ROADS**

The liberation of dust into the surrounding environment shall be effectively controlled by the use of, inter alia, water spraying and/or other dust-allaying agents. The speed of haul trucks and other vehicles must be strictly controlled to avoid dangerous conditions, excessive dust or excessive deterioration of the road being used.

### **F 2.2.4 REHABILITATION OF ACCESS ROADS**

Whenever a mining permit/ prospecting right is suspended, cancelled or abandoned or if it lapses and the holder does not wish to renew the permit or right, any access road or portions thereof, constructed by the holder and which will no longer be required by the landowner/tenant, shall be removed and/or rehabilitated to the satisfaction of the Regional Manager.

Any gate or fence erected by the holder which is not required by the landowner/tenant, shall be removed and the situation restored to the pre mining/ prospecting situation.

Roads shall be ripped or ploughed, and if necessary, appropriately fertilised (based on a soil analysis) to ensure the regrowth of vegetation. Imported road construction materials which may hamper regrowth of vegetation must be removed and disposed of in an approved manner prior to rehabilitation.

If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining/prospecting operation, be corrected and the area be seeded with a seed mix to the Regional Manager's specification.

## **F 2.3 OFFICE/CAMP SITES**

### **F 2.3.1 ESTABLISHING OFFICE / CAMP SITES**

Office and camp sites shall be established, as far as is practicable, outside the flood plain, above the 1 in 50 flood level mark within the boundaries of the mining/ prospecting area.

The area chosen for these purposes shall be the minimum reasonably required and which will involve the least disturbance to vegetation. Topsoil shall be handled as described in F 2.1 above

No camp or office site shall be located closer than 100 metres from a stream, river, spring, dam or pan.

No trees or shrubs will be felled or damaged for the purpose of obtaining firewood, unless agreed to by the landowner/tenant.

Fires will only be allowed in facilities or equipment specially constructed for this purpose. If required by applicable legislation, a fire-break shall be cleared around the perimeter of the camp and office sites.

Lighting and noise disturbance or any other form of disturbance that may have an effect on the landowner/tenant/persons lawfully living in the vicinity shall be kept to a minimum.

### **F 2.3.2 TOILET FACILITIES, WASTE WATER AND REFUSE DISPOSAL**

As a minimum requirement, the holder of a mining permit/ prospecting right shall, at least, provide pit latrines for employees and proper hygiene measures shall be established.

Chemical toilet facilities or other approved toilet facilities such as a septic drain shall preferably be used and sited on the camp site in such a way that they do not cause water or other pollution.

The use of existing facilities must take place in consultation with the landowner/tenant.

### EMPr COMMITMENTS

In cases where facilities are linked to existing sewerage structures, all necessary regulatory requirements concerning construction and maintenance should be adhered to.

All effluent water from the camp washing facility shall be disposed of in a properly constructed French drain, situated as far as possible, but not less than 200 metres, from any stream, river, pan, dam or borehole.

Only domestic type wash water shall be allowed to enter this drain and any effluents containing oil, grease or other industrial substances must be collected in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognised facility.

Spills should be cleaned up immediately to the satisfaction of the Regional Manager by removing the spillage together with the polluted soil and by disposing of them at a recognised facility.

Non-biodegradable refuse such as glass bottles, plastic bags, metal scrap, etc., shall be stored in a container at a collecting point and collected on a regular basis and disposed of at a recognised disposal facility. Specific precautions shall be taken to prevent refuse from being dumped on or in the vicinity of the camp site.

Biodegradable refuse generated from the office/camp site, processing areas vehicle yard, storage area or any other area shall either be handled as indicated above or be buried in a pit excavated for that purpose and covered with layers of soil, incorporating a final 0,5 metre thick layer of topsoil (where practicable). Provision should be made for future subsidence of the covering.

#### F 2.3.3 REHABILITATION OF THE OFFICE/CAMP SITE

On completion of operations, all buildings, structures or objects on the camp/office site shall be dealt with in accordance with section 44 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002), which states:

(1) When a prospecting right, mining right, retention permit or mining permit lapses, is cancelled or is abandoned or when any prospecting or mining operation comes to an end, the holder of any such right or permit may not demolish or remove any building, structure, object -

(a) which may not be demolished in terms of any other law;

(b) which has been identified in writing by the Minister for purposes of this section; or

(c) which is to be retained in terms of an agreement between the holder and the owner or occupier of the land, which agreement has been approved by the Minister in writing.

