

prime | resources

environmental consultants

The Workshop 70–7th Avenue Parktown North 2193 PO Box 2316 Parklands 2121 T +27 11 447 4888 F +27 86 604 2219 E prime@resources.co.za www.resources.co.za

# **SCOPING PHASE INFORMATION BOOKLET**

New Kleinfontein Goldmine (Pty) Ltd Tailings Storage Facility (TSF) Expansion Project

# APPLICATION FOR AN ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (NEMA, NO. 107 OF 1998)

AND

THE NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (NEM:WA, NO. 59 OF 2008)





This document summarises the currently available information. Registered Interested and Affected Parties (IAPs) will be notified of the availability of the EIA Phase Information Booklet.

The Scoping Report and Non-Technical Summary are currently available for public review and comment and **can be requested via email** (prime@resources.co.za) or can be downloaded from the Prime Resources website (www.resources.co.za).

You are invited to review the Scoping Report and/or this Information Booklet.

#### Please submit comments by 21 November 2022.

All comments submitted will be included in the final documentation to be sent to the Department of Mineral Resources and Energy (DMRE) for consideration and to make a recommendation to the Minister of Mineral Resources for the decision-making process.

In accordance with the POPI Act, No. 4 of 2013, the information provided by IAPs will be processed by Prime Resources insofar as is necessary to fulfil the abovementioned legal obligations. For further information, please contact the EAP.



# Background

New Kleinfontein Goldmine (Pty) Ltd, (hereafter referred to as the "Applicant" or "NKGM"), a subsidiary of Gold One Group Limited, is an existing gold mine located near Springs, Gauteng Province.

NKGM is a fully operational, underground, medium-sized gold mine with existing mining rights, several Environmental Authorisations (EA), and an approved Water Use Licence (WUL). NKGM is located on the Remaining Extent (RE) of the Farm Cloverfield 75 IR, near Springs and adjacent to the suburbs of Modder East and Eastvale, which is situated approximately 40 km to the east of the Johannesburg Central Business District (CBD) in the City of Ekurhuleni (CoE).

The remaining Life of Mine (LoM) is estimated to be 4 years and the mine is expected to operate until 2026. Decommissioning is expected to commence in 2027. The mine is currently depositing tailings at the existing Tailings Storage Facility (TSF) at NKGM. Once the underground resources at the mine are exhausted, NKGM intends to process ore from other Gold One operations at the existing processing plant.

In order to support ongoing mining operations until 2026 and continue processing ore from other Gold One operations, the Applicant is proposing to expand its existing TSF in both a western and northern direction. The western expansion will have a footprint of 54 ha, and the northern expansion will have a footprint of 26 ha. Both expansions are intended to reach a height of 32.5 m at full capacity, providing an additional 10 years of tailings storage capacity. NKGM also intends to upgrade their existing Return Water Dam (RWD) to account for the additional drain water originating from the expanded TSF, and re-route the existing access road, boundary fence, pedestrian walkway, mine water supply pipeline and powerline.

The Applicant is applying for an Environmental Authorisation (EA) for activities listed in terms of the National Environmental Management Act, No. 107 of 1998 (NEMA) Environmental Impact Assessment (EIA) Regulations (GNR982 of 2014, as amended) and the National Environmental Management: Waste Act, No 59 of 2008 (NEW:WA) Regulations (GNR921 of 2013, as amended). All components of the proposed project are within the boundaries of the existing Mining Right (MR) and within the existing surface lease area held by NKGM.



### Locality

The proposed expansion sites are located on the Remaining Extent (RE) of the Farm Cloverfield 75 IR, near Springs and adjacent to the suburbs of Modder East and Eastvale, which is situated approximately 40 km to the east of the Johannesburg CBD in the City of Ekurhuleni (CoE) Metropolitan Municipality, Gauteng Province.

The current land use of the proposed western TSF site is dominated by old abandoned derelict buildings and a waste rock dump consisting of soil and rock remains, possibly originating from historic mine-related excavations. The proposed northern expansion site is dominated by agricultural land which includes soya bean and maize crops.

#### Please refer to the map on the final page.

### **Regulatory requirements**

South Africa's main environmental law is the <u>National Environmental Management</u> <u>Act</u>, No. 107 of 1998 (NEMA). NEMA contains Regulations comprising of <u>listed</u> <u>activities</u>, which have been identified as activities that are potentially harmful to the environment. Before undertaking any of these activities, a company is required to apply for Environmental Authorisation (EA) for these activities. Depending on the nature of these activities, a *Basic Assessment* (BA) or *Scoping and Environmental Impact Assessment* (S&EIA) process will be required to support the application for EA.

#### **Environmental Authorisation (EA)**

An EA in terms of NEMA is required for the following activities as listed in terms of the NEMA EIA Regulations (GNR982 of 2014) and listing notices GNR983, GNR 984 and GNR985 of 2014, as amended:

- Listing Notice 1 (GNR943 of 2014, as amended)
  - Activity 21D: "Any activity including the operation of that activity which requires an amendment or variation to a right or permit in terms of section 102 of the Mineral and Petroleum Resources Development Act, as well as any other applicable activity contained in this Listing Notice or in Listing Notice 3 of 2014, required for such amendment."
  - Activity 28: "Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development..."



