

APPENDIX D

RBIDZ LETTER REGARDING THE AVAILABILITY OF SERVICES

23 July 2026

Mabasa 750 MW Power Plant

Attention: Chris Marland

RE: RESPONSE TO ENQUIRY REGARDING POTABLE WATER SUPPLY, WASTEWATER DISPOSAL AND ASSOCIATED MUNICIPAL SERVICES FOR THE PROPOSED MABASA 750MW POWER PLANT

The Richards Bay Industrial Development Zone (RBIDZ) acknowledges receipt of your enquiry regarding the potable water supply, wastewater disposal and associated municipal services required for the proposed Mabasa 750 MW Power Plant.

RBIDZ appreciates the information provided regarding your anticipated potable water demand, service water requirements, cooling water demand, and the anticipated domestic and industrial effluent streams. The information provided is valuable in assisting RBIDZ with infrastructure planning and determining the future upgrades that may be required to accommodate the proposed development.

Having reviewed your enquiry, RBIDZ provides the following comments.

Water Supply

RBIDZ confirms that two separate water distribution systems exist within the Zone, namely:

- **Potable Water Network;** and
- **Clarified Water Network.**

It should be noted that **RBIDZ does not have a demineralised (demin) water supply network.** Demineralised water, where required by industrial users, will therefore need to be produced by



**Directors: Adv B.A. Mbili (Chairperson), T.B. Hlongwa, P.S Mangole,
E.F. Mbatha, S.W. Mchunu, S. Mdlalose, M.T.B. Ndlovu,
Cllr X. Ngwezi, G.S Skosana, C.P. Vilakazi,
T.W Zulu (Chief Executive Officer), S. Mvelase (Chief Financial Officer)**

Richards Bay Industrial Development Zone Company SOC Ltd
Reg No. 2002/009856/30; Vat Registration Number: 4530249970

the end user through an on-site treatment facility supplied either from potable water or clarified water, depending on the final process design.

Potable Water

The potable water distribution network within the Zone consists of **250 mm diameter pipelines**.

Based on the information currently available and the existing hydraulic capacity of the potable water network, RBIDZ confirms that the following potable water demands can be accommodated:

- **6 m³/day** for domestic consumption; and
- **410 m³/day** for service water and demineralised water plant feed.

Accordingly, RBIDZ confirms that the total potable water demand of approximately **416 m³/day (0.416 ML/day)** can be supplied from the existing potable water network.

Clarified Water

RBIDZ has developed a dedicated clarified water distribution network for industrial users.

The internal clarified water reticulation network comprises **400 mm diameter pipelines**, which have an estimated maximum supply capacity of approximately **22–27 ML/day**, depending on the operating flow velocity.

This network has **not yet been commissioned**. However, construction is currently underway on a **900 mm diameter bulk clarified water pipeline** which will supply the internal clarified water network. The proposed 900 mm bulk pipeline will have an estimated maximum conveyance capacity of approximately **110–137 ML/day**, depending on the operating velocity.

Assessment of the Proposed Cooling Water Demand

RBIDZ has considered the two cooling options presented.

For the **air-cooled power plant option**, the proposed potable water demand can be accommodated using the existing potable water network.

However, for the **water-cooled power plant option**, the proposed clarified water demand of approximately **21 ML/day**, together with the additional process water requirement, **cannot presently be supplied** from the existing internal clarified water distribution system.

Should Mabasa proceed with the water-cooled option, RBIDZ will be required to initiate a project to upgrade the clarified water distribution network within the Zone in order to accommodate the increased demand.

Accordingly, RBIDZ requests that **Mabasa urgently confirms its final decision regarding whether the facility will be developed as an air-cooled or water-cooled power plant.** This decision is critical, as it will determine whether additional bulk water infrastructure upgrades need to be planned, designed and implemented. Early confirmation will enable RBIDZ to commence the necessary planning, sourcing of funds and procurement processes to ensure that adequate infrastructure is available within the required project programme.

Wastewater Disposal

RBIDZ confirms that domestic sewer infrastructure is available within the Zone.

However, with respect to industrial effluent, RBIDZ advises that **no industrial effluent will be accepted into the sewer disposal system unless it complies with the limits outlined in the City of uMhlathuze Water Services By-laws and the applicable Trade Effluent Discharge Standards.**

Accordingly:

- All industrial process effluent generated by the facility shall be **pre-treated on site** by Mabasa before discharge to the sewer system.
- The treated effluent shall comply with all concentration limits prescribed by the City of uMhlathuze Water Services By-laws.
- The quality of the discharged effluent shall not exceed the permissible limits stipulated in the applicable legislation and municipal requirements.
- Prior to connection to the sewer network, detailed process designs, hydraulic calculations, anticipated influent and treated effluent quality, monitoring proposals and all relevant approvals will be required for review and approval by the relevant authorities.

This requirement applies to the anticipated:

- 285 m³/day industrial effluent stream;
- cooling tower blowdown (should the water-cooled option be selected); and

- any other industrial wastewater generated during operation.

Domestic sewage generated by the facility may be discharged to the domestic sewer system subject to compliance with the applicable municipal requirements. If water cooling is adopted, there will also be a need to upgrade the domestic sewer system within the Zone.

Stormwater

RBIDZ confirms that stormwater infrastructure exists within the zone. The final stormwater connection arrangements for the site will be confirmed during the detailed engineering design stage and shall be undertaken in accordance with RBIDZ development standards.

Water Quality

The potable water supplied through the RBIDZ potable water network will comply with the applicable South African drinking water quality standards supplied by the municipal water services provider.

The clarified water supplied through the clarified water network will be untreated industrial clarified water suitable for industrial applications. The final water quality characteristics will be provided upon commissioning of the clarified water system and will be subject to the quality of the source water supplied by the regional water services provider.

Conclusion

RBIDZ trusts that the above information provides sufficient guidance for your current planning activities.

RBIDZ confirms that:

- the potable water demand of **6 m³/day** can be supplied;
- the additional **410 m³/day** potable water demand can also be supplied;
- RBIDZ currently has separate potable water and clarified water distribution systems, but **does not supply demineralised water**;
- the proposed **21 ML/day** clarified water demand associated with the water-cooled option cannot presently be accommodated without upgrading the internal clarified water distribution network; and

- all industrial effluent shall require appropriate on-site treatment to comply with the City of uMhlathuze Water Services By-laws prior to discharge to the municipal sewer system.

RBIDZ looks forward to receiving confirmation of Mabasa's preferred cooling technology to enable appropriate infrastructure planning and implementation.

Yours faithfully,



Civil Engineering Manager

Richards Bay Industrial Development Zone