

Proposed Orange River Water Abstraction, Supply and Storage by NamWater to Support Water Requirements of the Proposed Haib Copper Project, Noordoewer, //Karas Region

BACKGROUND INFORMATION DOCUMENT

ENVIRONMENTAL SCOPING STUDY



BACKGROUND

Namibia Water Corporation Ltd. (NamWater) is Namibia's national water utility and water resource management authority, established to ensure a sustainable, safe, and reliable water supply for domestic, industrial, and commercial use across the country. NamWater is a recognised and licensed authority for the abstraction and distribution of water in Namibia, ensuring that water use is sustainable and legally compliant.

NamWater seeks to apply for an Environmental Clearance Certificate (ECC) for the development of water abstraction, supply and storage infrastructure to support the water requirements of the proposed Haib Copper Project on EPL 3140. The Haib Copper Project is being developed by Haib Minerals (Pty) Ltd, a subsidiary of Koryx Copper Inc (Koryx). The purpose of this BID is to support NamWater's ECC application to present the scope of the proposed listed activity, outline regulatory obligations, identify potential environmental impacts, and describe proposed mitigation measures to enable Interested and Affected Parties (I&APs) to provide their comments and/or concerns.

The Haib Copper Project is located approximately 25 km north-east of Noordoewer, along the southern border of Namibia. The Orange River runs immediately to the south of the site boundary. The Haib Copper Project has advanced to the point where relevant applications for authorisations are being developed. NamWater is applying to the Executive Director, Ministry of Agriculture, Fisheries, Water, and Land Reform (MAFWLR), and the Environmental Commissioner, Ministry of Environment, Forestry and Tourism (MEFT), for an Environmental Clearance Certificate (ECC) in terms of Environmental Management Act (2007) and its Regulations (2012) for the Project's water abstraction, supply and storage infrastructure. Knight Piésold (KP) (Pty) Ltd Namibia was appointed by Koryx to support the development of environmental scoping and impact studies and ongoing regulatory compliance associated with the Haib Copper Project. The appointment is inclusive of support to develop ECC for mining activities and Mining License (ML) applications on behalf of Koryx, as well as ECC application for water abstraction, supply and storage on behalf of NamWater.

The development of the proposed activity would, through the Haib Copper Project, benefit the Namibian economy through revenues during the construction phase, royalties, levies and taxes during the 23-year Life of Mine (LoM), and positively contribute towards employment and infrastructure development.

Mr. Joseph Mülders and Dr. Lima Maartens, in the capacity of independent Environmental Assessment Practitioners (EAPs) are undertaking an Environmental Assessment (Scoping, Impact Assessment and Environmental Management Plan) for the proposed activities. To date, various specialist assessments have been undertaken for the proposed project area, including cultural heritage, water resources and water demand, terrestrial biodiversity and aquatic biodiversity assessments, air quality, noise, groundwater and socio-economic assessments.

PROJECT DESCRIPTION

The proposed water abstraction, supply and storage activities will supply the Project's water demand of 20 million cubic metres per annum (m^3/annum). A range of possible or potential raw water supply sources were investigated and evaluated and sourcing water from the Orange River proved to be a preferred option from a technical as well as financial perspective. The proposed activity comprises the development of the following infrastructure:

- Off-channel storage dam (concrete face rockfill with capacity up to 25 million cubic metres (Mm^3))
- Abstraction and Supply Infrastructure Alternatives
 - Alternative 1:
 - Water abstraction works (2 cubic metres per second (m^3/s) capacity)
 - Water supply pipeline (~8 km pipeline)
 - One booster pump station
 - Associated infrastructure (such as access roads and transmission lines, etc.)
 - Alternative 2:
 - Water abstraction works (2 m^3/s capacity)
 - Water supply pipeline (~45 km pipeline)
 - Two booster pump stations
 - Terminal reservoir
 - Associated infrastructure (such as access roads and transmission lines, etc.)

Off-channel storage is sized towards offsetting the impacts of water abstraction from the Orange River. Abstraction of 6 Mm^3/annum from the Orange River for the Haib Copper Project has been accounted for in various basin water management strategies since 2004.

Preliminary economic estimates for the Haib project, which these activities will support, will be presented in the Preliminary Economic Assessment (PEA) towards the end of 2025. The current mine plan indicates that a maximum of 3,500 staff during construction and a maximum of 1,350 during operations will be required by the Project. This will provide direct benefits through income and thus livelihoods to these households as well as support the broader economy for a minimum of 23 years of production in addition to the construction period of about 2 years.

Although alternatives for water abstraction and supply have been provided, the final Project description and site layout are still to be informed by specialist impact studies, the broader environmental and social impact assessment, public and consultations with I&APs, as well as the ongoing design process. Overall, any changes are anticipated to be in the order of landscape optimisation and no fundamental changes are expected.

The map below provides the proposed Project location and site layout.

