

EIA REFERENCE: 16/3/3/2/A3/57/2041/21
NEAS REFERENCE: WCP/EIA/0000955/2021
DATE: 22 June 2022

The Board of Directors
Blue Crane Funerals (Pty) Ltd
10 Gordons Bay Road
STRAND
7140

Attention: Mr. W.F. Ebersön

Cell: 080 372 8036
E-mail: fred@bluecranefunerals.co.za

Dear Sir

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) ("NEMA") AND THE ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") REGULATIONS, 2014 (AS AMENDED): THE PROPOSED ESTABLISHMENT OF A CREMATORIUM AND ASSOCIATED INFRASTRUCTURE ON ERF NO. 22973, STRAND.

1. With reference to the above application, the Department hereby notifies you of its decision to **refuse** Environmental Authorisation, attached herewith, together with the reasons for the decision.
2. In terms of Regulation 4 of the EIA Regulations, 2014 (as amended), you are hereby instructed to ensure, within fourteen (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 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 Appeal Regulations, 2014 (as amended), which prescribes the appeal procedure to be followed. This procedure is summarized in the attached refusal of Environmental Authorisation.

Your interest in the future of the environment is greatly appreciated.

Yours faithfully

MR. ZAAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT – REGION 1
DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

CC: (1) Ms. A. van Wyk (City of Cape Town: ERM)
(2) Ms. L. Elston (SRK Consulting)
(3) Mr. I. Gildenhuys (City of Cape Town: Environmental Health)

E-mail: Azanne.VanWyk@capetown.gov.za
E-mail: lelston@srk.co.za
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EIA REFERENCE: 16/3/3/2/A3/57/2041/21
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REFUSAL OF ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") REGULATIONS, 2014 (AS AMENDED): THE PROPOSED ESTABLISHMENT OF A CREMATORIUM AND ASSOCIATED INFRASTRUCTURE ON ERF NO. 22973, STRAND.

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 **refuses Environmental Authorisation** to the applicant to undertake the Listed Activity specified in section B below with respect to the preferred Alternative that is described in the Environmental Impact Assessment Report ("EIAR") received by the Department on 10 March 2022.

A. DETAILS OF THE APPLICANT

Blue Crane Funerals (Pty) Ltd
C/O Mr. W.F. Ebersön
10 Gordons Bay Road
STRAND
7140

Cell: 080 372 8036
E-mail: fred@bluecranefunerals.co.za

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

B. LISTED ACTIVITY REFUSED

Listed Activity	Project Description
<p>Listing Notice 2</p> <p>Activity Number: 6 Activity Description: <i>The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing</i></p>	<p>The application is for the establishment of a crematorium in an existing warehouse on Erf 22973, Strand. The crematorium requires an Atmospheric Emission Licence ("AEL") in</p>

<p><i>the generation or release of emissions, pollution or effluent, excluding—</i></p> <p><i>(i) activities which are identified and included in Listing Notice 1 of 2014;</i></p> <p><i>(ii) activities which are 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;</i></p> <p><i>(iii) the development of facilities or infrastructure for the treatment of effluent, polluted water, wastewater or sewage where such facilities have a daily throughput capacity of 2 000 cubic metres or less; or</i></p> <p><i>(iv) where the development is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will not exceed 50 cubic metres per day.</i></p>	<p>terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004).</p>
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The abovementioned Listed Activity is hereinafter referred to as "**the Listed Activity**".

The applicant is herein refused authorisation to undertake the following development proposal that includes the listed activity relating to:

The proposed establishment of a crematorium and associated infrastructure in an existing warehouse on Erf 22973, Strand. This included the following components:

- A 2m high boundary wall on De Kock Street;
- A brick-paved paving area behind the boundary wall;
- Two multi-chamber diesel-fired TIF cremators (incinerators) installed in the warehouse;
- Two stand-alone wet scrubbers fitted on the exhausts of the cremators, installed in the warehouse (exhaust to atmosphere);
- Two chimney stacks protruding from the warehouse;
- A 2 500 litre diesel Aboveground Storage Tank in a bund in the parking area adjacent to the warehouse;
- A standby generator in the parking area;
- Offices, a guest room to view cremation, an ashes preparation room, ablution facilities and a walk-in fridge for the storage of corpses in coffins; and
- An off-loading area in the warehouse.

