

F 2.4.4 Rehabilitation of vehicle maintenance yard and secured storages areas

- 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.

F 3 OPERATING PROCEDURES IN THE MINING AREA

F 3.1 Limitations on mining/prospecting

- 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.
- 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 EMP, 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.

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.

2. 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 EMPlan, as most of what the technical report requires has already been done in the EMPlan. If you refer to the EMPlan 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.
- 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.

F 3.4 PROCESSING AREAS AND WASTE PILES (DUMPS)

F 3.4.1 Establishing processing areas and waste piles

- 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.

F 3.4.2 Rehabilitation of processing areas

- 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.

F 3.5 TAILINGS DAM(S) (SLIMES DAM)

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.

Regulation 73 promulgated under the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) requires the following:

Management of residue stockpiles and deposits

56. (1) *The assessment of impacts relating to the management of residue stockpiles and deposits,*

where appropriate, must form part of the environmental impact assessment report and environmental management programme or the environmental management plan.

- (2) *Residue characterisation*
- (a) *Mine residue must be characterised to identify any potentially significant health and safety hazard and environmental impact that may be associated with the residue when stockpiled or deposited at the site(s) under consideration.*
- (b) *Residue stockpiles and deposits must be characterised in terms of its –*
- (i) *physical characteristics, which may include –*
- (aa) *the size distribution of the principal constituents;*
 (bb) *the permeability of the compacted material;*
 (cc) *void ratios of the compacted material;*
 (dd) *the consolidation or settling characteristics of the material under its own weight and that of any overburden;*
 (ee) *the strength of compacted material;*
 (ff) *the specific gravity of the solid constituents; and*
 (gg) *the water content of the material at the time of deposition, after compaction, and at other phases in the life of the deposit.*
- (ii) *chemical characteristics, which may include –*
- (aa) *the toxicity;*
 (bb) *the propensity to oxidize and /or decompose;*
 (cc) *the propensity to undergo spontaneous combustion;*
 (dd) *the pH and chemical composition of the water separated from the solids;*
 (ee) *stability and reactivity and the rate thereof; and*
 (ff) *neutralising potential.*
- (iii) *mineral content, which include the specific gravity of the residue particles and its impact on particle segregation and consolidation;*
- (3) *Classification of residue stockpiles and deposits*
- (a) *All residue stockpiles and deposits must be classified into one or a combination of the following categories –*
- (i) *the safety classification to differentiate between residue stockpiles and deposits of high, medium and low hazard on the basis of their potential to cause harm to life or property; and*
- (ii) *the environmental classification to differentiate between residue stockpiles and deposits with –*
- (aa) *a potentially significant impact on the environment due to its spatial extent, duration and intensity of potential impacts; or*
 (bb) *no potentially significant impact on the environment.*
- (b) *All mine residue stockpiles and deposits must be classified by a suitably qualified person(s).*
- (c) *The classification of residue stockpiles and deposits shall determine the –*
- (i) *level of investigation and assessment required;*
 (ii) *requirements for design, construction, operation, decommissioning, closure and post closure maintenance; and*
 (iii) *qualifications and expertise required of persons undertaking the investigations, assessments, design, construction thereof.*
- (d) *The safety classification of residue stockpiles and deposits shall be based on the following criteria –*

Number	of	Number of workers	Value of third party	Depth	to	Classification
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<i>residents in zone of influence</i>	<i>in zone of influence</i>	<i>property in zone of influence</i>	<i>underground mine workings</i>	
0	< 10	0 – R2 m	> 200m	<i>Low hazard</i>
1 – 10	11 – 100	R 2 m – R20 m	50 m – 200 m	<i>Medium hazard</i>
> 10	> 100	> R20 m	< 50 m	<i>High hazard</i>