(2) The provision of subsection (1) does not apply to bona fide mining equipment which may be removed.

Where office/camp sites have been rendered devoid of vegetation/grass or where soils have been compacted owing to traffic, the surface shall be scarified or ripped.

Areas containing French drains shall be compacted and covered with a final layer of topsoil to a height of 10cm above the surrounding ground surface.

The site shall be seeded with a vegetation seed mix adapted to reflect the local indigenous flora.

If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining/prospecting operation be corrected and the area be seeded with a vegetation seed mix to his or her specification.

Photographs of the camp and office sites, before and during the mining/ prospecting operation and after rehabilitation, shall be taken at selected fixed points and kept on record for the information of the Regional Manager.

#### F 2.4 VEHICLE MAINTENANCE YARD AND SECURED STORAGE AREAS

##### F 2.4.1 ESTABLISHING THE VEHICLE MAINTENANCE YARD AND SECURED STORAGE AREAS

The vehicle maintenance yard and secured storage area will be established as far as is practicable, outside the flood plain, above the 1 in 50 flood level mark within the boundaries of the mining/prospecting area.

<b>EMPr COMMITMENTS</b>
The area chosen for these purposes shall be the minimum reasonably required and involve the least disturbance to tree and plant life. Topsoil shall be handled as described in F 2.1 above.
The storage area shall be securely fenced and all hazardous substances and stocks such as diesel, oils, detergents, etc., shall be stored therein. Drip pans, a thin concrete slab or a facility with PVC lining, shall be installed in such storage areas with a view to prevent soil and water pollution.
The location of both the vehicle maintenance yard and the storage areas are to be indicated on the layout plan.
No vehicle may be extensively repaired in any place other than in the maintenance yard.
<b>F 2.4.2 MAINTENANCE OF VEHICLES AND EQUIPMENT</b>
The maintenance of vehicles and equipment used for any purpose during the mining/prospecting operation will take place only in the maintenance yard area.
Equipment used in the mining/prospecting process must be adequately maintained so that during operations it does not spill oil, diesel, fuel, or hydraulic fluid.
Machinery or equipment used on the mining/prospecting area must not constitute a pollution hazard in respect of the above substances. The Regional Manager shall order such equipment to be repaired or withdrawn from use if he or she considers the equipment or machinery to be polluting and irreparable.
<b>F 2.4.3 WASTE DISPOSAL</b>
Suitable covered receptacles shall be available at all times and conveniently placed for the disposal of waste.
All used oils, grease or hydraulic fluids shall be placed therein and these receptacles will be removed from the site on a regular basis for disposal at a registered or licensed disposal facility.
All spills should be cleaned up immediately to the satisfaction of the Regional Manager by removing the spillage together with the polluted soil and by disposing of them at a recognised facility.
On completion of mining/prospecting operations, the above areas shall be cleared of any contaminated soil, which must be dumped as referred to in section F 2.4.3 above.
All buildings, structures or objects on the vehicle maintenance yard and secured storage areas shall be dealt with in accordance with section 44 of the Mineral and Petroleum Resources Development Act, 2002.
The surface shall then be ripped or ploughed to a depth of at least 300mm and the topsoil previously stored adjacent the site, shall be spread evenly to its original depth over the whole area. The area shall then be fertilised if necessary (based on a soil analysis).
The site shall be seeded with a vegetation seed mix adapted to reflect the local indigenous flora.
If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining/prospecting operation be corrected and the area be seeded with a seed mix to his or her specification.
<b>F 3 GENERAL OPERATING PROCEDURES IN THE PROSPECTING AREA</b>
<b>F 3.1 LIMITATIONS ON MINING/PROSPECTING</b>
The mining of or prospecting for precious stones shall take place only within the approved demarcated mining or prospecting area.
Mining/ prospecting may be limited to the areas indicated by the Regional Manager on assessment of the application.
The holder of the mining permit/ prospecting right shall ensure that operations take place only in the demarcated areas as described in section F 1.1.2 above.