The total footprint is approximately 478m².

C. SITE DESCRIPTION AND LOCATION

The site where the Listed Activity was proposed is Erf 22973, Strand.

The SG 21-digit codes comprising the site are:

Site	SG 21-digit code
Erf 22973, Strand	C06700230002297300000

The co-ordinates of the site are given below:

Site	Latitude (S)	Longitude (E)
Erf 22973, Strand	34° 07' 17.16" S	18° 50' 22.44" E

Refer to Annexure 1: Locality Map(s).

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

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

SRK Consulting (South Africa) Pty Ltd.
Ms. Lauren Elston
The Administrative Building
Albion Spring
183 Main Road
RONDEBOSCH
7700

Tel.: (021) 659 3060
E-mail: lelston@srk.co.za

E. LEGISLATIVE REQUIREMENTS

1. In accordance with Regulation 46 of the EIA Regulations, 2014 (as amended), an applicant may not submit an application which is substantially similar to a previous application that has been refused, unless any appeals on such refusal have been finalised or the time period for the submission of such appeal has lapsed.
2. The holder must in writing, within fourteen (14) calendar days of the date of this decision–
 - 2.1. notify all registered Interested and Affected Parties ("I&APs") of –
 - 2.1.1. the decision reached on the application;
 - 2.1.2. the reasons for the decision as included in Annexure 2;
 - 2.1.3. the date of the decision; and
 - 2.1.4. the date when the decision was issued.
 - 2.2. 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 F below;
 - 2.3. draw the attention of all registered I&APs to the manner in which they may access the decision;
 - 2.4. provide the registered I&APs with the
 - 2.4.1. name of the holder (entity) of this Environmental Authorisation,
 - 2.4.2. name of the responsible person for this Environmental Authorisation,
 - 2.4.3. postal address of the holder,
 - 2.4.4. telephonic and fax details of the holder,
 - 2.4.5. e-mail address, if any, of the holder,
 - 2.4.6. 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 Appeals Regulations, 2014 (as amended).

F. 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 twenty (20) 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 twenty (20) 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 twenty (20) calendar days from the date of receipt of the appeal submission.
4. The appeal and the responding statement must be submitted to the address listed below:
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 Marius Venter (Tel.: 021 483 2659)
Room 809
8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

Note: For purposes of electronic database management, you are also requested to submit electronic copies (Microsoft Word format) of the appeal, responding statement and any supporting documents to the Appeal Authority at the address listed above and/or via e-mail to DEADP.Appeals@westerncape.gov.za.

5. A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from the Appeal Authority at: Tel.: (021) 483 3721, E-mail: DEADP.Appeals@westerncape.gov.za or URL: <http://www.westerncape.gov.za/eadp>.

Your interest in the future of our environment is greatly appreciated.

Yours faithfully

MR. ZAAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT – REGION 1
DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

DATE OF DECISION: 22 JUNE 2022

CC: (1) Ms. A. van Wyk (City of Cape Town: ERM)
(2) Ms. L. Elston (SRK Consulting)
(3) Mr. I. Gildenhuys (City of Cape Town: Environmental Health)

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ANNEXURE 1: LOCALITY MAP(S)



Path: G:\New Proj\572359_BlueCrane Funerals\GIS\GISPROJ\MXD\072359_Fig1_Blue Crane Funerals Crematorium EIA\Locality Map_A3L_20210713.mxd



**BLUE CRANE FUNERALS CREMATORIUM EIA
ERF 22973 ENVIRONMENTAL SENSITIVITY MAP**

Legend

- Road
- Erf 22973 (no environmental sensitivities)



Data Source:	
Chief Directorate: National Geospatial Information (CD.NGI)	
Scale:	
1:1 000 @ A3	
Projection:	Datum:
TM	HH94
Central Meridian/Zone:	
Lu27	
Date:	Compiled by:
12/01/2021	BRCH
Project No:	Fig No:
572359	1-2

