

Appendix B



DIRECTORATE: DEVELOPMENT MANAGEMENT
REGION 1

REFERENCE: 16/3/1/1/A3/39/2078/14

EXEMPTION REFERENCE: 16/3/1/4/A3/39/2079/14

ENQUIRIES: Adrian Pieterse

DATE OF ISSUE: 2016-07-07

The Municipal Manager
City of Cape Town
PO Box 16548
VLAEBERG
8018

Attention: Mr. Kevin Samson

Tel.: 021 487 2606
Fax: 021 423 9540

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998), THE ENVIRONMENTAL IMPACT ASSESSMENT AMENDMENT REGULATIONS, 2010 AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014: THE PROPOSED UPGRADE AND EXPANSION OF THE MACASSAR WASTE WATER TREATMENT WORKS ON ERF 1205, MACASSAR

With reference to your application for the abovementioned, find below the outcome with respect to this application.

ENVIRONMENTAL AUTHORISATION

DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998), the Environmental Impact Assessment Amendment Regulations, 2010 and the Environmental Impacts Assessment Regulations, 2014, ("NEMA EIA Regulations") the Competent Authority herewith **grants Environmental Authorisation and Exemption** to the applicant to undertake the list of activities specified in Section B below with respect to Alternative A of the development proposal described in the final Basic Assessment Report ("BAR") signed by the Applicant on 4 April 2016.

The applicant is herewith **exempted** from the following provisions of the NEMA EIA Regulations, 2010: Regulation 10(2)(d) of Government Notice No. R.543, which reads as follows:

10(2) "The applicant must, in writing, within 12 days of the date of the decision of the application

- (d) Publish a notice –
 - (i) Informing Interested and Affected Parties of the decision;
 - (ii) Informing Interested and Affected Parties where the decision can be accessed; and
 - (iii) Drawing the attention of Interested and Affected Parties to the fact that an appeal may be lodged against the decision in terms of Chapter 7 of these Regulations, if such appeal is available under the circumstances of the decision, in the newspapers contemplated in Regulation 54(2)(c) and (d) and which

newspaper was used for the placing of advertisements as part of the Public Participation Process."

The granting of this Environmental Authorisation is subject to compliance with the Conditions set out in Section E below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

The City of Cape Town
c/o Mr. Kevin Samson
PO Box 16548
VLAEBERG
8018

Tel.: 021 487 2606
Fax: 021 423 9540

The abovementioned Organ of State is the holder of this Environmental Authorisation and is hereinafter referred to as "the applicant".

B. LIST OF ACTIVITIES AUTHORISED

Government Notice No. R544 of 18 June 2010 –

Activity Number: 16

Activity Description:

"Construction or earth moving activities in the sea, an estuary, or within the littoral active zone or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater, in respect of –

- (i) fixed or floating jetties and slipways;*
- (ii) tidal pools;*
- (iii) embankments;*
- (iv) rock revetments or stabilising structures including stabilising walls;*
- (v) buildings of 50 square metres or more; or*
- (vi) infrastructure covering 50 square metres or more –*

but excluding

(a) if such construction or earth moving activities will occur behind a development setback line; or

(b) where such construction or earth moving activities will occur within existing ports or harbours and the construction or earth moving activities will not increase the development footprint or throughput capacity of the port or harbour;

(c) where such construction or earth moving activities is undertaken for purposes of maintenance of the facilities mentioned in (i)-(vi) above; or

(d) where such construction or earth moving activities is related to the construction of a port or harbour, in which case activity 24 of Notice 545 of 2010 applies."

Activity Number: 18

Activity Description:

"The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock or more than 5 cubic metres from:

- (i) a watercourse;*
- (ii) the sea;*
- (iii) the seashore;*
- (iv) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater-*

but excluding where such infilling, depositing, dredging, excavation, removal or moving;
 (a) is for maintenance purposes undertaken in accordance with a management plan agreed to by the relevant environmental authority; or
 (b) occurs behind the development setback line."

Activity Number: 28

Activity Description:

"The expansion of existing facilities for any process or activity where such expansion will result in the need for a permit or license in terms of national or provincial legislation governing the release of emissions or pollution, excluding where the facility, process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case that Act will apply."

Activity Number: 37

Activity Description:

"The expansion of facilities or infrastructure for the bulk transportation of water, sewage or storm water where:

- (a) the facility or infrastructure is expanded by more than 1000 metres in length; or
- (b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more—

excluding where such expansion:

- (i) relates to transportation of water, sewage or storm water within a road reserve; or
- (ii) where such expansion will occur within urban areas but further than 32 metres from a watercourse, measured from the edge of the watercourse."

