



**Western Cape
Government**

Environmental Affairs and
Development Planning

**DIRECTORATE: DEVELOPMENT MANAGEMENT
REGION 1**

REFERENCE NUMBER: 16/3/3/1/A2/30/3005/19

ENQUIRIES: MS. K. ADRIAANSE

DATE OF ISSUE:

2019 -09- 27

The Director
Legacy Pet Crematorium (Pty) Ltd.
P.O. Box 130999
BRYANSTON
2021

For Attention: Ms. A. Tresise

Tel: (011) 875 2099

Fax: (086) 515 4125

Dear Madam

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): PROPOSED CREMATORIUM, AQUACULTURE FACILITY AND ASSOCIATED INFRASTRUCTURE ON ERF 578, PHILIPPI.

1. With reference to the above application, the Department hereby notifies you of its decision to **grant** Environmental Authorisation, attached herewith, together with the reasons for the decision.
2. In terms of Regulation 4 of the Environmental Impact Assessment Regulations, 2014 (as amended), you are instructed to ensure, within 14 days of the date of the decision on the application, that all registered interested and affected parties ("I&APs") are provided with access to the decision and reasons for the decision, and that all registered I&APs are notified of their right to appeal.
3. Your attention is drawn to Chapter 2 of the National Appeal Regulations, 2014 (as amended), which prescribes the appeal procedure to be followed. This procedure is summarised in the attached Environmental Authorisation.

Yours faithfully

MR. ZAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

Copies to: (1) Ms. V. Vermaak / Ms. R. Antrobus-Wuth (Tala Solutions)
(2) Mr. I. Geldenhys (City of Cape Town: Air Quality)
(3) Mr. R. Samaai (City of Cape Town: Environmental Resource Management)

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REFERENCE: 16/3/3/1/A2/30/3005/19

NEAS REFERENCE: WCP/EIA/0000574/2019

ENQUIRIES: MS. K. ADRIAANSE

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ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): PROPOSED CREMATORIUM, AQUACULTURE FACILITY AND ASSOCIATED INFRASTRUCTURE ON ERF 578, PHILIPPI.

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

DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), the Competent Authority herewith **grants Environmental Authorisation** to the applicant to undertake the listed activities specified in section B below with respect to the Preferred Alternative, described in the Basic Assessment Report ("BAR"), dated June 2019.

The applicant for this Environmental Authorisation is required to comply with the conditions set out in section E below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

The Director
Legacy Pet Crematorium (Pty) Ltd.
c/o Ms. A. Tresise
P.O. Box 130999
BRYANSTON
2021

Tel: (011) 875 2099

Fax: (086) 515 4125

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

B. LIST OF ACTIVITIES AUTHORISED

Listed Activities	Activity/Project Description
<p>Listing Notice 1 of the NEMA EIA Regulations, 2014 (as amended):</p> <p>Activity Number: 3 Activity Description: <i>The development and related operation of facilities or infrastructure for the slaughter of animals with a —</i> <i>(i) product throughput of poultry exceeding 50 poultry per day;</i> <i>(ii) product throughput of reptiles, game and red meat exceeding 6 units per day; or</i> <i>(iii) wet weight product throughput of fish, crustaceans or amphibians exceeding 20 000 kg per annum.</i></p> <p>Activity Number: 6 Activity Description: <i>The development and related operation of facilities, infrastructure or structures for aquaculture of—</i> <i>(i) finfish, crustaceans, reptiles or amphibians, where such facility, infrastructure or structures will have a production output exceeding 20 000 kg per annum (wet weight);</i> <i>(ii) molluscs and echinoderms, where such facility, infrastructure or structures will have a production output exceeding 30 000 kg per annum (wet weight);</i> <i>or</i> <i>(iii) aquatic plants, where such facility, infrastructure or structures will have a production output exceeding 60 000 kg per annum (wet weight);</i> <i>excluding where the development of such facilities, infrastructure or structures is for purposes of sea-based cage culture in which case activity 7 in this Notice applies.</i></p>	<p>The proposed development entails the development and related operation of infrastructure for the slaughter of fish with a wet weight of approximately 40 000kg per annum.</p> <p>The proposed development entails the development of infrastructure for the aquaculture of fin fish exceeding 20 000kg per annum (wet weight).</p>

The abovementioned list is hereinafter referred to as “**the listed activities**”.