- (e) *A risk analysis must be carried out and documented on all high hazard residue stockpiles and deposits.*
- (f) *The environmental classification of residue stockpiles and deposits must be undertaken on the basis of –*
- (i) the characteristics of the residue;*
 - (ii) the location and dimensions of the deposit (height, surface area);*
 - (iii) the importance and vulnerability of the environmental components that are at risk; and*
 - (iv) the spatial extent, duration and intensity of potential impacts.*
- (g) *An assessment of the environmental impacts shall be done on all environmental components which are significantly affected.*
- (h) *The assessment of impacts and analyses of risks shall form part of the environmental assessment and management programme.*
- (4) *Site selection and investigation:*
- (a) *The process of investigation and selection of a site must entail –*
- (i) the identification of a sufficient number of possible candidate sites to ensure adequate consideration of alternative sites;*
 - (ii) qualitative evaluation and ranking of all alternative sites;*
 - (iii) qualitative investigation of the top ranking sites to review the ranking done in (ii);*
 - (iv) a feasibility study to be carried out on the highest ranking site(s), involving –*
 - (aa) a preliminary safety classification;*
 - (bb) an environmental classification;*
 - (cc) geotechnical investigations; and*
 - (dd) groundwater investigations.*
- (b) *The geotechnical investigations may include–*
- (i) the characterization of the soil profile over the entire area to be covered by the residue facility and associated infrastructure to define the spatial extent and depth of the different soil horizons;*
 - (ii) the characterization of the relevant engineering properties of foundations soils and the assessment of strength and drainage characteristics.*
- (c) *The groundwater investigations may include–*
- (i) the potential rate of seepage from the residue facility;*
 - (ii) the quality of such seepage;*
 - (iii) the geohydrological properties of the strata within the zone that could potentially be affected by the quality of seepage;*
 - (iv) the vulnerability and existing potential use of the groundwater resource within the zone that could potentially be affected by the residue facility.*
- (d) *From these investigations, a preferred site must be identified.*
- (e) *Further investigation on the preferred site, shall include –*
- (i) land use;*

- (ii) *topography and surface drainage;*
 - (iii) *infrastructure and man-made features;*
 - (iv) *climate;*
 - (v) *flora and fauna;*
 - (vi) *soils;*
 - (vii) *ground water morphology, flow, quality and usage; and*
 - (viii) *surface water.*
- (f) *The investigations, laboratory test work, interpretation of data and recommendations for the identification and selection of the most appropriate and suitable site for the disposal of all residue that have the potential to generate leachate that could have a significant impact on the environment and groundwater must be carried out by a suitably qualified person.*
- (5) *Design of residue stockpile and deposit*
- (a) *The design of the residue stockpile and deposit shall be undertaken by a suitably qualified person.*
 - (b) *An assessment of the typical soil profile on the site is required for residue stockpiles and deposits which -*
 - (i) *have a low hazard potential; and*
 - (ii) *have no significant impact on the environment.*
 - (c) *The design of the residue stockpile and deposit must take into account all phases of the life cycle of the stockpile and deposit, from construction through to closure and must include -*
 - (i) *the characteristics of the mine residue;*
 - (ii) *the characteristics of the site and the receiving environment;*
 - (iii) *the general layout of the stockpile or deposit, whether it is a natural valley, ring dyke, impoundment or a combination thereof and its 3-dimensional geometry at appropriate intervals throughout the planned incremental growth of the stockpile or deposit;*
 - (iv) *the type of deposition method used; and*
 - (v) *the rate of rise of the stockpile or deposit.*
 - (d) *Other design considerations, as appropriate to the particular type of stockpile and deposit must be incorporated -*
 - (i) *the control of storm water on and around the residue stockpile or deposit by making provision for the maximum precipitation to be expected over a period of 24 hours with a frequency of once in a 100 years, in accordance with the regulations made under section 8 of the National Water Act, 1998;*
 - (ii) *the provision, throughout the system, of a freeboard of at least 0.5 m above the expected maximum water level, in accordance with regulations made under the National Water Act, 1998, to prevent overtopping;*
 - (iii) *keeping the pool away from the walls; where there are valid technical reasons for deviating from this, adequate motivation must be provided and the design must be reviewed by a qualified person as required in terms of sections 9(6) or 9(7) of the Mine Health and Safety Act, 1996;*
 - (iv) *the control of decanting of excess water under normal and storm conditions;*
 - (aa) *the retention of polluted water in terms of polluted water in terms of GN R991(9), where measures may be required to prevent water from the residue deposit from leaving the residue management system unless it meets prescribed requirements;*