Activity Number: 45

Activity Description:

"The expansion of facilities in the sea, an estuary, or within the littoral active zone or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater, for –

- (i) fixed or floating jetties and slipways;
- (ii) tidal pools;
- (iii) embankments;
- (iv) rock revetments or stabilising structures including stabilising walls;
- (v) buildings by more than 50 square metres;
- (vi) infrastructure by more than 50 square metres;
- (vii) facilities associated with the arrival and departure of vessels and the handling of cargo;
- (viii) piers;
- (ix) inter- and sub-tidal structures for entrapment of sand;
- (x) breakwater structures;
- (xi) coastal marinas;
- (xii) coastal harbours or ports;
- (xiii) structures for draining parts of the sea or estuary;
- (xiv) tunnels; or
- (xv) underwater channels –

where such expansion will result in an increase in the development footprint of such facilities

but excluding where such expansion occurs:

- (a) behind a development setback line; or
- (b) within existing ports or harbours where there will be no increase in the development footprint or throughput capacity of the port or harbour."

Activity Number: 52

Activity Description:

"The expansion of facilities or infrastructure for the transfer of water from and to or between any combination of the following:

- (i) water catchments;
- (ii) water treatment works; or
- (iii) impoundments;

where the capacity will be increased by 50 000 cubic metres or more per day, but excluding water treatment works where water is treated for drinking purposes."

Activity Number: 55

Activity Description:

"The expansion of facilities for the treatment of effluent, wastewater or sewage on undeveloped land where the capacity will be increased by 15 000 cubic metres or more per day."

Government Notice No. R546 of 18 June 2010 –

Activity Number: 4

Activity Description:

"The construction of a road wider than 4 metres with a reserve less than 13,5 metres.

(d) In Western Cape:

- i. In an estuary;
- ii. All areas outside urban areas;
- iii. In urban areas:

(aa) Areas zoned for use as public open space within urban areas; and

(bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose."

Activity Number: 10

Activity Description:

"The construction of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres.

(e) In Western Cape:

- i. In an estuary;
- ii. All areas outside urban areas;
- iii. Inside urban areas:

(aa) Areas seawards of the development setback line or within 200 metres from the high-water mark of the sea if no such development setback line is determined;

(bb) Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined."

Activity Number: 12

Activity Description:

"The clearance of an area of 300 square metres or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation.

(a) Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;

(b) Within critical biodiversity areas identified in bioregional plans;

(c) Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuary, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas."

Activity Number: 13

Activity Description:

"The clearance of an area of 1 hectare or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation, except where such removal of vegetation is required for:

- (1) the undertaking of a process or activity included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), in which case the activity is regarded to be excluded from this list.
- (2) the undertaking of a linear activity falling below the thresholds mentioned in Listing Notice 1 in terms of GN No. 544 of 2010.

(c) In Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape and Western Cape:

i. In an estuary;

ii. Outside urban areas, the following:

(aa) A protected area identified in terms of NEMPAA, excluding conservancies;

(bb) National Protected Area Expansion Strategy Focus areas;

(cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;

(dd) Sites or areas identified in terms of an International Convention;

(ee) Core areas in biosphere reserves;

(ff) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;

(gg) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined.

iii. In urban areas, the following:

(aa) Areas zoned for use as public open space;

(bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose;

(cc) Areas seawards of the development setback line;

(dd) Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined."

Activity Number: 23

Activity Description:

"The expansion of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage facilities will be expanded by 30 cubic metres or more but less than 80 cubic metres.

(d) In Western Cape:

i. In an estuary;

ii. All areas outside urban areas;

iii. Areas inside urban areas, the following:

(aa) Areas seawards of the development setback line or within 200 metres from the high-water mark of the sea if no such development setback line is determined;

(bb) Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined."

Government Notice No. R983 of 4 December 2014 –

Activity Number: 17

Activity Description:

"Development—

(i) in the sea;

- (ii) in an estuary;
- (iii) within the littoral active zone;
- (iv) in front of a development setback; or
- (v) if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater;

in respect of—

- (a) fixed or floating jetties and slipways;
- (b) tidal pools;
- (c) embankments;
- (d) rock revetments or stabilising structures including stabilising walls;
- (e) buildings of 50 square metres or more; or
- (f) infrastructure with a development footprint of 50 square metres or more —

but excluding—

- (aa) the development of infrastructure and structures within existing ports or harbours that will not increase the development footprint of the port or harbour;
- (bb) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;
- (cc) the development of temporary infrastructure or structures where such structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared; or
- (dd) where such development occurs within an urban area."