Path: \\CTN-SVR0.ctn.za.srk.advo\IT\Root\Proj\New Proj\572359_BlueCrane Funerals\GIS\GISPROJ\MXD\572359_Fig1-2_BlueCrane Funerals Crematorium EIA_EnviroSensitivity_A3L_20220112.mxd

Revision: A Date: 12/01/2022

ANNEXURE 2: REASONS FOR THE DECISION

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

- a) The information contained in the Application Form received by the Department on 4 August 2021, the final Scoping Report and Plan of Study received by the Department on 20 September 2021, the final EIAR received by the Department on 10 March 2022 and the EMPr submitted together with the final EIAR for decision-making on 10 March 2022;
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation, Need and Desirability and Alternatives (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the NEMA;
- d) The comments received from I&APs and the responses thereto, included in the EIAR;
- e) The balancing of negative and positive impacts and proposed mitigation measures; and
- f) A site visit was conducted by officials of the Department on 18 May 2022.

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

- identification of and engagement with I&APs;
- Notice boards were placed at the site where the listed activity is proposed to be undertaken and the nearby Southside Centre Shopping Mall on 4 August 2021;
- giving written notice to the owners of the land and owners and occupiers of land adjacent to the site where the Listed Activity is proposed to be undertaken, the Municipality, Organs of State and State Departments having jurisdiction in respect of any aspect of the proposed development;
- the placing of newspaper advertisements in two newspapers, 'Die Burger' and 'Helderberg Gazette' on 5 August 2021; and
- making the draft Scoping Report and Plan of Study available to I&APs for comment from 5 August 2021 to 6 September 2021 and the draft EIAR from 19 January 2022 to 21 February 2022.

During the abovementioned public participation process, several concerns and objections against the proposed development were received from both the public as well as commenting authorities. The key concerns and objections are summarised as follows:

- Air quality and associated health and / or nuisance impacts:
A reduction in local ambient air quality with consequent health and / or odour nuisance impacts on affected receptors.
- Compliance with applicable legislation: specifically, the Regulations Relating to the Management of Human Remains (2013) which specify a minimum distance of 500m between cremation facilities and residential dwellings.
- The investigation of an alternative site, which is located more than 150m away from any habitable dwelling. I&APs queried why alternative sites were not investigated and I&APs were not satisfied with the Environmental Assessment Practitioner's response provided (i.e., that the applicant owns the site and as such did not consider investigating additional alternatives).
- The assumptions that informed the Impact Assessment: the findings of the Impact Assessment are based on the assumption that the incinerators will meet the Minimum Emission Standards and the claim that the incinerator equipment vendor does not provide this guarantee.
- The City of Cape Town: Air Quality Management Department noted that the supplier cannot guarantee the effectiveness and efficiency of the cremators and abatement equipment, to meet the new plant Minimum Emission Standards for the listed activity Sub-Category 8.2, in

relation to Regulation 89 when overloaded. The response provided by the Environmental Assessment Practitioner ("EAP") stated that *"The equipment vendor has guaranteed that the equipment (design specifications) meets the MES under normal operating conditions. The EMP includes operational management measures aimed at ensuring that equipment is used as per design specifications."*

- Operation and maintenance of incinerators: the need to operate and maintain incinerators and wet scrubbers according to manufacturer specifications.
- Decline in property value: a deterioration in air quality adversely affecting property prices.

Although responses were provided to the comments raised by I&APs, the proposed development is not deemed as appropriate, as the site is located too close to residential dwellings (as close as 150m and no alternative sites were considered) and a number of I&APs have expressed concerns in this regard.

2. Alternatives

According to the EIAR, site alternatives were not considered for this project for the following reasons:

- Blue Crane Funerals ("BCF") owns the site and does not own any other suitable property in the area;
- The Air Quality Impact Assessment (undertaken in the pre-application stage) found the development of BCF's crematorium and associated infrastructure at the site assessed (Erf 22973) is acceptable for all three stack height alternatives (i.e., is unlikely to lead to significant health of odour impacts in the community);
- The site is near BCF's existing Funeral Home in Gordons Bay, reducing transportation costs between the two facilities;
- The site is in an area zoned for General Industry 1 for which crematoria are a primary use (CCT, 2012), and therefore the project is compatible with immediately surrounding land use; and
- The site is completely transformed, therefore biophysical impacts associated with land disturbance are not anticipated.

