



# MINISTER ROUTE FORM

Tracking No.: M'. 13028

SUBJECT MATTER: ALGOA WATER SUPPLY SYSTEM: DECLARATION OF THE PROPOSED COERNEY BALANCING DAM AS AN EMERGENCY WORKS

RANK	INITIALS AND SURNAME	SIGNATURE	DATE
CHIEF DIRECTOR: INTEGRATED WATER RESOURCE PLANNING	LS MABUDA	an	22/5/20
DEPUTY-DIRECTOR- GENERAL: PLANNING AND INFORMATION	DG MOCHOTLHI	Do	28.05.2020
DEPUTY DIRECTOR-GENERAL: NATIONAL WATER RESOURCE INFRASTRUCTURE	C MANUS	pp BOC	1/06/2020
DIRECTOR-GENERAL			
DEPUTY MINISTER	D M MAHLOBO, MP		
MINISTER	L N SISULU, MP		

28/05/20





**ENQUIRIES:** D Mochotihi

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REFERENCE: 14/2/ M000/14/2

## MINISTER OF HUMAN SETTLEMENTS, WATER AND SANITATION

ALGOA WATER SUPPLY SYSTEM: DECLARATION OF THE PROPOSED COERNEY BALANCING DAM AS AN EMERGENCY WORKS

#### 1. PURPOSE

1.1 To request Minister's authorisation to declare the proposed Coerney Dam and associated works as an Emergency Works in terms of Section 110(20)c of the National Water Act, 1998 (Act No. 36 of 1998), to enable the detailed design to be undertaken by the Department of Water and Sanitation (DWS) in parallel with the Environmental Impact Assessment (EIA) process for the project.

#### 2. BACKGROUND AND DISCUSSION

- 2.1 The DWS recently undertook a detailed planning investigation to establish a means to reduce the risk of failure of water supply to the Nelson Mandela Bay Municipality (NMBM) from the Orange-Fish-Sundays (OFS) Transfer Scheme.
- 2.2 The Nooitgedagt water treatment works, which receives raw water from the OFS Transfer Scheme via the Lower Sundays River Government Water Scheme (LSRGWS), currently supplies about half of potable water used by the population and industries in the city, towns and settlements in the greater NMBM water service area (refer to the map attached as Appendix A).
- 2.3 The risk of failure of water supply to NMBM is due mainly to the condition of the conveyance infrastructure of the OFS Transfer Scheme, which was constructed in the 1970's. There was a failure of the Kirkwood primary canal in 2017 and a failure of the Elandsdrift canal in 2019.
- 2.4 After investigation of various options, it is recommended that a balancing storage dam be constructed as part of the LSRGWS, near the town of Kirkwood. Refer to **Appendix B** for a map showing the locality of the proposed balancing dam.



- 2.5 The proposed dam will provide storage capacity for twenty-one (21) days emergency water supply to NMBM, which is regarded as sufficient time to effect temporary repairs of unforeseen damage to the conveyance infrastructure.
- 2.6 The technical feasibility study of the proposed Coerney Dam and associated works is currently nearing completion.
- 2.7 An EIA process, in accordance with the National Environment Management Act, 1998 (Act No. 107 of 1998) [NEMA], is a legal requirement to obtain Environmental Authorisation for implementation of the project.
- 2.8 The tender process to appoint an independent Professional Service Provider (PSP) to undertake the EIA process is in progress.

#### **URGENCY OF PROJECT**

- 2.9 The water supply to NMBM is already under stress due to on-going water shortages from the storage dams to the west of Port Elizabeth. Drought and water restrictions (as high as thirty per cent (30%) on domestic use and eighty per cent (80%) on irrigation use) on the Algoa System dams have been on-going since 2017 to present.
- 2.10 The stressed water supply situation in NMBM area is supported by a letter from the Department's Eastern Cape Regional office, which was sent to NMBM. The letter dated 25 March 2020 is titled 'Impending water crisis in Nelson Mandela Bay Municipality' and is attached as Appendix C.
- 2.11 If water supply from the Nooitgedagt Water Treatment Works (WTW) should be interrupted for more than a week, NMBM would have a crisis as there is no other adequate alternative water supply in the NMBM area.
- 2.12 The Orange-Fish-Sundays (OFS) Transfer Scheme, like any other major transfer scheme, practices a three (3) week dry period each year when canal maintenance, repair and upgrades are done. The increased demand of the Nooitgedagt Scheme makes the Coerney Dam for balancing and emergency storage a critical part of water security.
- 2.13 It is therefore imperative that the proposed Coerney Dam be implemented as a matter of urgency to secure the potable water supply to NMBM.
- 2.14 The implementation time of the proposed project can be shortened by about two (2) years if the detailed design is undertaken by DWS in parallel with the EIA process. Funding for the project from National Treasury could also be secured at the same time.
- 2.15 The Chief Directorate: Engineering Services has the capacity, expertise and experience to undertake the detailed civil and mechanical design of this project.
- 2.16 The urgency of the project was supported by the various role players at the Study Management meeting held on 19 February 2020.
- 2.17 Undertaking the detailed design before Environmental Authorisation has been received for the project is a deviation from the normal implementation process.