Activity Number: 19

Activity Description:

"The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from—

- (i) a watercourse;
- (ii) the seashore; or
- (iii) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater—

but excluding where such infilling, depositing, dredging, excavation, removal or moving—

- (a) will occur behind a development setback;
- (b) is for maintenance purposes undertaken in accordance with a maintenance management plan; or
- (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies."

Activity Number: 27

Activity Description:

"The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—

- (i) the undertaking of a linear activity; or
- (ii) maintenance purposes undertaken in accordance with a maintenance management plan."

Activity Number: 34

Activity Description:

"The expansion or changes to existing facilities for any process or activity where such expansion or changes will result in the need for a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the release of emissions or pollution, excluding—

- (i) where the facility, process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; or

(ii) the expansion of or changes to existing facilities for the treatment of effluent, wastewater or sewage where the capacity will be increased by less than 15 000 cubic metres per day."

Activity Number: 46

Activity Description:

"The expansion and related operation of infrastructure for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes where the existing infrastructure—

(i) has an internal diameter of 0,36 metres or more; or

(ii) has a peak throughput of 120 litres per second or more; and

(a) where the facility or infrastructure is expanded by more than 1000 metres in length; or

(b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more;

excluding where such expansion—

(aa) relates to transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes within a road reserve; or

(bb) will occur within an urban area."

Activity Number: 54

Activity Description:

"The expansion of facilities—

(i) in the sea;

(ii) in an estuary;

(iii) within the littoral active zone;

(iv) in front of a development setback; or

(v) if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater;

in respect of—

(a) fixed or floating jetties and slipways;

(b) tidal pools;

(c) embankments;

(d) rock revetments or stabilising structures including stabilising walls;

(e) buildings where the building is expanded by 50 square metres or more; or

(f) infrastructure where the development footprint is expanded by 50 square metres or more,

but excluding—

(aa) the expansion of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour; or

(bb) where such expansion occurs within an urban area."

Activity Number: 57

Activity Description:

"The expansion and related operation of facilities or infrastructure for the treatment of effluent, wastewater or sewage where the capacity will be increased by 15000 cubic metres or more per day and the development footprint will increase by 1000 square meters or more."

Government Notice No. R985 of 4 December 2014 –

Activity Number: 4

Activity Description:

"The development of a road wider than 4 metres with a reserve less than 13,5 metres.

(f) In Western Cape:

i. Areas outside urban areas;

(aa) Areas containing indigenous vegetation;

(bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or

- ii. In urban areas:
- (cc) Areas zoned for conservation use; or
- (dd) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority."

Activity Number: 10

Activity Description:

"The development of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres.

(g) In Western Cape:

i. All areas outside urban areas; or

ii. Inside urban areas:

(aa) Areas seawards of the development setback line or within 200 metres from the high-water mark of the sea if no such development setback line is determined;

(bb) Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined; or

(cc) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined."

Activity Number: 12

Activity Description:

"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.

(a) In Eastern Cape, Free State, Gauteng, Limpopo, North West and Western Cape provinces:

i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;

ii. Within critical biodiversity areas identified in bioregional plans;

iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on even in urban areas; or

iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning."

Activity Number: 22

Activity Description:

"The expansion of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage facilities or infrastructure will be expanded by 30 cubic metres or more but no more than 80 cubic metres.

(a) In Western Cape:

i. All areas outside urban areas; or

ii. Areas inside urban areas, the following:

(aa) Areas seawards of the development setback line or within 200 metres from the high-water mark of the sea if no such development setback line is determined;

(bb) Areas on the watercourse side of the development setback line or within 100 metres from the edge of a watercourse where no such setback line has been determined; or

(cc) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined."

The abovementioned list is hereinafter referred to as "the listed activities".

The applicant is herein authorised to undertake the following alternative related to the listed activities:

The upgrade and expansion of the existing Macassar waste water treatment works ("WWTW") in order to increase the total treatment capacity by 50 MI/day average dry weather flow ("ADWF"). The WWTW will be expanded from the current 30 MI/day to approximately 80MI/day. The development footprint of the WWTW will increase by approximately 2.4 ha as a result of the upgrade and expansion works and entails the following:

Existing WWTW facilities to be expanded:

- Increasing the treatment capacity of the existing WWTW facilities from 30 MI/day to approximately 48 MI/day by increasing the aeration at the existing reactors. This will not increase the development footprint of the existing WWTW.