The holder is herein authorised to undertake the following alternative that includes the listed activities as it relates to the proposed development:

The proposed development entails the development of a crematorium, aquaculture facility and associated infrastructure on Erf 578, Philippi.

The proposed crematorium will be for the cremation of animals and will comprise of:

- A refrigeration unit;
- A staging area;
- Two cremators (one with a capacity of approximately 300kg/hr and another with a capacity of approximately 90 kg/hr);
- Two 2000L storage tanks for the storage of paraffin;
- A skip;
- Offices;

- A store room;
- Staff facilities;
- Parking;
- A vehicle wash bay; and
- Associated infrastructure.

The development footprint of the crematorium will be approximately 500m² in extent. One cremator will be used for communal cremation and the cremation of larger animals. The other cremator will be used for private cremations. Ashes will be returned to the owner of the pet or be disposed of at a licensed disposal facility. No water will be required for the cremation process.

The proposed aquaculture facility will be a closed Recirculating Aquaculture System and will comprise of:

- Breeding tanks;
- A hatchery;
- Fingerling tanks;
- Mixed cell raceway tanks;
- A biological filter system;
- A filter sludge containment slab;
- An oxygen generator;
- A kitchen;
- Staff facilities;
- A store room; and
- Associated infrastructure.

The development footprint of the aquaculture facility will be approximately 1500m² in extent. The maximum throughput capacity will be approximately 40 000kg per annum. The fish species that may be used is either *Oreochromis niloticus* (i.e. Nile tilapia) or *Clarias gariepinus* (i.e. African sharptooth catfish). Products will include fingerlings, to be sold to farmers, and processed whole round and fillets, which will be sold as a sustainable protein source.

The proposed crematorium and aquaculture facility will be linked through a heat exchange system. Heat generated through the cremation process will be harnessed through a heat exchange system using pipes running adjacent to the cremator through which water from the aquaculture facility will be circulated. The heat exchange system will heat the temperature of the water to allow for optimum conditions for year-round breeding.

Sludge from the filter system of the aquaculture facility will drain onto an impermeable slab, transferred into a skip for temporary storage and will be disposed of at an appropriately licensed disposal facility. The proposed development will connect to existing municipal services for potable water supply and sewage disposal. Electricity supply will be obtained from Eskom.

Access to the site will be gained off Rochester Road, Philippi.

C. SITE DESCRIPTION AND LOCATION

The authorised listed activities will be undertaken on Erf 578, Philippi, which is located off Rochester Road, Philippi and has the following co-ordinates:

Point	Latitude	Longitude
Middle	34°0'18.42" South	18°36'14.14" East

The SG 21-digit code is:

Erf 578	C01600450000057800000
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Refer to Annexure 1: Locality Map and Annexure 2: Site Plan.

The above is hereinafter referred to as "**the site**".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Tala Solutions
c/o Ms. V. Vermaak / Ms. R. Antrobus-Wuth
P.O. Box 1375

RANDPARK RIDGE
2156

Cell: (072) 260 8716 / (072) 235 7067

Email: vanessa@talasolutions.co.za / romy@talasolutions.co.za

E. CONDITIONS OF AUTHORISATION

Scope of authorisation

1. The holder is authorised to undertake the listed activities specified in Section B above in accordance with and restricted to the Preferred Alternative described in the BAR dated June 2019 on the site as described in Section C above.
2. This Environmental Authorisation is granted for a period of five (5) years, from the date of issue, during which period the holder must commence with the authorised listed activities.
3. The holder shall be 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.
4. Any changes to, or deviations from the scope of the alternative described 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 information in order 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.