### EMPr COMMITMENTS

Operations will not be conducted closer than one and a half times the height of the bank from the edge of the river channel and in such manner that the stability of the bank of the river is affected.

Precautions shall also be taken to ensure that the bank of the river is adequately protected from scouring or erosion. Damage to the bank of the river caused by the operations, shall be rehabilitated to a condition acceptable to the Regional Manager at the expense of the holder.

Restrictions on the disturbance of riverine vegetation in the form of reeds or wetland vegetation must be adhered to. The presence of these areas must be entered in Part of the programme and indicated on the layout plan.

#### **F 3.2 MINING/ PROSPECTING OPERATIONS WITHIN THE RIVERINE ENVIRONMENT**

*NOTE: The Department of Water Affairs and Forestry may impose additional conditions which must be attached to this EMP. In this regard, please see the Best Practice Guideline for small scale mining developed by DWAF (BPG 2.1) (available from <http://www.dwaf.gov.za>)*

The mining of or prospecting for precious stones in the river or the banks of the river will be undertaken only after the Regional Manager has consulted with the Department of Water Affairs and Forestry.

The canalisation of a river will not be undertaken unless the necessary permission has been obtained from the Department of Water Affairs and Forestry. Over and above the conditions imposed by the said Department, which conditions shall form part of this EMPr, the following will also apply:

The canalisation of the flow of the river over different parts of the river bed shall be constructed in such a manner that the following are adhered to at all times:

The flow of the river may not be impeded in any way and damming upstream may not occur.

The canalisation of the flow may not result in scouring or erosion of the river-bank.

Well points or extraction pumps in use by other riparian users may not be interfered with and canalisation may not impede the extraction of water at these points.

Access to the riverbed for the purpose of conducting excavations in the river-bed, shall be through the use of only one access at a time. The location of the access to the river channel across the river-bank shall be at a point of the river-bank where the least excavation and damage to vegetation will occur and shall not be wider than is reasonably required. The position of the river access together with all planned future access points, must be indicated on the layout plan.

#### **F 3.2.1 REHABILITATION OF ACCESS TO RIVER-BED**

When rehabilitating the access point, the original profile of the river-bank will be re-established by backfilling the access point with the original material excavated or other suitable material.

The topsoil shall then be returned over the whole area to its original depth and if necessary fertilised and the vegetation allowed to grow.

If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining/prospecting operation be corrected and the area be seeded with a seed mix to his or her specification.

In the event of damage from an occurrence where high flood waters scour and erode access points in the process of rehabilitation over the river-bank or an access point currently in use, repair of such damage shall be the sole responsibility of the holder of the mining permit or prospecting right.

Repair to the river-bank to reinstate its original profile to the satisfaction of the Regional Manager must take place immediately after such event has occurred and the river has subsided to a point where repairs can be undertaken.

Final acceptance of rehabilitated river access points will be awarded only after the vegetation has re-established to a point where the Regional Manager is satisfied that the river-bank is stable and that the measures installed are of durable nature and able to withstand high river-flow conditions.

## EMPr COMMITMENTS

### F 3.2.2 REHABILITATION OF MINING/PROSPECTING AREA IN THE BED OF THE RIVER

The goal of rehabilitation with respect to the area where mining/prospecting has taken place in the river-bed is to leave the area level and even, and in a natural state containing no foreign debris or other materials and to ensure the hydrological integrity of the river by not attenuating or diverting any of the natural flow.

All scrap and other foreign materials will be removed from the bed of the river and disposed of as in the case of other refuse (see section F 2.3.2 above), whether these accrue directly from the mining/prospecting operation or are washed on to the site from upstream.

Removal of these materials shall be done on a continuous basis and not only at the start of rehabilitation.

Where reeds or other riverine vegetation have been removed from areas, these shall be re-established systematically in the approximate areas where they occurred before mining/prospecting.

An effective control programme for the eradication of invader species and other exotic plants, shall be instituted on a regular basis over the entire mining/prospecting area under the control of the holder of the mining permit/ prospecting right, both during mining/prospecting and at the stage of final rehabilitation.