Proposed new WWTW facilities:

- The construction of 2 x 16 MI/day conventional activated sludge bioreactor units.
- The construction of 6 x settling tanks (clarifiers) with approximately 30m diameters each.
- The construction of new inlet works to receive a capacity of approximately 80 MI/day.
- The construction of a new sludge dewatering facility to with a capacity of 50 MI/day.
- The construction of storage facilities for temporary storage of dewatered sludge with a capacity of approximately 200 m³.
- The construction of a chemical dosing facility for the purpose of phosphorous removal.
- The construction of a chlorine tank within the maturation pond with an approximate capacity of 900 m³.
- The construction of a new/upgraded outlet pipe from the maturation ponds into the Eerste River approximately 330 mm in diameter and 75m in length.
- The construction of bunded storage areas for the storage of hazardous substances.
- The construction and upgrading of the access road and other internal roads.
- The construction of a boundary fence.
- The construction and installation of an odour control system at the inlet works and the sludge dewatering facility.
- The construction of electrical infrastructure, including a new 12 kV infeed substation, a new underground medium voltage cable and a new motor control centre building to house a new 2 MVA stand-by generator, 2MVA transformer and 11kV switchgear.
- The construction of various associated internal WWTW infrastructure e.g. interconnecting pipes, storage rooms, pump stations, paved areas, etc.

See Appendix A for the authorised layout plan of the upgrade and expansion of the WWTW.

C. PROPERTY DESCRIPTION AND LOCATION

The listed activities will take place on Erf 1205, Macassar

The SG 21 digit code is:

C06700150000120500000

co-ordinates:

S 34° 4' 35.3"
E 18° 45' 58.45"

Hereinafter referred to as "the site".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Sharples Environmental Services cc.
% Ms Stephnie Kot
PO Box 443

MILNERTON
7435

Tel.: (021) 554 5195

Fax: 086 575 2869

E. CONDITIONS OF AUTHORISATION

1. This Environmental Authorisation is valid for a period of five **(5)** years from the date of issue. The holder must commence with the listed activities within the said period or this Environmental Authorisation lapses and a new application for Environmental Authorisation must be submitted to the Competent Authority, unless the holder has lodged a valid application for the amendment of the validity period of this Environmental Authorisation, at least three (3) months prior to the expiry of this Environmental Authorisation. The listed activities, including site preparation, may not commence during the period of administrative extension.

Please note that:

- 1.1 In terms of Regulation 28(2) of the NEMA EIA Regulations, 2014 failure to lodge an application for amendment at least three (3) months prior to the expiry of the validity period of the Environmental Authorisation may result in the Competent Authority being unable to process the application for amendment and in the lapsing of the Environmental Authorisation; and
- 1.2 It is an offence in terms of Section 49A(1)(a) of the NEMA for a person to commence with a listed activity, unless the Competent Authority has granted an Environmental Authorisation for the undertaking of the activity.
2. The listed activities, including site preparation, must not commence within 20 (twenty) calendar days of the date of the notification of the decision being sent to the registered Interested and Affected Parties ("I&APs"). In the event that an appeal is lodged with the Appeal Administrator, the effect of this Environmental Authorisation is suspended until such time as the appeal is decided.
3. The applicant must in writing, within 12 (twelve) calendar days of the date of this decision and in accordance with Regulation 10(2)–
 - 3.1 Notify all I&APs of –
 - 3.1.1 The outcome of the application;
 - 3.1.2 The reasons for the decision as included in Annexure 1;
 - 3.1.3 The date of the decision;
 - 3.1.4 The date of issue of the decision; and
 - 3.1.5 Provide the registered I&APs with:
 - The name of the holder (entity) of this Environmental Authorisation;
 - Name of the responsible person for this Environmental Authorisation;
 - Postal address of the holder;
 - Telephonic and fax details of the holder; and
 - E-mail address if any.
 - 3.2 Draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the NEMA EIA Regulations, 2010 detailed in Section F below; and
 - 3.3 Draw the attention of all registered I&APs to the manner in which they may access the decision.