- 2.18 This deviation from the normal implementation process is justified due to the urgency of the project and is permissible if the project is declared as an Emergency Works.
- 2.19 Based on the above motivation, it is recommended that the Minister declares the proposed Coerney Dam an Emergency Works.
- 2.20 After Environmental Authorisation has been received the proposed project will be submitted to the Minister for approval as a Government Waterworks in terms of Section 109 of the National Water Act, 1998 (Act No. 36 of 1998), and signing of the Gazette Notice in terms of Section 110 of the National Water Act, 1998.
- 2.21 The project will then be handed over to the Chief Directorate: Infrastructure Development for implementation according to normal procedure. The only difference being that the project can proceed directly to construction, as the detailed design and funding arrangements would have been completed.

## 3. IMPLICATIONS

# 3.1 Financial

- 3.1.1 There will be no financial implications due to the declaration of the proposed Coerney Dam as an Emergency Works.
- 3.1.2 It is envisaged that the proposed Coerney Dam will form part of the existing Lower Sundays River Government Water Scheme and it is therefore proposed to secure funding for construction of the project from National Treasury via the Departmental Capital Budget.

## 3.2 Personnel

- 3.2.1 The technical staff of the Chief Directorate: Engineering Services (engineers, technologists and technicians) will undertake the detailed civil and mechanical design of the proposed Coerney Dam and associated works.
- 3.2.2 This proposed project will provide the opportunity for Departmental officials to gain valuable experience for their professional careers. It will also provide training opportunities for candidate engineers and technicians to obtain design experience needed for professional registration.

## 3.3 Legal

- 3.3.1 The relevant sections of the National Water Act, 1998 (Act No. 36 of 1998) will be complied with, namely Section 109 and Section 110.
- 3.3.2 The legal requirements of the National Environment Management Act, 1998 (Act No. 107 of 1998) will be met, as the EIA process will be undertaken to obtain Environmental Authorisation for the project.

## 3.4 Communication

3.4.1 The Chief Director: Integrated Water Resource Planning will engage with the Chief Director: Engineering Services regarding the detailed design of this proposed project.

3.4.2 The Chief Director: Integrated Water Resource Planning will engage with National Treasury to secure funding for the implementation of this project.

## 4. OTHER COMPONENTS CONSULTED

4.1 The various role players currently involved in the feasibility study, namely the Eastern Cape Regional office, Proto Catchment Management Agency, Infrastructure Operations South, NMBM and Lower Sundays River Water User Association, were consulted during the planning process.

#### 5. RECOMMENDATION

It is recommended that:

5.1 The Minister declares the proposed Coerney Dam and associated works an Emergency Works in terms of Section 110(20)c of the National Water Act, 1998 (Act No. 36 of 1998), to enable the detailed design of the project to be undertaken by the Department of Water and Sanitation (DWS) in parallel with the Environmental Impact Assessment (EIA) process.

NAME: LS MABUDA -

CHIEF DIRECTOR: INTEGRATED WATER RESOURCES PLANNING

DATE: 22/5/2020

RECOMMENDATIONS SUPPORTED/ NOT SUPPORTED

NAME: Deborch mochothi

**DEPUTY DIRECTOR-GENERAL: PLANNING AND INFORMATION** 

DATE: 28.05.2020

RECOMMENDATIONS SUPPORTED/ NOT-SUPPORTED

NAME: LAV. Mans.

**DEPUTY DIRECTOR-GENERAL: NATIONAL WATER RESOURCE INFRASTRUCTURE** 

DATE: 1/6/2020

## 5. RECOMMENDATION

It is recommended that:

The Minister declares the proposed Coerney Dam and associated works an Emergency Works in terms of Section 110(20)c of the National Water Act, 1998 (Act No. 36 of 1998), to enable the detailed design of the project to be undertaken by the Department of Water and Sanitation (DWS) in parallel with the Environmental Impact Assessment (EIA) process.

RECOMMENDATIONS SUPPORTED/ NOT SUPPORTED

NAME:

ACTING DIRECTOR-GENERAL

DATE: ()

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RECOMMENDATIONS SUPPORTED/ NOT SUPPORTED

M D MAHLOBO, MP DEPUTY MINISTER OF WATER AND SANITATION DATE:

RECOMMENDATION IN PAR. 5.1 APPROVED/ NOT APPROVED

L N SISULU, MP

MINISTER OF HUMAN SETTLEMENTS, WATER AND SANITATION

DATE:

0/01/2020