#### THE WATER USE LICENCE

The National Water Act, (Act 36 of 1998), is based on the principles of sustainability, efficiency and equity, meaning that the protection of water resources must be balanced with their development and use.

In addition to being issued with a prospecting right or mining permit a small-scale miner may also need to get a water use licence for the proposed water uses that will take place, except in certain cases.

NOTE: The Department of Water Affairs and Forestry (DWAF) developed specific Best Practice Guideline for small scale mining that relates to stormwater management, erosion and sediment control and waste management. Copies of these guidelines can be obtained from the regional office of DME or DWAF.

Applications for a water use licence must be made in good time, such that approval can be granted before a water use activity can begin. The appropriate licence forms for each kind of expected water use should be completed together with supporting documentation. The main supporting document required is a technical report. To make the technical report easier, you can refer to sections in this EMPr, as most of what the technical report requires has already been done in the EMPr. If you refer to the EMPr it must be attached to the technical report.

### F 3.3 EXCAVATIONS

#### F 3.3.1 ESTABLISHING THE EXCAVATION AREAS

Whenever any excavation is undertaken for the purpose of locating and/or extracting ore bodies of all types of minerals, including precious stone-bearing gravels, the following operating procedures shall be adhered to:

Topsoil shall, in all cases (except when excavations are made in the river-bed), be handled as described in F 2.1 above.

Excavations shall take place only within the approved demarcated mining/prospecting area.

Overburden rocks and coarse material shall be placed concurrently in the excavations or stored adjacent to the excavation, if practicable, to be used as backfill material once the ore or gravel has been excavated.

Trenches shall be backfilled immediately if no ore or precious stone-bearing gravel can be located.

#### F 3.3.2 REHABILITATION OF EXCAVATION AREAS

The following operating procedures shall be adhered to:

The excavated area must serve as a final depositing area for the placement of tailings during processing.

Rocks and coarse material removed from the excavation must be dumped into the excavation simultaneously with the tailings.

<b>EMPr COMMITMENTS</b>
Waste, as described in paragraph F 2.3.2 above, will not be permitted to be deposited in the excavations.
Once excavations have been refilled with overburden, rocks and coarse natural materials and profiled with acceptable contours and erosion control measures, the topsoil previously stored, shall be returned to its original depth over the area.
The area shall be fertilised if necessary to allow vegetation to establish rapidly. The site shall be seeded with a local or adapted indigenous seed mix in order to propagate the locally or regionally occurring flora.
If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining/ prospecting operation, be corrected and the area be seeded with a vegetation seed mix to his or her specification.
<b>F 3.4 PROCESSING AREAS AND WASTE PILES (DUMPS)</b>
<b>F 3.4.1 ESTABLISHING PROCESSING AREAS AND WASTE PILES</b>
Processing areas and waste piles shall not be established within 100 metres of the edge of any river channel or other water bodies.
Processing areas should be established, as far as practicable, near the edge of excavations to allow the waste, gravel and coarse material to be processed therein.
The areas chosen for this purpose shall be the minimum reasonably required and involve the least disturbance to vegetation.
Prior to development of these areas, the topsoil shall be removed and stored as described in paragraph F 2.1 above.
The location and dimensions of the areas are to be indicated on the layout plan and once established, the processing of ore containing precious stones shall be confined to these areas and no stockpiling or processing will be permitted on areas not correctly prepared.
Tailings from the extraction process must be so treated and/or deposited that it will in no way prevent or delay the rehabilitation process
<b>F 3.4.2 REHABILITATION OF PROCESSING AREAS</b>
Coarse natural material used for the construction of ramps must be removed and dumped into the excavations.
On completion of mining/prospecting operations, the surface of the processing areas especially if compacted due to hauling and dumping operations, shall be scarified to a depth of at least 300mm and graded to an even surface condition and the previously stored topsoil will be returned to its original depth over the area.
Prior to replacing the topsoil the material that was removed from the processing area will be replaced in the same order as it originally occurred.
The area shall then be fertilised if necessary to allow vegetation to establish rapidly. The site shall be seeded with a local, adapted indigenous seed mix.
If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining/prospecting operation be corrected and the area be seeded with a seed mix to his or her specification.
<b>F 3.5 TAILINGS DAM(S) (SLIMES DAM)</b>
The permission of the Regional Manager must be obtained should a tailings dam be constructed for the purpose of handling the tailings of the mining/prospecting operations. The construction, care and maintenance of tailings dams have been regulated and the relevant regulation is copied herewith, both for your information and as a guideline to the commissioning, management, operation, closing and aftercare of a tailings deposition facility.
If applicable, see Regulation 73 of MPRDA for specific requirements.
<b>F 3.6 FINAL REHABILITATION</b>
All infrastructure, equipment, plant, temporary housing and other items used during the mining period will be removed from the site (section 44 of the MPRDA)