4. A written notice of seven (7) calendar days must be given to the Competent Authority before commencement of construction activities.
 - 4.1. The notice must make clear reference to the site details and EIA Reference number given above.
 - 4.2. The notice must also include proof of compliance with the following Conditions described herein:

Conditions: 2, 3 and 13.
5. The holder is responsible for ensuring compliance with the Conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.
6. Any changes to, or deviations from the scope of the description set out in Section B above must be accepted or approved, in writing, by the Competent Authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the Competent Authority may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.
7. The applicant must notify the Competent Authority in writing, within 24 hours thereof if any condition herein stipulated is not being complied with.
8. The draft Environmental Management Programme ("EMPr") submitted as part of the application for Environmental Authorisation is hereby approved and must be implemented. The EMPr must be included in all contract documentation for all phases of implementation.
9. Should any amendments to the EMPr be required before the required audit in terms of this Environmental Authorisation, the applicant must:
 - 9.1. Notify the Competent Authority of the intention to amend the EMPr at least sixty (60) days prior to the submission of the application for amendment to the EMPr;
 - 9.2. Obtain comment from potential I&APs, including the Competent Authority, by using any of the methods provided for in the NEMA for a period of at least 30 days; and
 - 9.3. Submit the amended EMPr to the Competent Authority for approval within 60 days of inviting comments on the proposed amendments.
10. A copy of the Environmental Authorisation and the EMPr must be kept at the site where the listed activities will be undertaken. Access to the site referred to in Section C above must be granted and, the Environmental Authorisation and EMPr must be produced to any authorised official representing the Competent Authority who requests to see it for the purposes of assessing and/or monitoring compliance with the Conditions contained herein. The Environmental Authorisation and EMPr must also be made available for inspection by any employee or agent of the applicant who works or undertakes work at the site.
11. The applicant must submit an application for amendment of the Environmental Authorisation and/or EMPr to the Competent Authority in terms of Chapter 5 of the NEMA EIA Regulations, 2014 where any detail or change in scope with respect to the Environmental Authorisation and/or EMPr must be amended, added, substituted, corrected, removed or updated. However, such application for amendment shall not include the personal details of the holder of the Environmental Authorization.

12. Non-compliance with a Condition of this Environmental Authorisation or EMPr may result in suspension of this Environmental Authorisation and may render the holder liable for criminal prosecution.
13. The holder must appoint a suitably experienced Environmental Control Officer ("ECO") or site agent where appropriate, for all phases of implementation before commencement of any land clearing or construction activities to ensure compliance with the EMPr and the Conditions contained herein.
14. Should any heritage remains be exposed during excavations or any actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape (in accordance with the applicable legislation). Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape. Heritage remains include: archaeological remains (including fossil bones and fossil shells); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features; rock art and rock engravings; shipwrecks; and graves or unmarked human burials.

A qualified archaeologist must be contracted where necessary (at the expense of the applicant and in consultation with the relevant Authority) to remove any human remains in accordance with the requirements of the relevant Authority.
15. An audit report which demonstrates compliance with the Conditions of this Environmental Authorisation must be submitted to this Department every four (4) months from the date of commencement of works on the site for the first year of construction and once per year thereafter, until the completion of the construction phase.

The audit report must:
 - 15.1. Specifically state whether the Conditions of this Environmental Authorisation and EMPr are being adhered to;
 - 15.2. Identify and assess any new impacts and risks that may arise as a result of undertaking the activities, if applicable;
 - 15.3. Identify shortcomings in the EMPr, if applicable;
 - 15.4. Identify the need, if any, for any changes to the management, avoidance and mitigation measures provided for in the EMPr;
 - 15.5. If applicable, specify that any corrective action/s taken for the non-conformities noted in the previous audit were adequate; and
 - 15.6. Be submitted by the applicant to the Competent Authority within 30 days from the date on which the auditor finalised the audit.
16. Should any shortcomings in terms of Regulation 34(4) of the NEMA EIA Regulations, 2010 be identified, the applicant must submit recommendations to amend the EMPr in order to rectify any shortcomings identified by the aforementioned audit report.
17. The applicant must submit an updated '*Action Plan for the Progressive Re-use of Treated Effluent*' to this Department every five (5) years. This plan must include updated information and data indicating the efforts to progressively re-use and supply the treated effluent from the Macassar WWTW to end-users.

F. APPEALS

Appeals must comply with the provisions contained in Chapter 7 of the Environmental Impact Assessment Amendment Regulations, 2010.