- (bb) *the design of the penstock, outfall pipe, under-drainage system and return water dams;*
 - (cc) *the height of the phreatic surface, slope angles and method of construction of the outer walls and their effects on shear stability;*
 - (dd) *the erosion of slopes by wind and water, and its control by (ee) vegetation, berms or catchment paddocks; and*
 - (ee) *the potential for pollution.*
- (e) *A design report and operating manual shall be drawn up for all residue stockpiles and deposits which –*
- (i) *have a medium to high hazard; and*
 - (ii) *have a potentially significant impact on the environment.*
- (f) *Relevant information must be included in the draft environmental management programme or environmental management plan.*
- (6) *Construction and operation of residue deposits:*
- (a) *The holder of any right or permit in terms of the Act, must ensure that-*
- (i) *the residue deposits, including any surrounding catchment paddocks, is constructed and operated in accordance with the approved environmental management programme or environmental management plan;*
 - (ii) *the design of the residue deposit is followed implicitly throughout the construction thereof, and that any deviations from the design be approved by the Regional Manager and the environmental manage programme and environmental management plan be amended accordingly;*
 - (iii) *as part of the monitoring system, measurements of all residues transported to the site and of all surplus water removed from the site are recorded;*
 - (iv) *the provision for appropriate security measures be implemented to limit unauthorised access to the site and intrusion into the residue deposit;*
 - (v) *specific action be taken in respect of any sign of pollution;*
 - (vi) *adequate measures be implemented to control dust pollution and erosion of the slopes; and*
 - (vii) *details of rehabilitation of the residue deposit be provided in the draft environmental management programme or environmental management plan.*
- (b) *A system of routine maintenance and repair in respect of the residue deposit must be implemented to ensure the ongoing control of pollution, the integrity of rehabilitation and health and safety matters at the site.*
- (7) *Monitoring of residue stockpiles and deposits:*
- (a) *A monitoring system for residue stockpiles and deposits with respect to potentially significant impacts as identified in the environmental assessment must be included in the environmental management programme or environmental management plan.*
- (b) *In the design of a monitoring system for a residue stockpile or deposit, consideration must be given to –*
- (i) *baseline and background conditions with regard to air, surface and groundwater quality;*
 - (ii) *the air, surface and groundwater quality objectives;*
 - (iii) *residue characteristics;*
 - (iv) *the degree and nature of residue containment;*
 - (v) *the receiving environment and specifically the climatic, local geological, hydro geological and geochemical conditions;*
 - (vi) *potential migration pathways;*

- (vii) *potential impacts of leachate;*
- (viii) *the location of monitoring points and the prescribed monitoring protocols; and*
- (ix) *the reporting frequency and procedures.*

(8) *Decommissioning, closure and after care:*

- (a) *The decommissioning, closure and post closure management of residue deposits must be addressed in the closure plan, which must contain the following -*
 - (i) *the environmental classification, including assumptions on which the classifications were based;*
 - (ii) *the closure objectives, final land use or capability;*
 - (iii) *conceptual description and details for closure and post closure management;*
 - (iv) *cost estimates and financial provision for closure and post-closure management; and*
 - (v) *residual impacts, monitoring and requirements to obtain mine closure in terms of the Act.*

F 3.6 FINAL REHABILITATION

- 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)
- 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.

F 4 MONITORING AND REPORTING

F 4.1 Inspections and monitoring

- 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.

Regulation 55 promulgated in terms of the MPRDA requires the following:

Monitoring and performance assessments of environmental management programme or plan

- (1) *As part of the general terms and conditions for a prospecting right, mining right or mining permit and in order to ensure compliance with the approved environmental management*

- programme or plan and to assess the continued appropriateness and adequacy of the environmental management programme or plan, the holder of such right must-
- (a) conduct monitoring on a continuous basis;
 - (b) conduct performance assessments of the environmental management programme or plan as required; and
 - (c) compile and submit a performance assessment report to the Minister to demonstrate adherence to sub-regulation (b).
- (2) The frequency of performance assessment reporting shall be-
- (a) in accordance with the period specified in the approved environmental management programme or plan, or, if not so specified;
 - (b) as agreed to in writing by the Minister; or
 - (c) biannually (every two years).
- (3) The performance assessment report, shall be in the format provided in guidelines that will from time to time be published by the Department and shall as a minimum contain-
- (a) information regarding the period that applies to the performance assessment;
 - (b) the scope of the assessment;
 - (c) the procedure used for the assessment;
 - (d) the interpreted information gained from monitoring the approved environmental management programme or plan;
 - (e) the evaluation criteria used during the assessment;
 - (f) the results of the assessment; and
 - (g) recommendations on how and when deficiencies that are identified and/or aspects of non-compliance will be rectified.
- (4) The holder of a prospecting right, mining right or mining permit may appoint an independent qualified person(s) to conduct the performance assessment and compile the performance assessment report provided that no such appointment shall relieve the holder of the responsibilities in terms of these regulations.
- (5) Subject to section 30(2) of the Act, the performance assessment report submitted by the holder shall be made available by the Minister to any person on request.
- (6) If upon consideration by the Minister, the performance assessment executed by the holder is not satisfactory or the report submitted by the holder is found to be unacceptable, the holder must-
- (a) repeat the whole or relevant parts of the performance assessment and revise and resubmit the report; and/or
 - (b) submit relevant supporting information; and/or
 - (c) appoint an independent competent person(s) to conduct the whole or part of the performance assessment and to compile the report.
- (7) If a reasonable assessment indicates that the performance assessment cannot be executed satisfactorily by the holder or a competent person(s) appointed by the holder, the Minister may appoint an independent performance assessment person(s) to conduct such performance assessment. Such appointment and execution shall be for the cost of the holder.
- (8) When the holder of a prospecting right, mining right or mining permit intends closing such operation, a final performance assessment shall be conducted and a report submitted to the Minister to ensure that -
- (a) the requirements of the relevant legislation have been complied with;
 - (b) the closure objectives as described in the environmental management programme or plan have been met; and
 - (c) all residual environmental impacts resulting from the holder's operations have been identified and the risks of latent impacts which may occur have been identified, quantified and arrangements for the management thereof have been assessed.
- (9) The final performance assessment report shall either precede or accompany the application for a closure certificate in terms of the Act.