<b>EMPr COMMITMENTS</b>	
	Waste material of any description, including receptacles, scrap, rubble and tyres, will be removed entirely from the mining area and disposed of at a recognised landfill facility. It will not be permitted to be buried or burned on the site.
	Final rehabilitation shall be completed within a period specified by the Regional Manager.
<b>F.4</b>	<b>MONITORING AND REPORTING</b>
<b>F 4.1</b>	<b>INSPECTIONS AND MONITORING</b>
	Regular monitoring of all the environmental management measures and components shall be carried out by the holder of the prospecting right, mining permit or reconnaissance permission in order to ensure that the provisions of this programme are adhered to.
	Ongoing and regular reporting of the progress of implementation of this programme will be done.
	Various points of compliance will be identified with regard to the various impacts that the operations will have on the environment.
	Inspections and monitoring shall be carried out on both the implementation of the programme and the impact on plant and animal life.
	Visual inspections on erosion and physical pollution shall be carried out on a regular basis.
<b>F 4.2</b>	<b>COMPLIANCE REPORTING / SUBMISSION OF INFORMATION</b>
	Layout plans will be updated on a regular basis and updated copies will be submitted on a biannual basis to the Regional Manager
	Reports confirming compliance with various points identified in the environmental management programme will be submitted to the Regional Manager on a regular basis and as decided by the said manager.
	Any emergency or unforeseen impact will be reported as soon as possible.
	An assessment of environmental impacts that were not properly addressed or were unknown when the programme was compiled shall be carried out and added as a corrective action.
<b>F 5</b>	<b>CLOSURE</b>
<b>F 5.1</b>	<b>ENVIRONMENTAL RISK REPORT</b>
	When the holder of a prospecting right, mining permit or reconnaissance permission intends closing down his/her operations, an environmental risk report shall accompany the application for closure. The requirements of such a risk report is contained in Regulation 60 of the Regulations promulgated in terms of the Act.
<b>F 5.2</b>	<b>CLOSURE OBJECTIVES</b>
	Closure objectives form part of this EMPr and must- (a) identify the key objectives for mine closure to guide the project design, development and management of environmental objectives; (b) provide broad future land use objective(s) for the site; and (c) provide proposed closure cost.
<b>F 5.3</b>	<b>CONTENTS OF CLOSURE PLAN</b>

## EMPr COMMITMENTS

See EMPr commitments for contents of closure plan

### F 5.4 TRANSFER OF ENVIRONMENTAL LIABILITIES TO A COMPETENT PERSON

Should the holder of a prospecting right, mining permit or reconnaissance permission wish to transfer any environmental liabilities and responsibilities to another person or persons, the following will pertain:

- (1) An application to transfer environmental liabilities to a competent person in terms of section 48) of the Act, must be completed on Form O as set out in Annexure 1 to the Regulations and be lodged to the Minister for consideration.
- (2) The holder of a prospecting right, mining right or mining permit may transfer liabilities and responsibilities as identified in the environmental management plan and the required closure plan to a competent person as contemplated in Regulation 58.
- (3) When considering the transfer of environmental liabilities and responsibilities in terms of section 48) of the Act, the Minister must consult with any State department which administers any law relating to matters affecting the environment.
- (4) No transfer of environmental liabilities and responsibilities to a competent person may be made unless the Chief Inspector of Mines and the Department of Water Affairs and Forestry have confirmed in writing that the person to whom the liabilities and responsibilities is transferred to, have the necessary qualifications pertaining to health and safety and management of potential pollution of water resources.