1. An appellant must –

- 1.1. submit a notice of intention to appeal to the Minister, within 20 (twenty) calendar days of the date of the decision;
 - 1.1.1 If the appellant is an applicant, the appellant must provide each person and organ of state that was a registered interested and affected party in relation to the applicant's application, within 10 days of having lodged the notice with the Minister, with—
 - (a) a copy of the notice lodged with the Minister; and
 - (b) a notice indicating that the appeal submission will be made available on the date of lodging with the Minister and where and for what period the appeal submission will be available for inspection by such person or organ of state.
 - 1.1.2 If the appellant is a person other than an applicant, the appellant must provide the applicant, within 10 days of having lodged the notice with the Minister, with—
 - (a) a copy of the notice lodged with the Minister and
 - (b) a notice indicating where and for what period the appeal submission will be available for inspection by the applicant.
 - 1.2. submit the appeal within 30 (thirty) calendar days after the lapsing of the 20 (twenty) calendar days contemplated in regulation 60(1), for the submission of the notice of intention to appeal; and
 - 1.3 that a responding statement may be made on the appeal within 30 (thirty) calendar days from the date the appeal submission was lodged with the Minister and
 - 1.4 if a respondent introduces any new information not dealt with in the appeal submission of the appellant, the appellant is entitled to submit an answering statement to such new information to the Minister within 30 days of receipt of the responding statement.
2. A person, organ of state or applicant who submits a responding or answering statement in terms of regulation 63 must within 10 (ten) calendar days of having submitted the responding or answering statement, serve a copy of the statement on the other party.
 3. All notice of intention to appeal and appeal forms must be submitted in hard copy by means of one of the following methods:

By post: Western Cape Ministry of Local Government,
Environmental Affairs and Development Planning
Private Bag X9186
CAPE TOWN
8000

By facsimile: (021) 483 4174; or

By hand: Attention: Mr Jaap de Villiers (Tel: 021-483 3721)
Room 809
8th Floor Utilitas Building,
1 Dorp Street
Cape Town
8001

PLEASE NOTE : Appeals, responding and answering statements must not be lodged by e-mail.

4. A prescribed notice of intention to appeal form and appeal form as well as assistance regarding the appeal processes is obtainable from the office of the Minister at: Tel. (021) 483 3721, E-mail Jaap.DeVilliers@westerncape.gov.za or URL <http://www.westerncape.gov.za/eadp>.

G. DISCLAIMER

The Western Cape Government, the Local Authority, committees or any other public authority or organisation appointed in terms of the Conditions of this Environmental Authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the Conditions as set out herein or any other subsequent document or legal action emanating from this decision.

Yours Faithfully



MR ZAAHIR TOEFY

DIRECTOR: DEVELOPMENT PLANNING: REGION 1

DEPARTMENT OF ENVIRONMENTAL AFFAIRS & DEVELOPMENT PLANNING

DATE OF DECISION: 07/07/2016

Copied to: Ms Stephnie Kot

Sharples Environmental Services cc.

Fax: 086 575 2869

FOR OFFICIAL USE ONLY:

EIA REFERENCE NUMBER:	16/3/1/1/A3/39/2078/14
NEAS EIA REFERENCE NUMBER:	WCP/EIA/0001821/2014
EXEMPTION REFERENCE NUMBER:	16/3/1/4/A3/39/2079/14
NEAS EXEMPTION REFERENCE NUMBER:	WCP/EIA/EX/0000506/2014

ANNEXURE 1: REASONS FOR THE DECISION

In reaching its decision, the Competent Authority, *inter alia*, considered the following:

- a) The information contained in the application form received on 10 March 2014, the draft BAR dated May 2015, the final BAR including the EMPr which was received on 16 February 2016, the additional information received on 5 April 2016 and the acceptance letter of the final BAR issued on 7 April 2016;
- b) Relevant information contained in the Departmental information base, including, the Guidelines on Public Participation, Alternatives and Exemptions (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including Section 2 of the NEMA;
- d) This application was submitted in terms of the EIA Regulations of 2010 and was pending at the time of the promulgation of the EIA Regulations, 2014. Some of the listed activities herein authorised may not have been listed in terms of the NEMA EIA Regulations of 2010, but are now listed in terms of the EIA Regulations, 2014. In accordance with Regulation 53(3) of Government Notice No. R.982, these listed activities may be authorised as if applied for;
- e) The comments received from I&APs including, *inter alia*, the Department of Environmental Affairs & Development Planning: Directorate - Waste Management, the Department of Environmental Affairs & Development Planning: Directorate - Pollution & Chemicals Management, the Department of Water Affairs & Sanitation; CapeNature; Heritage Western Cape; the Department of Agriculture: Western Cape;
- f) The sense of balance of the negative and positive impacts and the proposed mitigation measures.