F 4.2 Compliance reporting / submission of information

- Layout plans will be updated on a regular basis and updated copies will be submitted on a biennial 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.

F 5 CLOSURE

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 and is quoted below:

F 5.1 ENVIRONMENTAL RISK REPORT

"An application for a closure certificate must be accompanied by an environmental risk report which must include-

- (a) *the undertaking of a screening level environmental risk assessment where-*
 - (i) *all possible environmental risks are identified, including those which appear to be insignificant;*
 - (ii) *the process is based on the input from existing data;*
 - (iii) *the issues that are considered are qualitatively ranked as –*
 - (aa) *a potential significant risk; and/or*
 - (bb) *a uncertain risk; and/or*
 - (cc) *an insignificant risk.*
- (b) *the undertaking of a second level risk assessment on issues classified as potential significant risks where-*
 - (i) *appropriate sampling, data collection and monitoring be carried out;*
 - (ii) *more realistic assumptions and actual measurements be made; and*
 - (iii) *a more quantitative risk assessment is undertaken, again classifying issues as posing a potential significant risk or insignificant risk.*
- (c) *assessing whether issues classified as posing potential significant risks are acceptable without further mitigation;*
- (d) *issues classified as uncertain risks be re-evaluated and re-classified as either posing potential significant risks or insignificant risks;*
- (e) *documenting the status of insignificant risks and agrees with interested and affected persons;*
- (f) *identifying alternative risk prevention or management strategies for potential significant risks which have been identified, quantified and qualified in the second level risk assessment;*
- (g) *agreeing on management measures to be implemented for the potential significant risks which must include-*
 - (i) *a description of the management measures to be applied;*
 - (ii) *a predicted long-term result of the applied management measures;*
 - (iii) *the residual and latent impact after successful implementation of the management measures;*
 - (iv) *time frames and schedule for the implementation of the management measures;*

- (v) responsibilities for implementation and long-term maintenance of the management measures;
- (vi) financial provision for long-term maintenance; and
- (vii) monitoring programmes to be implemented."

F 5.2 CLOSURE OBJECTIVES

Closure objectives form part of this EMPlan 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

F 5.3 CONTENTS OF CLOSURE PLAN

A closure plan forms part of the EMP and must include the following:

- (a) a description of the closure objectives and how these relate to the prospecting or mine operation and its environmental and social setting;
- (b) a plan contemplated in Regulation 2(2), coordinated according to generally accepted standards, showing the land or area under closure;
- (c) a summary of the regulatory requirements and conditions for closure negotiated and documented in the environmental management programme or plan;
- (d) a summary of the results of the environmental risk report and details of identified residual and latent impacts;
- (e) a summary of the results of progressive rehabilitation undertaken;
- (f) a description of the methods to decommission each prospecting or mining component and the mitigation or management strategy proposed to avoid, minimize and manage residual or latent impacts;
- (g) details of any long-term management and maintenance expected;
- (h) details of financial provision for monitoring, maintenance and post closure management, if required;
- (i) a plan or sketch at an appropriate scale describing the final land use proposal and arrangements for the site;
- (j) a record of interested and affected persons consulted; and
- (k) technical appendices, if any.

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, <i>inter alia</i> , 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).