Written notice to the Competent Authority

5. A minimum of 7 (seven) calendar days' notice, in writing, must be given to the Competent Authority before commencement of development activities.
 - 5.1. The notice must make clear reference to the site details and EIA Reference number given above.
 - 5.2. The notice must also include proof of compliance with the following conditions described herein:

Conditions: 6 and 10.

Notification and administration of appeal

6. The holder must in writing, within 14 (fourteen) calendar days of the date of this decision—
 - 6.1. Notify all registered Interested and Affected Parties ("I&APs") of –
 - 6.1.1. the outcome of the application;
 - 6.1.2. the reasons for the decision as included in Annexure 3;
 - 6.1.3. the date of the decision; and
 - 6.1.4. the date when the decision was issued.

- 6.2. Draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeal Regulations, 2014 (as amended) detailed in Section G below;
- 6.3. Draw the attention of all registered I&APs to the manner in which they may access the decision; and
- 6.4. Provide the registered I&APs with:
 - 6.4.1. the name of the holder (entity) of this Environmental Authorisation,
 - 6.4.2. name of the responsible person for this Environmental Authorisation,
 - 6.4.3. postal address of the holder,
 - 6.4.4. telephonic and fax details of the holder,
 - 6.4.5. e-mail address, if any, of the holder,
 - 6.4.6. the contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the National Appeal Regulations, 2014 (as amended).
7. The listed activities, including site preparation, must not commence within 20 (twenty) calendar days from the date the holder notifies the registered I&APs of this decision. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided i.e. the listed activities, including site preparation, must not commence until the appeal is decided.

Management of activity

8. The draft Environmental Management Programme ("EMPr") submitted as part of the application for Environmental Authorisation is hereby approved, on condition that the following amendments are made and implemented.
 - 8.1. An Aquaculture Management Plan must be compiled prior to the commencement of the operational phase of the aquaculture facility. The aquaculture management plan must include, *inter alia*, the following:
 - 8.1.1. A list of all relevant permits/licenses that will be required for the fish species to be farmed;
 - 8.1.2. A biosecurity plan to address, *inter alia*, disease monitoring, control and treatment, the management of mortalities, aquaculture chemicals and the grading, moving and harvesting of fish; and
 - 8.1.3. A maintenance management plan.
 - 8.2. The amended EMPr must be provide to this Directorate for record purposes prior to the commencement of the operational phase of the aquaculture facility.
9. The EMPr must be included in all contract documentation for all phases of implementation.

Monitoring

10. The holder must appoint a suitably experienced environmental control officer ("ECO"), or site agent where appropriate, before the commencement of development activities to ensure compliance with the provisions of the EMPr and the conditions contained in this Environmental Authorisation.
11. A copy of the Environmental Authorisation, EMPr, Environmental Audit Reports and compliance monitoring reports must be kept at the site where the listed activities will be undertaken and must be made available to any authorised official on request.

12. Access to the site referred to in Section C above must be granted, and the environmental reports mentioned above 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.

Auditing

13. In terms of Regulation 34 of the NEMA EIA Regulations, 2014 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation and the EMPr and submit Environmental Audit Reports to the Competent Authority. The Environmental Audit Reports must be prepared by an independent person and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014 (as amended).
 - 13.1. The holder must undertake an environmental audit within 6 (six) months of the commencement of the development activities and submit an Environmental Audit Report to the Competent Authority upon the completion of the environmental audit.
 - 13.2. An Environmental Audit Report must be submitted to the Competent Authority 1 (one) month after the completion of the development activities.
 - 13.3. An Environmental Audit Report must be submitted to the Competent Authority every 5 (five) years after the commencement of the operational phase.
 - 13.4. The holder must, within 7 (seven) calendar days of the submission of an Environmental Audit Report to the Competent Authority, notify all potential and registered I&APs of the submission and make the Environmental Audit Report available to anyone on request.