No site visit was conducted. The Competent Authority had sufficient information to make an informed decision without conducting a site visit.

All information presented to the Competent Authority was taken into account in the consideration of the Application for Environmental Authorisation. A summary of the issues which, according to the Competent Authority, were the most significant reasons for the decision is set out below:

1. Exemption

Exemption from Regulation 10(2)(d) was granted due to all registered I&APs having been notified of the Exemption Application, as is required, and due to no significant concerns were raised by I&APs in this regard.

2. Public Participation

The Public Participation Process included, *inter alia*, opening a register of I&APs and providing notification of the application in writing, placing a notice in two local newspapers, notifying the Municipal Ward Councillor and the Local Municipality, notifying relevant Organs of State and relevant State Departments in respect of the Basic Assessment and Exemption Applications and the draft BAR and the final BAR.

This Department is satisfied that the Public Participation Process that was followed met the minimum legal requirements. All of the comments received and responses made were included in the report.

Specific management and mitigation measures have been considered in this Environmental Authorisation and in the EMPr to adequately address the concerns raised.

3. Alternatives

The applicant considered layout alternatives, technology alternatives, operational alternatives and the 'no-go' alternative.

Layout Alternatives:

Layout Alternative A (Herewith Authorised)

- The conventional activated sludge ("CAS") reactors, settling tanks, sludge dewatering facility and a part of the new inlet works are all to be developed within the existing footprint of the WWTW.
- The chlorine contact tank is to be located within the existing maturation pond.
- The new/upgraded outlet pipe is to be constructed adjacent to the existing outlet pipe from the maturation ponds into the Eerste River.
- The re-routing of the perimeter gravel road.
- The upgrading of the unsurfaced road on the south-west boundary of the WWTW to a tarred road with a turning circle.
- Construction of a new internal tarred access road.
- The construction of a perimeter fence at the WWTW facility.
- An increase in the aeration at the existing aerators.

Layout Alternative B (Not Authorised)

A second Layout Alternative B was also considered. However, Layout Alternative A is seen as the best option from an engineering and cost viewpoint. In addition, Layout Alternative A is the most preferable as this layout is at a lower elevation in comparison to the inlet works, i.e. this would allow the raw sewage to drain under gravity from the inlet works to the new CAS reactors, thus requiring no electricity or maintenance to pump sewage from the inlet works.

Technology Alternatives:

Technology Alternatives (Herewith Authorised)

- The WWTW will make use of the CAS biological treatment process to reduce the organic content of the incoming raw sewage.
- The WWTW will use chemical dosing to augment the biological removal of phosphorous.
- The WWTW will use an enclosed dewatering facility in which secondary sludge is thickened by treating with chemicals and then dewatered by passing the sludge through mechanical belt presses.
- The WWTW will use gaseous chlorine to dose the treated effluent within chlorine contact tanks and further disinfect in maturation ponds by exposure to ultraviolet ("UV") light through sunlight.

Technology Alternatives (Not Authorised)

- The use of membrane bio-reactors was considered undesirable due to the high set-up and maintenance costs in addition to vulnerability to power outages.
- The removal of phosphorous through biological processes only was considered undesirable due to the difficulty of attaining the Department of Water and Sanitation special limit values for phosphorous concentrations in the final discharge from the WWTW.
- The removal of phosphorous through chemical precipitation processes only was considered undesirable due to the high operational costs and the increased risk of spillage of hazardous chemicals.
- The use of concrete drying beds for the secondary sludge was considered undesirable due to the larger space requirements and the increased negative odours associated with the process.
- The use of high intensity UV lights to denature the pathogens contained in the effluent was considered undesirable due to the high operational and maintenance costs and the fact that its efficacy cannot be guaranteed.
- The use of ozone to denature the pathogens contained in the effluent was considered undesirable due to the high operational and electricity costs.

Operational Alternatives:

Operational Alternative 1 (Herewith Authorised)

The WWTW will discharge into the Eerste River via an existing outlet which is also to be upgraded in capacity. This discharge will be the final treated effluent which has been treated to the water quality

standards specified in the General Limit Values, with Special Limit Values for ammonia and orthophosphate.

The applicant is committed, through the 'Action Plan for the Progressive Re-use of Treated Effluent', to re-use a portion of the final treated effluent, i.e. irrigation supply, internal WWTW processes, supply to industry, potable use, etc.

Operational Alternatives (Not Authorised)

An additional three operational alternatives were considered and subsequently disregarded:

Operational Alternative 2 entails no final treated effluent discharge into the Eerste River from the Macassar WWTW. This Alternative would require all of the final treated effluent to be re-used and supplied to multiple end-users. This is not feasible as the infrastructure, facilities and a sufficient number of end-users are not in place at this point in time.