### F 5.5 NOTES ON LEGAL PROVISIONS

NOTE:

The holder of a prospecting right, mining permit or reconnaissance permission must also take cognisance of the provisions of other legislation dealing with matters relating to conservation, and which include, inter alia, the following:

- \* National Monuments Act, 1969 (Act 28 of 1969).
- \* National Parks Act, 1976 (Act 57 of 1976)
- \* Environmental Conservation Act, 1989 (Act 73 of 1989)
- \* National Environmental Management Act, 1998 (Act No. 107 of 1998)
- \* Atmospheric Pollution Prevention Act, 1965 (Act 45 of 1965)
- \* The National Water Act, 1998 (Act 36 of 1998)
- \* Mine Safety and Health Act, 1996 (Act 29 of 1996)
- \* The Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983).

## SECTION G OF EMPr – ADDITIONAL COMMITMENTS

### SECTION G: SPECIFIC ADDITIONAL REQUIREMENTS DETERMINED BY THE REGIONAL MANAGER

No additional commitments were included in Section G of the EMP.

### CONDITIONS IN DMR APPROVAL LETTER

All mining activities must take place in accordance with the approved EMP.

No contactors will be allowed under the permit unless the written permission is given by the Director: Mineral Development (DME, Klerksdorp).

No prospecting activities are allowed within 1:50 year flood line or 100m from the edge of the river whatever is the greatest, without the necessary authorization from DWAF.

No prospecting infrastructure is allowed to be constructed within the 1:100 year flood line without the necessary authorization from DWAF.

The applicant is responsible for all surface disturbances on the mining area, which includes all historical mining activities.

All available topsoil must be stripped and stockpiled separately prior to any surface disturbance.

All mine waste must be taken back to the excavation area for backfilling purposes.

No mine waste will be allowed to be deposited in natural drainage lines or erosion gullies.

No dump structures must be left on the surface, this includes topsoil stockpiles, overburden stockpiles, waste rock stockpiles, tailings dumps and slimes dams.

All excavations must be backfilled to the natural surface level, if a bulk factor exists it must be accommodated on the total area of disturbance.

A surveyed plan must be submitted every year to the DME that indicates:

- the positions, footprints and volumes of all topsoil stockpiles, overburden dumps, waste rock dumps and slimes dams (any structure that is above the natural surface)
- the positions, surface areas and depths of all open pits.
- the positions and surface area of all rehabilitated areas (please indicate the status of rehabilitation-backfilled, profiled/landscaped, topsoiled, vegetated or monitoring and managing).

The rehabilitation fund must be upgraded or revised on an annual basis according to the surveyed plan, which indicates the progress in rehabilitation.

Any project expansions or additional infrastructure must be addressed through an addendum and submitted to the Director: Mineral Development for his approval before they commence.

This approval may be amended at any stage if deemed necessary.

This approval does not purport to absolve your company from its common law obligations towards the surface rights holder or any other affected party.

The following Acts are applicable and relevant to the said approval and your company is to familiarise itself with the provisions in so far as they apply to the company's operations:

- The National Water Act 1998, (Act 36 of 1998), with particular reference to the sections pertaining to mining or prospecting in the proximity of dams and their catchment areas, rivers, marshes, streams, pans and other water resources.
- The Environmental Conservation Act (Act 73 of 1989). Your attention is specifically directed to the requirements of Section 20 of the above-mentioned Act.
- The Atmospheric Pollution Prevention Act, 1965 (Act 45 of 1965), with particular reference to the sections pertaining to the liberation of dust, and other emissions, created by mining activities, into the atmosphere.
- The Conservation of Agriculture Resources Act, 1983 (Act 43 of 1983), with particular reference to the sections pertaining to soil conservation.
- The National Heritage Resources Act (Act No 25 of 1999), with particular reference to the protection of all historical and pre-historical cultural remains.
- The Mine Health and Safety Act (Act 26 of 1996) in conjunction with the Minerals Act (Act 50 of 1991), with particular reference to those sections and regulations pertaining to health and safety at mines; mining within 100m from structures that must be protected; as well as those sections pertaining to rehabilitation of the surface.

All persons concerned must be made fully conversant with the terms of this approval, copies of which must be readily available to them.