- Activity 30: "Any process or activity identified in terms of section 53(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)."
- Activity 56: "The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre..."
- Listing Notice 2 (GNR984 of 2014, as amended)
  - Activity 6: "The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent..."
  - Activity 15: "The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for..."
  - Activity 17: "Any activity including the operation of that activity which requires a mining right in terms of section 22 of the Mineral and Petroleum Resources Development Act, as well as any other applicable activity as contained in this Listing Notice, in Listing Notice 1 of 2014 or Listing Notice 3 of 2014, required to exercise the mining right."
  - Activity 19: "The removal and disposal of a mineral, which requires a permission ated[sic] in terms of section 20 of the Mineral and Petroleum Resources Development Act, as well as any other applicable activity as contained in this Listing Notice, in Listing Notice 1 of 2014 or Listing Notice 3 of 2014, required to exercise the permission."
- Listing Notice 3 (GNR985 of 2014, as amended)
  - Activity 4: "The development of a road wider than 4 metres with a reserve less than 13,5 metres in Gauteng at sites identified as National Protected Area Expansion Strategy Focus Areas (NPAES), Critical Biodiversity Areas (CBAs) or Ecological Support Areas (ESAs) in the Gauteng Conservation Plan or in bioregional plans..."
  - Activity 12: "The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan in Gauteng at sites within Critical Biodiversity Areas or Ecological Support Areas identified in the Gauteng Conservation Plan or bioregional plans..."
  - Activity 18: "The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre in Gauteng at sites identified as National Protected Area Expansion Strategy Focus Areas (NPAES),



*Critical Biodiversity Areas (CBAs) or Ecological Support Areas (ESAs) in the Gauteng Conservation Plan or in bioregional plans, and sites identified as high potential agricultural land in terms of Gauteng Agricultural Potential Atlas..."* 

The listed activities triggered require that a full Scoping and Environmental Impact Assessment (S&EIA) process be followed. The two phases, Scoping and EIA, each have a 30-day public participation period, allowing review of documents and raising of comments / questions / concerns – which need to be included in the final documentation submitted to the authorities.

#### **Waste Management Licence**

The proposed expansion project triggers activities listed in the <u>National</u> <u>Environmental Management: Waste Act</u> (No. 59 of 2008) (NEM:WA). An EA in terms of NEM:WA is required for the following activities as listed in terms of the NEMA:WA Regulations (GNR921 of November 2013, as amended):

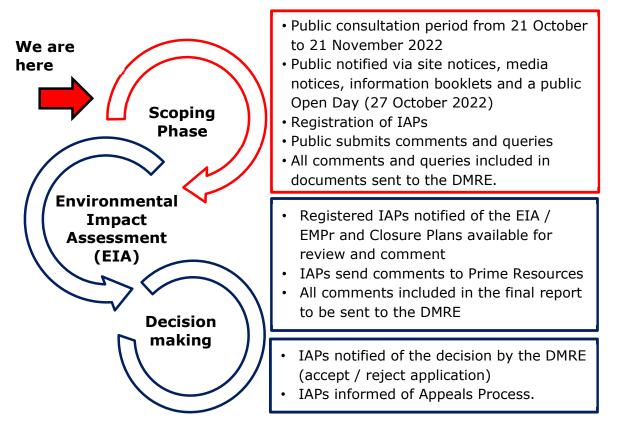
- Category B of the NEM:WA (GNR921 of 29 November 2013, as amended)
  - Activity 3: "The recovery of waste including the refining, utilisation, or coprocessing of the waste at a facility that processes in excess of 100 tons of general waste per day or in excess of 1 ton of hazardous waste per day, excluding recovery that takes place as an integral part of an internal manufacturing process within the same premises."
  - Activity 7: "The disposal of any quantity of hazardous waste to land."
  - Activity 10: <u>"The construction of a facility for a waste management activity</u> listed in Category B of this Schedule (not in isolation to associated waste management activity)."
  - Activity 11: "The establishment or reclamation of a residue stockpile or residue deposit resulting from activities which require a mining right, exploration right or production right in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)."

#### Water Use License

A Water Use Licence (WUL) in terms of Section (S) 40 of the National Water Act, 1998 will be applied for from the Department of Water and Sanitation (DWS) for water uses to be undertaken in terms of S21. These water uses relate specifically to the construction and operation of the TSF, as the site already has a WUL for other water uses associated with mining and processing. A pre-application enquiry has been submitted to the DWS.

prime | resource

#### Scoping and Environmental Impact Assessment (S&EIA) process



The DMRE is the Competent Authority for this project and will decide whether to grant an EA for the activities triggered.

Prime Resources has been appointed as the independent Environmental Assessment Practitioner (EAP) to conduct the regulated environmental processes for the project. Independent specialists have been appointed to undertake studies for the project. Neither Prime Resources nor these specialists have any vested interest in the project proceeding.