Operational Alternative 3 entails all final treated effluent discharge being discharged directly into the sea via a marine outfall pipe. This is not feasible due to the significant additional costs of constructing a 500 - 800m length marine outfall pipe.

Operational Alternative 4 entails the Macassar WWTW not being upgraded and to rather direct all untreated and poorly treated final effluent directly into the sea via a 5000m long marine outfall pipe. This is not feasible due to the significant additional costs of constructing a marine outfall pipe of this length.

"No-Go" Alternative:

The option of not upgrading the Macassar WWTW would result in no additional treatment facilities being constructed and that the treatment capacity of the WWTW will remain the same. In addition, the development footprint of the WWTW will remain the same.

This alternative is deemed to be undesirable as the Macassar WWTW is quickly approaching its design capacity for the treatment of raw sewage. The steadily increasing volumes of raw sewage cannot be treated effectively if the Macassar WWTW is not upgraded to meet the demand. In addition, incidents of capacity overload have previously occurred when the inlet works overflowed as a result of high storm flows.

4. Impacts, Assessment and Mitigation Measures

4.1 Activity Need and Desirability

The proposed upgrades to the Macassar WWTW relate directly to Objective 9 of the Western Cape Provincial Spatial Development Framework, which emphasizes the progressive improvement of WWTWs in the Western Cape.

In addition, it is stated in the City of Cape Town's Integrated Development Plan (2012-2017) that the intention is to invest in the maintenance and expansion of essential utility services.

The upgrades are necessary and are required for the applicant to continue to provide essential wastewater treatment services to the surrounding community.

4.2 Biodiversity / Biophysical Impacts

The upgrades to the WWTW will result in the loss of approximately 2.4 ha of endangered ecosystem (Cape Flats Dune Strandveld vegetation). However, most of the development site is transformed through the existence of the historical WWTW ponds and furthermore, only 0.2 ha of good quality vegetation will be lost.

The increase in the WWTW capacity will result in an increase in the discharge of treated effluent into the lower Eerste River system and the Eerste River estuary. However, through

the re-use of a portion of the final treated effluent, the volume of discharge can be reduced. The applicant is committed to the long-term progressive increase in the re-use of the final treated effluent and has established the '*Action Plan for the Progressive Re-use of Treated Effluent*' which must be updated every five (5) years to indicate progress made regarding the aim of reducing the volume of discharge into the Eerste River.

4.3 Heritage Impacts

Heritage Western Cape ("HWC") confirmed in a letter dated 18 November 2014 that no heritage resources will be impacted negatively by the proposed development and that Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) is not applicable.

4.4 Socio-economic Impacts

The increase in the operational capacity of the Macassar WWTW is a necessity and will result in positive impacts for the surrounding communities. Furthermore, the upgrades will result in approximately 122 construction phase employment opportunities and approximately six permanent operational phase employment opportunities.

The development will result in both negative and positive impacts:

Negative Impacts:

- Potential impacts from the loss of habitat within an Endangered Ecosystem, i.e. Cape Flats Dune Strandveld vegetation.
- The increase in waste water treatment capacity at the Macassar WWTW will result in an increase in the amount of final effluent discharged into the Eerste River.

Positive Impacts:

- The upgrades to the WWTW are necessary to continue providing essential wastewater treatment to the surrounding community and to prevent poorly treated final effluent from being discharged into the Eerste River.
- The upgrades will result in approximately 122 construction phase employment opportunities and approximately six permanent operational phase employment opportunities.

This Department is satisfied that the significant negative impacts specified above can be adequately addressed by the conditions contained in this Environmental Authorisation and the mitigation measures contained in the EMP. Furthermore, the applicant is required to comply with the Conditions of this Environmental Authorisation. This Department is therefore satisfied that the positive impacts of the proposed development outweigh the negative impacts.

5. National Environmental Management Act Principles

The National Environmental Management Act Principles (set out in Section 2 of the NEMA, which apply to the actions of all Organs of State, serve as Guidelines by reference to which any Organ of State must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), *inter alia*, provides for:-

- The effects of decisions on all aspects of the environment to be taken into account;
- The consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- The co-ordination and harmonization of policies, legislation and actions relating to the environment;
- The resolving of actual or potential conflicts of interest between Organs of State through conflict resolution procedures; and
- The selection of the best practicable environmental option.