Specific Conditions

14. Should any heritage remains be exposed during excavations or any other actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape. Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape.
 - 14.1. Heritage remains include: meteorites, archaeological and/or palaeontological remains (including fossil shells and trace fossils); 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 with heritage significance; rock art and rock engravings; and/or graves or unmarked human burials including grave goods and/or associated burial material.
15. An integrated waste management approach, which is based on waste minimisation and incorporates reduction, recycling, re-use and disposal, where appropriate, must be employed. Any solid waste must be disposed of at a landfill licensed in terms of the applicable legislation.
16. The installation of the storage tanks and associated infrastructure must comply with relevant South African National Standards ("SANS") codes.
17. Leak detection equipment must be installed in accordance with the relevant SANS codes. Effective stock inventory monitoring, recording and regular auditing must take place for the early identification of possible leaks and keep a leak history for the site. Should any leaks be discovered, remediation of the pollution must take place immediately after consultation with the competent authority.

18. Sludge generated from the cleaning of the filter system of the aquaculture facility must be disposed of at a licensed disposal facility.
19. Employment opportunities must be afforded to the local community (as far as possible) during all phases of the proposed development.

F. GENERAL MATTERS

1. Notwithstanding this Environmental Authorisation, the holder must comply with any other statutory requirements that may be applicable when undertaking the listed activities.
2. Non-compliance with a condition of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.
3. If the holder does not commence with the listed activities within the period referred to in Condition 2, this Environmental Authorisation shall lapse for that activity, and a new application for Environmental Authorisation must be submitted to the Competent Authority. If the holder wishes to extend the validity period of the Environmental Authorisation, an application for amendment in this regard must be made to the Competent Authority prior to the expiry date of the Environmental Authorisation.
4. The holder must submit an application for amendment of the Environmental Authorisation to the Competent Authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated. If a new holder is proposed, an application for Amendment in terms of Part 1 of the NEMA EIA Regulations, 2014 (as amended) must be submitted.

Please note that an amendment is not required if there is a change in the contact details of the holder. In this case, the Competent Authority must only be notified of such changes.

5. The manner and frequency for updating the EMPr is as follows:

Amendments to the EMPr, other than those required by this Environmental Authorisation, must be done in accordance with Regulations 35 to 37 of the NEMA EIA Regulations, 2014 (as amended) or any relevant legislation that may be applicable at the time.

G. APPEALS

Appeals must comply with the provisions contained in the National Appeal Regulations, 2014 (as amended).

1. An appellant (if the holder of the decision) must, within 20 (twenty) calendar days from the date the notification of the decision was sent to the holder by the Competent Authority –
 - 1.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014 (as amended) to the Appeal Administrator; and
 - 1.2. Submit a copy of the appeal to any registered I&APs, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
2. An appellant (if NOT the holder of the decision) must, within 20 (twenty) calendar days from the date the holder of the decision sent notification of the decision to the registered I&APs–
 - 2.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014 (as amended) to the Appeal Administrator; and

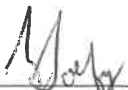
- 2.2 Submit a copy of the appeal to the holder of the decision, any registered I&AP, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
3. The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered I&AP and the Organ of State must submit their responding statements, if any, to the appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.
4. The appeal form/s must be submitted by means of one of the following methods:
- By post: Attention: Marius Venter
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. M. Venter (Tel: 021 483 2659)
Room 809
8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001
5. The prescribed appeal form, as well as assistance regarding the appeal processes is obtainable from the office of the appeal authority/ at: Tel. (021) 483 3721, E-mail DEADP.Appeals@westerncape.gov.za or URL <http://www.westerncape.gov.za/eadp>.

H. DISCLAIMER

The Western Cape Government, the holder, 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.

Your interest in the future of our environment is appreciated.

