



forestry, fisheries & the environment

Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Environment House · 473 Steve Biko Road, Arcadia, PRETORIA

DDFE Reference: EDMS-254117

Enquiries: Sibusiso Mbethe

Email: OCEIA@dffe.gov.za

Telephone: (021) 493 7043

Ms Corlie Steyn
Zutari (Pty) Ltd,
P.O.Box 509,
George,
6530

Tel: 044 805 5421

Email: corlie.steyn@zutari.com

Dear Ms Steyn

COMMENTS ON THE DRAFT BASIC ASSESSMENT REPORT FOR THE PROPOSED UPGRADE AND EXPANSION OF THE MACASSAR WASTEWATER TREATMENT WORKS (WWTW) AND ASSOCIATED INFRASTRUCTURE, MACASSAR, CITY OF CAPE TOWN.

The Department of Forestry, Fisheries, and the Environment (DDFE); Branch Oceans & Coasts (O&C) appreciates the opportunity granted to provide comments and recommendations on the draft basic assessment report for the proposed upgrade and expansion of the Macassar Wastewater Treatment Works (WWTW) and associated infrastructure, Macassar, City of Cape Town. This Branch will provide comments based on the provisions of the National Environmental Management Act 107 of 1998 ("NEMA") and the National Environmental Management: Integrated Coastal Management Act 24 of 2008 ("ICM Act").

The Branch O&C is mandated to ensure the holistic management of the coast, estuarine areas, and maintenance of the seascapes to realise the development and use of natural resources in a sustainable fashion. The Branch further ensures that the ecological integrity, natural character, and economic, social, and aesthetic value of the coastal zone are maintained to protect people, properties, and economic activities against the impacts of dynamic coastal processes.

Guided by the principles of integrated coastal management, this Branch promotes developments that promote socially justified sharing of benefits derived from a resource-rich coastal area and strives to ensure that the principles of sustainable development are upheld.

Based on the submitted BAR, the Branch O&C presents the comments stipulated below for consideration.

1. It is rather unfortunate that in the application under Appendix E, a comment from the DEA: Oceans and Coast is noted as not applicable. The Branch O&C is *inter alia* tasked with the coordination and facilitation of the implementation of the ICM Act at a national level. The Branch O&C seeks to ensure an integrated management of the coastal zone in South Africa which is of paramount importance to achieve the constitutional commitment to improving the quality of life of all citizens while protecting the

natural environment for the benefit of the present and future generations. The EAP must therefore ensure that the comments from the Branch O&C are often received.

2. It is of equal concern that the EAP has indicated that the ICM Act does not apply to the proposed Macassar WWTW activities. It is not clear on what grounds the ICM Act is not applicable, yet the proposed activities occur within the coastal zone, an area that is specifically regulated by the ICM Act as a specific environmental management Act listed as such under section 1 of the NEMA. If this was not the case, the comments from DEA&DP Coastal Management could have not been sought and included in the PPP yet that section of DEA&DP is a creature of the ICM Act.
3. The non-applicability professed under Coastal Environment in the report falls squarely under the concerns raised in para 1 and 2 *supra*. The effluent from Macassar WWTW discharges at Eerste River Estuary. This discharge has largely modified the natural function of the estuary, as a result, it is often open to the sea. It is of course not the only contributing factor as the Eerste River is joined by Kuils River approximately 4 km upstream of the estuary. The Kuils River also receives effluent treatment from several WWTW, urban pollutants, runoff, etc. The take-home message however is that Macassar WWTW effluent discharge has a significant impact on the Eerste River Estuary's natural estuarine characteristics. It is also alleged that unplanned emergency overflow of untreated wastewater from the Macassar WWTW ended up in the Eerste River Estuary, please see Chapter 23 of the Estuary Management Plans 2011 prepared by Coastal and Environmental Consultant for the government.
4. The Eerste River Estuary management vision was

“To manage the estuary and its catchment in such a manner as to reduce and minimize urban influence and pollutants on the estuary, where possible allow free and natural movement of the estuary mouth, manage alien invasive species, continuously work towards achieving high standards of water quality, recognize the estuary as an important nursery and biodiversity habitat and monitor the estuary in such a manner so as to intervene when urban influences have compromised the natural functioning of the estuary”

5. It is therefore a welcome move that the new proposed design for the refurbishment of the existing Macassar WWTW will achieve improved treatment and operations and consequently improve the effluent discharged into the estuary thus improving water quality. It is, however, unclear how the increased discharge volume would impact the estuary. This concern has been shared in the specialist study too. It seems plausible and ideal that the volume is reduced and the recommendations that the treated wastewater must be re-used in casu.
6. Large areas of vegetation will be cleared. It is hereby recommended that during construction and operations, sand trapping methods should be adopted, and rehabilitation should occur after construction. Many parts of the road infrastructure in this area are often covered by sand due to mobile dune movement. Approximately 1 to 2 million tonnes of sediments are transported past the South African coastline at any given time either east or west coast each year due to south-westerly swell and that results in a net-littoral drift. It is therefore important to trap the sand so that it doesn't cause problems in other areas.
7. The ICM Act enjoins us to consider Integrated Coastal management as an evolving process that learns from past experiences so at the end, we can achieve conservation of the coastal zone and sustainable use. It is acknowledged that the initial EA was approved in 2016. The Macassar WWTW was constructed in a flood plain, it is also seaward of the line delineated by the City of Cape Town, and the results of the studies dictate that the Macassar WWTW is within the 1:50 years flood line. It seems thereof that it is

undesirable to have such a large infrastructure in the area Macassar WWTW is in. In case of flooding, how will the overflow of untreated wastewater be managed?

8. Section 69 of the ICM Act stipulates that no person may discharge effluent that originates from a source on land into coastal waters except in terms of a general discharge authorization or a coastal waters discharge permit issued by the Minister. Therefore, the applicant should liaise with the Branch via CWDP@dfpe.gov.za to ascertain whether the effluent discharge permits in terms of the ICM Act would be required or not.
9. It should further be noted that the use of vehicles in the coastal areas is prohibited in South Africa. The applicant in the BAR is however an organ of state which will be covered under regulation 3(1)(d) of the Control of Use of Vehicles in the Coastal Area Regulations published in GN R. 496 of 27 June 2014.
10. The location for the proposed WWTW upgrade and expansion is adjacent to the estuary and the discharge of the treated effluent will be on the estuary, however, the Estuarine Impact Assessment was not conducted to assess the present ecological health/integrity and conservation/ecosystem services value of the study area that will be affected by the proposed development with due consideration of the following the impact on river hydraulics, the flow and channel characteristics and the influence to mouth movements, etc and having conducted this study would have assisted the EAP response to the coastal environment questions and assessment of the increased treated effluent volumes being discharged to the estuary.
11. Three Estuarine Management Plans (EMPs) are included in this draft BAR. However, the report does not refer to the other 2, and even the applicable one on page 41 is not recognised as a management tool that was considered during the preparation of this report.

Kindly note that the Branch Oceans and Coasts reserves the right to revise its comments and request further information based on any additional information received. All correspondence, documentation, and/or requests (hard copy and an electronic copy) should be submitted to our office via email to OCEIA@dfpe.gov.za / or **Physical Address: Department of Forestry, Fisheries & the Environment (DFPE), Branch: Oceans and Coast, 2 East Pier Building, East Pier Road, Victoria and Alfred Waterfront, Cape Town, 8001.**

Yours sincerely,



Ms Makwarela Mnwana
Acting Director: Coastal Development & Coordination
Department of Forestry, Fisheries, and the Environment
Date: 02/12/2024