G. SPECIFIC ADDITIONAL REQUIREMENTS DETERMINED BY THE REGIONAL MANAGER.

Officials in regional offices may use the following matrix to determine the necessity for additional objectives to be included in this Section of the document:

POTENTIAL ENVIRONMENTAL IMPACTS OF MINING										
Activity	Disturbance					Pollution				Visual
	Landform	Soil	Flora	Fauna	Heritage	Land	Water	Air	Noise	
Mining										
Access										
Topsoil removal										
Overburden removal										
Mineral Extraction										
Tailings disposal										
Water Abstraction										
Pipeline route										
Transport										
Accommodation										

Waste Disposal										
Electricity										
Hydrocarbon storage										
Workforce										

Please indicate VL, L, M, H, and VH for Very Low, Low, Medium, high and Very high in each column to determine the main area and severity of impact.

G. This section outlines the specific additional requirements that may be set for the operation by the Regional Manager. Additional requirements will only have been set if the Regional Manager is of the opinion that there are specific impacts on the environment which will not be adequately mitigated by the provisions set within the standard version of the Environmental Management Plan. These requirements form part of the Environmental Management Plan and all elements and instructions contained herein must be complied with by the applicant.

H. UNDERTAKING

I, Charles S. Kinsley the undersigned and duly authorised thereto by Kobow Investments 100 (pty) Ltd Company/~~Close Corporation/Municipality~~ (Delete that which is not applicable) have studied and understand the contents of this document in it's entirety and hereby duly undertake to adhere to the conditions as set out therein including the amendment(s) agreed to by the Regional Manager in Section G and approved on

Signed at Plebedorp this 22nd day of April 2011

[Signature]
Signature of applicant

Director
Designation

Agency declaration: This document was completed by on behalf of

J. APPROVAL

Approved in terms of Section 39(4) of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002)

Signed at this day of 20.....