Yours faithfully



MR. ZAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

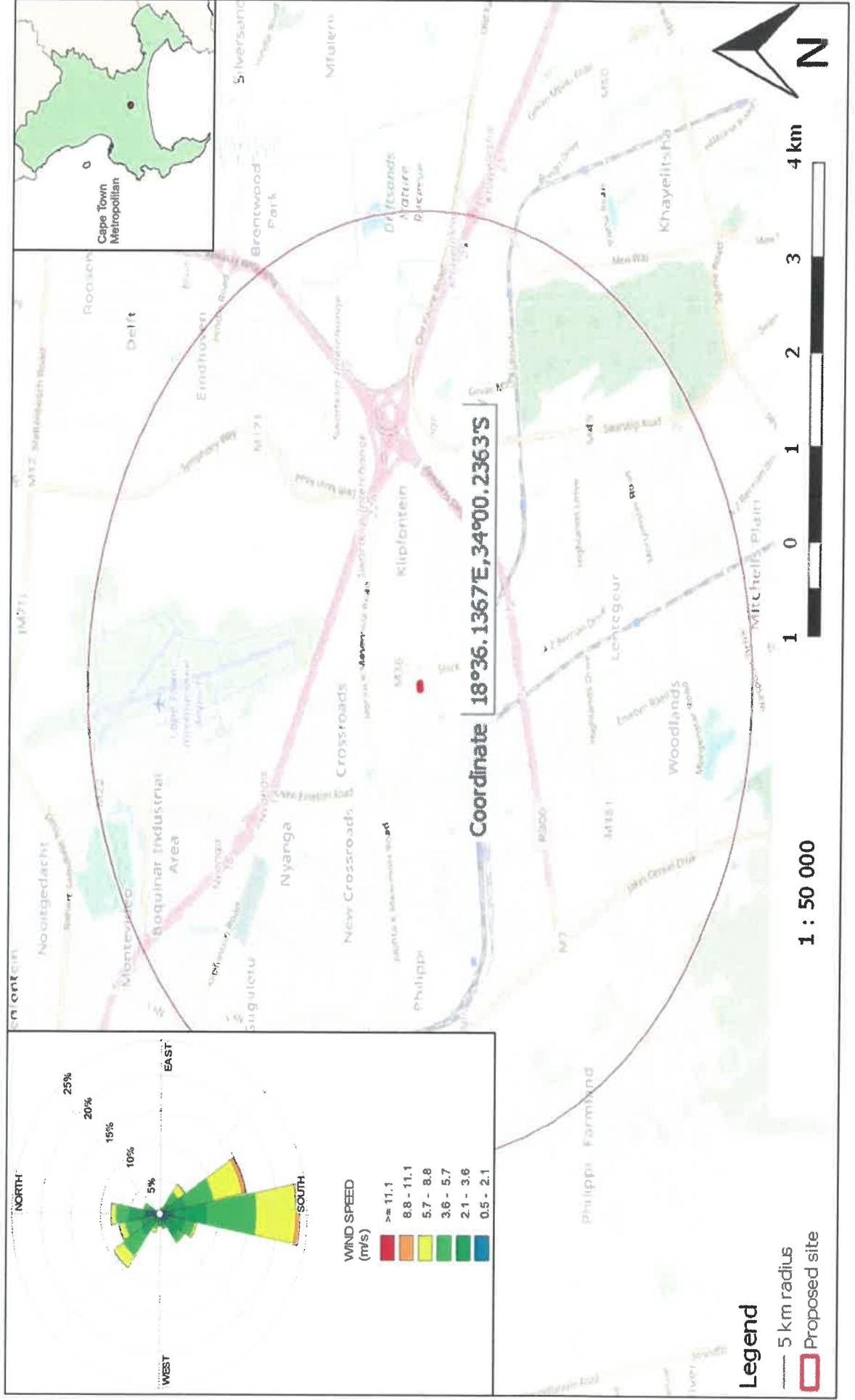
DATE OF DECISION: 27/09/2019

Copies to: (1) Ms. V. Vermaak / Ms. R. Antrobus-Wuth (Tala Solutions)
(2) Mr. I. Geldenhys (City of Cape Town: Air Quality)
(3) Mr. R. Samaai (City of Cape Town: Environmental Resource Management)

Email: vanessa@talasolutions.co.za
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ANNEXURE 1: LOCALITY MAP

Locality map of the proposed site.