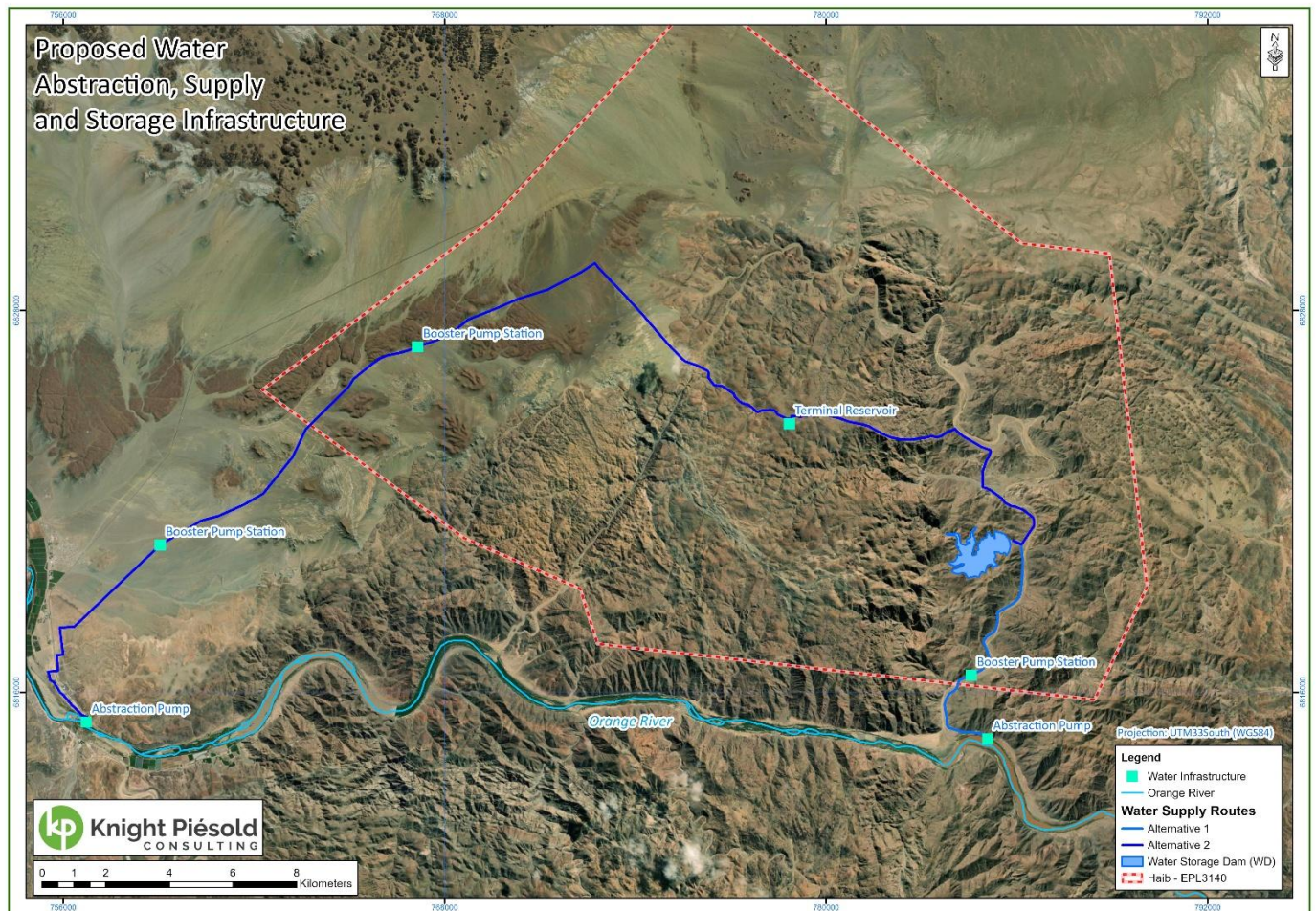


Figure 1: Project location and site layout

Potential environmental impacts identified are presented in the table below. Towards managing anticipated potential impacts, the following specialist baseline and impact assessment studies, still to be completed, have been identified: archaeology and heritage, biodiversity (aquatic and terrestrial), water quality, water demand and water resources and socio-economic studies, and associated routine monitoring.

Anticipated Impacts and Proposed Mitigation	
Possible Impact	Mitigation
Impact on heritage resources	• Demarcate sensitive areas and declare these as "no go" areas • Implement a Chance Find Procedure
Decreased water availability for downstream users	• Apply for a water use licence • Implement water demand and water conservation measures • Off channel storage • Seasonal abstraction as guided by appropriate analysis
Potential water resources contamination	• Safeguarding the quality of surface and groundwater resources • Runoff and contaminant management • Spill kits and permeability management
Reduced biodiversity	• Design facility and operate as per mitigation hierarchy (avoid, minimise, manage, rehabilitate and offset) • Active management • Ongoing restoration/rehabilitation
Increased surface water runoff	• Implement erosion control measures • Implement storm water management measures (culverts and drains)
Socio-economic cost	• Abstraction in periods of surplus flow • Abstraction Management Plan and operating rules
Socio-economic benefit	• Water supply will support job opportunities created through the development of the Haib Copper Project, with opportunity for a variety of other socio-economic benefits

ENVIRONMENTAL SCOPING AND IMPACT ASSESSMENT PROCESS

In terms of the Environmental Management Act 7 of 2007 and the Environmental Impact Assessment Regulations gazetted on 6 February 2012, an Environmental Impact Assessment (EIA) for the proposed Project must be approved by the Ministry of Agriculture, Fisheries, Water and Land Reform (MAFWLR) as the Competent Authority. This process involves seeking an Environmental Clearance Certificate (ECC) through the ECC application process as required by the Ministry of Environment, Forestry and Tourism (MEFT). The procedure requires an application phase, followed by a scoping phase, an environmental impact assessment (EIA) and an Environmental Management Plan (EMP) phase, to apply for the ECC as per the EIA Regulations. This sequence ensures adherence to regulatory requirements and facilitates the assessment and management of environmental and social impacts associated with the proposed Project.

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