

**SUMMARY OF THE PROPOSED PROSPECTING OPERATION**  
**PROJECT REFERENCE: NC 30/5/1/1/2/13209 PR**

**1. List of activities applied for**

All prospecting and prospecting related activities for occurrence determination for the mineral Diamonds (Alluvial, General and Kimberlite) by means of geological investigations, Geophysical surveys and Percussion drilling:

NAME OF ACTIVITY	ARIAL EXTENT OF THE ACTIVITY HA OR M <sup>2</sup>	APPLICABLE LISTING NOTICE
Geological investigations	21.7668 ha	NEMA 2017, GNR 327, Listed 1, Activity 20: Any activity including the operation of that activity which requires a prospecting right ...
Percussion Drilling		
Drilling	Total: 0.0360 ha Per hole: 0.004 ha	NEMA 2017, GNR 327, Listed 1, Activity 20: Any activity including the operation of that activity which requires a prospecting right ... (a) associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource ...  NEMA 2017, GNR 327, Listed 1, Activity 22: The decommissioning of any activity ... (i) a closure certificate in terms of section 43 of the MPRDA ...
Sampling		NEMA 2017, GNR 327, Listed 1, Activity 20: Any activity including the operation of that activity which requires a prospecting right ... (a) associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource ...
Rehabilitation	0.4368 ha	NEMA 2017, GNR 327, Listed 1, Activity 22: The decommissioning of any activity ... (i) a closure certificate in terms of section 43 of the MPRDA ...
Ablution facility	Total: 0.0008 ha Per site: 0.0004 ha	NEMA 2017, GNR 327, Listed 1, Activity 20: Any activity including the operation of that activity which requires a prospecting right ... (a) associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource ...  NEMA 2017, GNR 327, Listed 1, Activity 22: The decommissioning of any activity ... (i) a closure certificate in terms of section 43 of the MPRDA ...

Vehicle storage		<p>NEMA 2017, GNR 327, Listed 1, Activity 20: Any activity including the operation of that activity which requires a prospecting right ... (a) associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource ...</p> <p>NEMA 2017, GNR 327, Listed 1, Activity 22: The decommissioning of any activity ... (i) a closure certificate in terms of section 43 of the MPRDA ...</p>
Chemical storage		<p>NEMA 2017, GNR 327, Listed 1, Activity 20: Any activity including the operation of that activity which requires a prospecting right ... (a) associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource ...</p> <p>NEMA 2017, GNR 327, Listed 1, Activity 22: The decommissioning of any activity ... (i) a closure certificate in terms of section 43 of the MPRDA ...</p>
Diesel storage		<p>NEMA 2017, GNR 327, Listed 1, Activity 20: Any activity including the operation of that activity which requires a prospecting right ... (a) associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource ...</p> <p>NEMA 2017, GNR 327, Listed 1, Activity 22: The decommissioning of any activity ... (i) a closure certificate in terms of section 43 of the MPRDA ...</p>
Domestic waste facility		<p>NEMA 2017, GNR 327, Listed 1, Activity 20: Any activity including the operation of that activity which requires a prospecting right ... (a) associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource ...</p>
Access road and drill traverses	0.4 ha	<p>NEMA 2017, GNR 327, Listed 1, Activity 20: Any activity including the operation of that activity which requires a prospecting right ... (a) associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource ...</p> <p>NEMA 2017, GNR 327, Listed 1, Activity 22: The decommissioning of any activity ... (i) a closure certificate in terms of section 43 of the MPRDA</p>

Geological modelling		NEMA 2017, GNR 327, Listed 1, Activity 20: Any activity including the operation of that activity which requires a prospecting right ...
Feasibility study		NEMA 2017, GNR 327, Listed 1, Activity 20: Any activity including the operation of that activity which requires a prospecting right ...