ANNEXURE 2: SITE PLAN

Site plan of the proposed development.



ANNEXURE 3: REASONS FOR THE DECISION

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

- a) The information contained in the Application Form dated 12 March 2019, the BAR received by the Competent Authority on 14 June 2019, the EMPr received by the Competent Authority on 14 June 2019 and the additional information received by the Competent Authority on 05, 17 and 18 September 2019;
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation, Alternatives and Need and Desirability (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998);
- d) The comments received from I&APs and responses to these, included in the BAR dated June 2019;
- e) The balancing of negative and positive impacts and proposed mitigation measures; and
- f) No site visits were conducted. The Competent Authority had sufficient information before it 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 that were considered to be the most significant for the decision is set out below.

1. Public Participation

The public participation process included:

- identification of and engagement with I&APs;
- fixing a notice board on the site where the listed activities are to be undertaken on 08 April 2019;
- giving written notice to the owners and occupiers of land adjacent to the site where the listed activities are to be undertaken, the municipality and ward councillor, and the various organs of state having jurisdiction in respect of any aspect of the listed activities on 08 April 2019;
- the placing of a newspaper advertisement in the 'City Vision' and 'Vukani Classifieds' on 11 April 2019; and
- making the BAR available to I&APs for public review from 08 April 2019 to 17 May 2019 and extending it until 10 June 2019.

All the concerns raised by I&APs were responded to and adequately addressed during the public participation process. Specific management and mitigation measures have been considered in this Environmental Authorisation and in the EMPr to adequately address the concerns raised.

The Competent Authority concurs with the Environmental Assessment Practitioner's responses to the issues raised during the public participation process and has included appropriate conditions in this Environmental Authorisation and in the EMPr.

2. Alternatives

Technology Alternatives and the "no-go" alternative were identified and assessed. The following technology alternatives were considered:

- Burner fuel (i.e. Diesel versus paraffin);
- Water efficient technology for the vehicle wash bay; and
- Recirculating Aquaculture Systems versus Conventional Aquaculture Systems.

The preferred technology alternatives have been incorporated into the Preferred Alternative as follows:

The Preferred Alternative (herewith authorised)

The proposed development entails the development of a crematorium, aquaculture facility and associated infrastructure on Erf 578, Philippi.

The proposed crematorium will be for the cremation of pets and will comprise of:

- A refrigeration unit;
- A staging area;
- Two cremators (one with a capacity of approximately 300kg/hr and another with a capacity of approximately 90 kg/hr);
- Two 2000L storage tanks for the storage of paraffin;
- A skip;
- Offices;
- A store room;
- Staff facilities;
- Parking;
- A vehicle wash bay; and
- Associated infrastructure.

The development footprint of the crematorium will be approximately 500m² in extent. One cremator will be used for communal cremation and the cremation of larger animals. The other cremator will be used for private cremations. Ashes will be returned to the owner of the pet or be disposed of at a licensed disposal facility. No water will be required for the cremation process.

The proposed aquaculture facility will be a closed Recirculating Aquaculture System and will comprise of:

- Breeding tanks;
- A hatchery;
- Fingerling tanks;
- Mixed cell raceway tanks;
- A biological filter system;
- A filter sludge containment slab;
- An oxygen generator;
- A kitchen;
- Staff facilities;
- A store room; and
- Associated infrastructure.

The development footprint of the aquaculture facility will be approximately 1500m² in extent. The maximum throughput capacity will be approximately 40 000kg per annum. The fish species that may be used is either *Oreochromis niloticus* (i.e. Nile tilapia) or *Clarias gariepinus* (i.e. African sharptooth catfish). Products will include fingerlings, to be sold to farmers, and processed whole rounds and fillets, which will be sold as a sustainable protein source.