### Potential impacts on the environment and the community

The key potential issues, which will be investigated further, were identified with the aid of specialist investigations and the National web-based Screening Tool. The final footprint of the proposed expanded TSF will be in close proximity to existing residential areas. The western TSF boundary will be 140 m from houses in Modder East along Cloverfield Road and 110 m from dwellings on the southern edge of Skoonplaas informal settlement. The northern TSF expansion will be 150 m from dwellings on the eastern border of Skoonplaas.

Potential negative impacts include:

• A decrease in ambient air quality through increased dust and particulate matter generation



- Community health impacts associated with decrease in ambient air quality
- A permanent change in the topography of the project sites
- Visual intrusion on the residents of Skoonplaas and Modder East suburb
- Potential groundwater contamination, although this is expected to be minimal
- Loss of 20 hectares of agriculturally important soils
- The disturbance of flora and fauna, although the expansion areas are considered to be largely transformed and have low to moderately low sensitivity
- A minor increase in noise during construction
- Socio-economic impacts including the potential in-migration of job seekers and associated expansion of informal settlements
- Potential risk of TSF failure (unlikely) and associated loss of life, damage to property and contamination of watercourses.

Potential positive impacts include:

- Temporary employment opportunities during construction
- The continued operation of the existing NKGM processing plant and continued employment for some of the current surface employees due to a delay in closure of the processing plant, and the associated downstream benefits of this.

### Impacts of the project are still being investigated by specialists, and more information will be provided during the next phase (Environmental Impact Assessment) of the project.

# Register as an Interested and Affected Party (IAP)

Individuals and organisations are invited to register as an IAP. If you would like to register as an IAP, please submit your contact details to Prime Resources via SMS / WhatsApp (076 403 3386) or email (<u>prime@resources.co.za</u>). Please include the subject line "**NKGM TSF**" and indicate your interest.

### **Opportunity to comment**

The Scoping Report and Non-Technical Summary of the Scoping Report can be downloaded from <u>www.resources.co.za</u> during the 30-day public commenting period, from 21 October to 21 November 2022. The Scoping Report and Non-Technical Summary can be provided via email upon request, and are available for review at the following locations:

- Springs Public Library
- Bakerton Public Library
- Dersley Post Office



- Gulfstream Filling Station on Outeniqua Road
- Skoonplaas Community Office (near the Skoonplaas playgrounds)

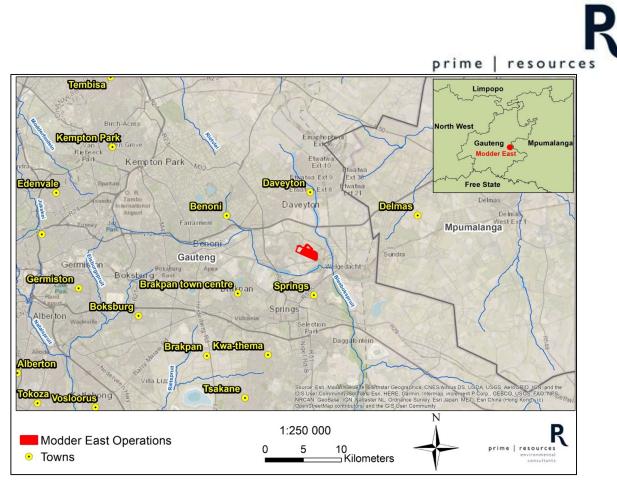
You are invited to attend an Open Day, an informal information sharing opportunity where more information about the project will be available. The Open Day will be held on Thursday 27<sup>th</sup> October 2022 at the project site (access road to the site is on the corner of Outeniqua Road and Cloverfield Road – project site is located adjacent and to the west of the existing TSF). All IAPs are welcome to visit the Prime Resources team anytime between 13h00 and 16h00, at the project site, and obtain more information, ask questions or register concerns.

All comments regarding the proposed project are welcome. In particular, we would like to invite comments or suggestions on:

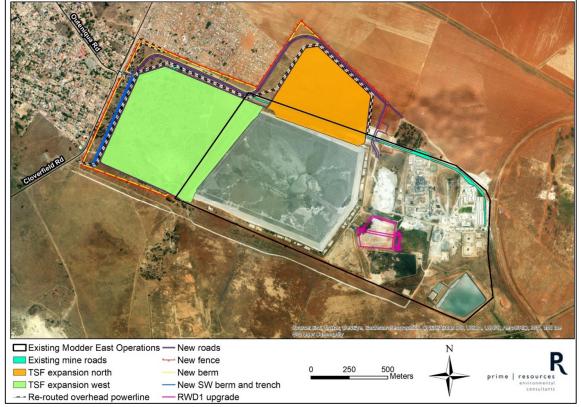
- How the project might affect you and your community
- Information on any environmental or social features that may have been overlooked
- Suggestions to lessen any anticipated environmental or social impacts
- Suggestions as to the standard you feel the site should be rehabilitated to

Please ensure that you submit your comments or concerns to Prime Resources by **21 November 2022**.

- Telephone: 011 447 4888
- SMS / WhatsApp: 076 403 3386
- Email: <u>prime@resources.co.za</u>



Locality Map



Map of the existing and proposed infrastructure at NKGM