## 2. Typical impacts of activities

- Vegetation loss – a total area of 4 368 m<sup>2</sup> will be cleared for the prospecting activities and related structures during the course of operations. The impact can be regarded as low to medium, with no long term effects. If rehabilitation of these areas is done correctly full recovery of the environment is possible.
- Noise disturbance – during the drilling operations is noise generated by the machinery. Again the noise will be much localized and should have no impact on the surrounding environment.
- Air quality loss – dust will be generated during the drilling activities. The dust generated may have an impact on the air quality, but with localized effects and should not have an effect on the surrounding environment. For this the impact can be regarded as low.
- Soil pollution – chemical soil pollution is always a possibility during mechanical operations. Working machinery and storage facilities bears a risk for chemical spillage and the impact thereof may be very severe.
- Soil compaction – heavy vehicles driving off-road bears a great risk to the trampling of vegetation and the compaction of the soil. The drill site areas will also become compacted during the duration of the prospecting activities. If not rehabilitated vegetation re-growth will be haltered and poses a low to medium risk to the environment.
- Littering pollution – littering during the prospecting activities can happen and may have a low to medium impact on the environment depending on the type of littering and the remediation thereof.
- Water pollution – chemical contaminated water from the storage facilities bears a risk to the environment. This impact should always be regarded as high and proper mitigation and/or remediation measures should be in place.

### 3. Duration of each activity

All of the listed activities will be occurring concurrently and the time frame applied for at the Department of Mineral Resources' and Energy is 2 years, which is the duration of the permit applied for.

Per listed activity:

- Geological investigations - ± 5 months
- Drilling - ± 13 months
- Sampling - concurrent with drilling
- Rehabilitation - concurrent with drilling
- Ablution facility - concurrent with geological investigations and drilling
- Vehicle storage - concurrent with drilling
- Chemical storing - concurrent with drilling
- Diesel storage - concurrent with drilling
- Domestic waste facility - concurrent with drilling
- Roads and traverses - concurrent with drilling
- Geological report - ± 6 months

### 4. Details regarding intended operation

The exploration activities on the proposed project area will be done in various phases, which will include a detailed desktop study, geophysical survey as well as Reverse Circulation Percussion Drilling to delineate the various commodity zones possibly underlying the property to determine minable resources.

Prospecting Right using the following methodology:

- Phase 1 – Geological investigations (4 months)
  - Geological investigations (months 1 to 4)

Initial geological investigations will be in the form of desktop studies using existing literature, available data of the area and satellite imagery. From this information obtained the current geological maps is updated to be more area specific.

Field visits will also be conducted for the purpose of geological surveys for determining the existence of specific trace minerals as well as outcrop evaluation. All findings will be digitally captured and geological models drafted.
  - Geological overview (month 5)

All results obtained during the first phase activities are communicated and explained within the geological overview. Within this report all data is summarized and final drilling positions determined and recommended.
- Phase 2 – RC Drilling (13 months)
  - The initial drilling proposed is done to demarcate the gravel body with its boundaries. 9 Holes is proposed to a maximum depth of 10 meters each.

- Drilling will be conducted by means of Reverse Cycle Percussion drilling and the dust obtained captured within plastic tubes for logging and sampling.
- Logging (months 6 to 18)  
All drill holes will be logged every meter containing information such as hole location, hole depth, gravel depth and other geological structures encountered within the hole. The dust samples will be taken and stored within sealed chip trays and safeguarded for future referencing.
- Rehabilitation (months 6 to 18)  
Once each hole is completely drilled it will be fully rehabilitated before moving to the next drill hole location. Rehabilitation will be done by the back filling of the dust material in their respective manner. In this way rehabilitation is time and cost effective.
- Phase 3 – Geological Report (6 months)
  - Data input and mapping (months 19 to 22)  
All data obtained during the proposed activities will be digitally captured and already existing maps updated to form more detailed and accurate models of the study area.
  - Report writing (months 23 to 24)  
All findings and results will be drafted and explained within a geological report. The geological models created will be used for the purpose and also be included within the report. The report will further include recommendations on future activities.