The proposed crematorium and aquaculture facility will be linked through a heat exchange system. Heat generated through the cremation process will be harnessed through a heat exchange system using pipes running adjacent to the cremator through which water from the aquaculture facility will be circulated. The heat exchange system will heat the temperature of the water to allow for optimum conditions for year-round breeding.

Sludge from the filter system of the aquaculture facility will drain onto an impermeable slab, transferred into a skip for temporary storage and will be disposed of at an appropriately licensed disposal facility. The proposed development will connect to existing municipal services for potable water supply and sewage disposal. Electricity supply will be obtained from Eskom.

Access to the site will be gained off Rochester Road, Philippi.

The Preferred Alternative incorporates the best practical environmental technology alternatives. The use of paraffin as burner fuel will result in less emissions when compared to the use of diesel as a burner fuel. Water efficient technologies have been incorporated into the design of the vehicle wash bay area. Rainwater tanks will be used as the main water source for the wash bay. The Recirculating Aquaculture System requires a significantly less amount of water for operation when compared to the Conventional Aquaculture System.

"No-Go" Alternative

The "No-Go" alternative would result in maintaining the "*status quo*". However, since the Preferred Alternative will not result in unacceptable environmental impacts, the "No-Go" alternative was not warranted.

3. Impact Assessment and Mitigation measures

3.1. Activity Need and Desirability

Legacy Pet Crematorium currently provides collection and cremation services to private clients, animal welfare organisations and veterinary facilities in the Gauteng and KwaZulu-Natal provinces and propose to expand their operations to the Western Cape. At the Gauteng facility, heat from the crematorium activities is recovered (through heat exchange pipes running adjacent to the cremator) and used to raise the temperature of the water in a recirculating tilapia aquaculture facility on the property facilitating optimum conditions for year-round fish breeding and growth, which allows the operation to be financially viable. The development technology used at the Gauteng facility is therefore proposed in the Western Cape.

The proposed site is located within the industrial area of Philippi and is zoned General Industrial 1. The proposed development is in line with the zoning of the site and is in line with the relevant planning policies applicable to the area. The proposed site is currently vacant and contains no sensitive biophysical features.

The proposed crematorium will provide an alternative to the disposal of deceased animals. Currently, deceased animals are disposed of at landfill sites. The proposed crematorium contributes to the principles of avoiding and minimising the creation of waste and reduces disposal to landfill. The proposed aquaculture facility will contribute to food security targets. Fingerlings will be sold to farms and the farmed fish will be processed and packaged as whole rounds and fillets, and sold as a sustainable protein source.

The proposed facility will therefore create some employment opportunities during all phases of the proposed development.

3.2. Biophysical Impacts

The proposed site is vacant and located within an industrial area. No indigenous vegetation, watercourses or wetlands occur on the proposed site. The potential biophysical impacts are therefore anticipated to be of low to negligible significance.

3.3. Air Quality Impacts

An Atmospheric Impact Report (compiled by WSP and dated 23 January 2019) was undertaken to determine the potential air quality impacts associated with the proposed crematorium. The specialist indicated that numerous schools, medical facilities and high density residential areas are located within a 5km radius of the proposed site. The specialist modelled the potential air quality impacts using data obtained from the applicant's existing pet crematorium in Gauteng as the proposed facility will utilise the same technology used at the Gauteng facility. The specialist indicated that none of the potential emissions of key air pollutants (i.e. particulate matter, Sulphur dioxide, nitrogen oxides and carbon monoxide) were exceeded the National Ambient Air Quality Standards. The potential air quality impacts are therefore anticipated to be of low negative significance post mitigation. The specialists' recommendations have been included in the EMPr. An Atmospheric Emissions Licence in terms of the National Environmental Air Quality Act, 2004 (Act No. 39 of 2004) is required from the relevant licensing authority (in this instance the City of Cape Town) and will be applied for.