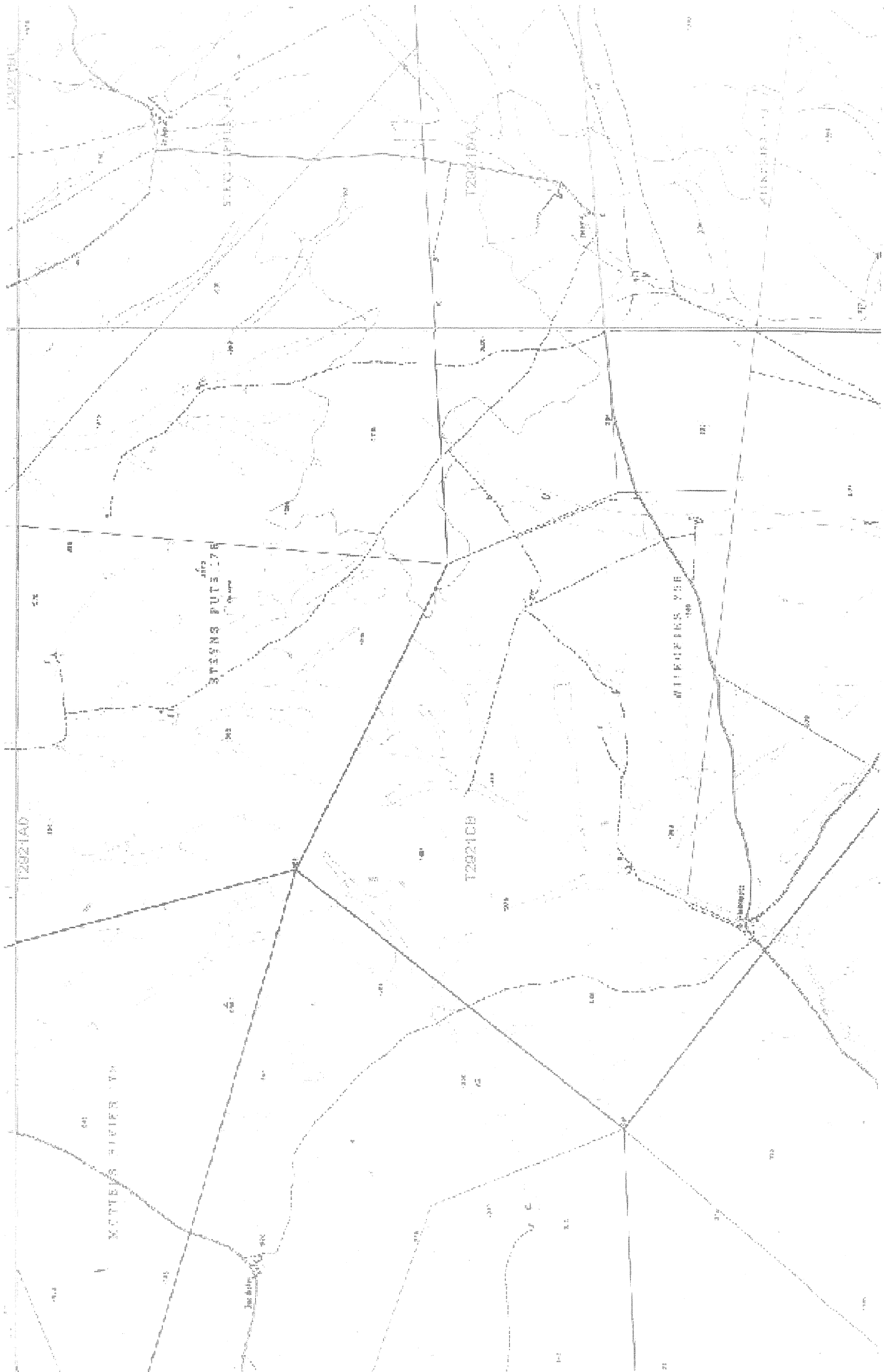
.....
REGIONAL MANAGER

REGION:

This document has been compiled by the Directorate: Mine Environmental Management of the Department of Minerals and Energy at their Head Office in Pretoria. Any comments, suggestions or inputs will be sincerely appreciated. If you have any comments or suggestions regarding this document or its application, please forward your contribution to:

The Director: Mine Environmental Management
Private Bag X 59
PRETORIA
0001

Tel: 012 317 9288
Fax: 012 320 6786
E-mail: dorothy@mepta.pww.gov.za



P.O. Box 6724,
Flamwood 2572.
Klerksdorp

22 March 2011.

Regional Manager: Mineral Regulation
Private Bag X14,
Springbok 8240.

Dear Sir,

Communication land owner Ref. NCS 30/5/1/3/2/852 MP
and Ref. NCS 30/5/1/3/2/851 MP.

I have written letters to both Mr. Kung and
Masigbane Trading 855 and by registered mail.

Included please find copies of these letters
and well as copies of proof of registration. To
date I have not received any answer. I also
tried to phone these contact, but without success
so far.

Please let me know what the next step
is, because we wish to carry on with mine
planning, EMP, etc.

Kind regards,

B. Kringsley.

Director, Robow Investments 100 (Pty) Ltd.

P.S. Mr. Kung's tel no is 0833973569.

3 Maart 2011.

Postbus 6724,
Flamwood 2572
Klerksdorp.

Mnr. C.F. Keung,
Postbus 7,
Grootdrink. 8822.

Heagte Mnr. Chris Keung,
i.s. Rooskwaarts mynpermit.

Robow Investments No. 100 (Edms) Bpk, waarvan ek een van die direkteurs is, het in mynpermit om rooskwaarts te myn op gedeelte 3 (wiewet) van Steyns Pute 178 en gedeelte van gedeelte 2 van Witkopjes 258. Ons het ook in finansiële beson wat belangstel om geld te belê in hierdie mynplan.

Hiernaas wil ek dus graag met u onderhandel oor die huurvergoeding vir die area op u plaas wat ons tydens die mynbedrywigheid sal gebruik. Daar is nog geen mynplan opgetrek nie skoen ons nie met u onderhandel het nie.

Dus sal ek graag wil vernemen of ons in die nabije toekomst kan ontmoet om hierdie sake te bespreek.

U spoedige antwoord sal waardeur word.

Die ewe,

Dr. S. Khungdy

Tel/faks 018-4687885

Sel 0823164444

e-pos geotech@intekom.co.za

P.O. Box 6724,
Flamwood.
Klerksdorp 2572.

3 March 2011.

Marighanoe Trading 855 CC,
P.O. Box 55/53,
Sunset Beach 7435.

Dear Sir,

Mining permit - Steyns Puts 178
Robow Investments No 100, of which I am
one of the directors, has acquired a mining
permit over a portion of portion 3 of the
farm Steyns Puts 178, Kerkhardt.

According to the Regional Manager of the
Department of Mineral Resources, Northern Cape
Region, you also have an interest on this
farm. Robow Investments plans to start
mining rose quartz here in the near future.

Do you have any comment in this
regard? If so, please contact the undersigned.

Yours sincerely,

Dr. G. Kingo.

Tel/fax 018-4687885

cell 0823164444

e-mail geotech@intekom.co.za