3.4. Odour Impacts

The proposed crematorium may result in potential odour impacts. To reduce the potential odour impacts, deceased animals will be refrigerated prior to the cremation process. Under excessively windy conditions and during abnormal operating conditions (i.e. start-up and loading, which occur intermittently), some odour may be noticed off-site as a result of the cremation process. As only deceased animals and veterinary waste will be treated at the facility, the potential odour is not be considered noxious. Sludge from the filter system of the aquaculture facility, which will drain onto an impermeable slab may result in odour and nuisance impacts. Fly and odour control measures will be implemented to prevent potential odour and nuisance impacts from occurring. Mitigation measures have been included in the EMPr. The potential odour impacts are therefore anticipated to be negligible post mitigation.

3.5. Noise Impacts

Potential noise impacts associated with the construction activities are anticipated during the development phase. Noise impacts during the operational phase may be associated with the operation of the cremulators. The cremulators will therefore be located within an enclosed area, which will serve as an acoustic barrier. Since the cremulators will be located in an enclosed area and that the proposed site is in an industrial area, the potential noise impacts will be of low negative significance post mitigation. Mitigation measures have however been included in the EMPr to minimise the potential noise impacts.

3.6. Potential Risks

Potential risks associated with the aquaculture facility are anticipated during the operational phase of the development. An aquaculture management plan will be developed prior to the commencement of the operational phase of the aquaculture facility. This will include the development and implementation of a biosecurity plan to address disease monitoring, control and treatment, the management of mortalities, aquaculture chemicals, and the grading, moving and harvesting of farmed fish (as recommended by the Department of Agriculture, Forestry and Fisheries in their comment dated 17 April 2019). The development of the aquaculture management plan has been included as a condition set in this Environmental Authorisation.

3.7. Dust Impacts

Potential dust impacts may occur as a result of the proposed development. The cremulators will be located within an enclosed area, which will contain dust that may be generated by the cremulators. The potential dust impacts will be of negligible significance post mitigation. Mitigation measures have been included in the EMP to minimise the potential dust impacts.

3.8. Traffic Impacts

The BAR (dated June 2019) indicates that no significant traffic impacts are anticipated since a maximum of five vehicles will be utilised. Further, no heavy vehicles will be utilised. The potential traffic impacts will be of negligible significance.

3.9. Heritage Impacts

Given that the proposed site is transformed and will have a development footprint of approximately 2000m², the proposed development has not triggered Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999). The potential impact on heritage resources is therefore anticipated to be negligible.

3.10. Services/ Bulk Infrastructure

Limited wastewater will be generated from the crematorium (only from the cleaning of the staging area and vehicle wash bay) and will be disposed of into the municipal sewer system. The Recirculating Aquaculture System will be a closed system and will not result in the release of effluent or organisms into the environment. Potable water supply will be required for the aquaculture facility. Confirmation of sufficient, spare and unallocated potable water supply and sewage capacity has been provided by the City of Cape Town (correspondence dated 17 September 2019). Confirmation of sufficient, spare and unallocated electricity supply has been provided by Eskom (correspondence dated 16 September 2019). Ash obtained through the cremation process will be removed by a private contractor and disposed of at an appropriately licensed disposal facility. Sludge generated from the cleaning of the filter system of the aquaculture facility will be disposed of at an appropriately licenced disposal facility.

The development will result in both negative and positive impacts.

Negative Impacts include:

- Potential air quality impacts;
- Potential noise impacts;
- Potential odour impacts; and
- Potential dust impacts.

Positive impacts include:

- The provision of crematory services for pets and large animals;
- Reduced waste disposed to a landfill;
- Contribution towards food security;
- Economic benefits; and
- Some employment opportunities.

4. National Environmental Management Act Principles

The National Environmental Management 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 harmonisation 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.

5. Conclusion

In view of the above, the NEMA principles, compliance with the conditions stipulated in this Environmental Authorisation, and compliance with the EMPr, the Competent Authority is satisfied that the proposed listed activities will not conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activities can be mitigated to acceptable levels.

You are reminded of your general duty of care towards the environment in terms of Section 28(1) of the NEMA which states: *"Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment."*

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