2.1 The Preferred Alternative (hereby refused)

The proposed establishment of a crematorium and associated infrastructure in an existing warehouse on Erf 22973, Strand. This included the following components:

- A 2m high boundary wall on De Kock Street;
- A brick-paved paving area behind the boundary wall;
- Two multi-chamber diesel-fired TIF cremators (incinerators) installed in the warehouse;
- Two stand-alone wet scrubbers fitted on the exhausts of the cremators, installed in the warehouse (exhaust to atmosphere);
- Two chimney stacks protruding from the warehouse;
- A 2 500-litre diesel Aboveground Storage Tank in a bund in the parking area adjacent to the warehouse;
- A standby generator in the parking area;
- Offices, a guest room to view cremation, an ashes preparation room, ablution facilities and a walk-in fridge for the storage of corpses in coffins; and
- An off-loading area in the warehouse.

The total footprint is approximately 478m².

2.2 Alternative Fuels:

BCF considered coal, LPG and diesel fuel source alternatives for the crematorium. Coal combustion emits GHGs and particulates and would lead to excessive operational cost. Furthermore, coal supply cannot be secured at all times which would present an operational risk to BCF. While the use of LPG as a fuel source is viable, the risk of insecure fuel supply and the higher capital cost of LPG-fired cremators led to BCF selecting diesel as their preferred fuel source.

2.3 Technology Alternatives:

Three cremator technology (CT) alternatives were identified and investigated during the Pre-feasibility stage. These alternatives included the following:

- Option 1 (CT1): LDF cremator/incinerator – which comprises two combustion chambers and a primary burner, with capacity to incinerate up to 500 kg per hour (LDF 500 model).
- Option 2 (CT2): TIF 47 HC gas-fired cremator/incinerator - which comprises two primary burners and one afterburner (three gas pressure jet burners), with capacity to incinerate 1 body per 60/75 min.
- Option 3 (CT3): TIF 47 HC diesel-fired cremator/incinerator - which comprises two primary burners and one after burner (three gas pressure jet burners), with capacity to incinerate 1 body per 60/75 min.

While the LDF cremator is the cheapest option, according to BCF the preference for a local supplier (to invest in the South African Economy), as well as inconsistent LPG supply, led BCF to select the TIF 47 HC Diesel Fired Cremator as their preferred (and only feasible and reasonable) cremator technology.

2.3 'No-Go' Alternative

The “No-Go” alternative of not proceeding with the proposed development is the preferred alternative of the competent authority, as the preferred site alternative of the applicant is not considered as the best practicable environmental option. This Directorate has requested in correspondences including the acceptance of the Scoping Report and comments on the draft EIAR, that the applicant investigates alternative sites, which are located further away from habitable dwellings, given the number of objections raised by local residents and the requirement of the Department of Health. This was however not addressed given the reasons highlighted above.

The competent authority is therefore not of the view that the preferred alternative (development of crematorium on the proposed site) is the best practicable option.

3. **Key Factors Affecting the Decision**

3.1 **Receiving environment**

The surrounding land use within approximately 150m radius includes light industrial (panel beaters, autobody repair shops, tyre and repair shops, logistics company, fuel service stations etc.). The Southside Centre Shopping Mall is located approximately 200m west of the site. The nearest residential property is located approximately 150m from the site in Lochnerhof. Residential communities of Onverwacht are situated approximately 350m to the east of the site, Van Rynerveld (approximately 400 m to the north-west), Lochnerhof (150 m to the north), Strand (approximately 800 m to the north-east) and Weltevreden (approximately 150 m to the south) are also located within relatively close proximity of the preferred site of the applicant. An unnamed informal settlement is located approximately 270 m east of the site on the periphery of the area zoned for General Industry 1. A Reconstruction and Development Programme (RDP) housing development is located approximately 350 m north-east of the site in De Kock Street.

Additional sensitive receptors located within a 500m radius of the site include Strand Moslem Primary School, St. Peter's Academy, RDP housing, Jamia Masjid Mosque and suburban areas such as Onverwacht, Van Rynerveld and Lochnerhof.

The proposed site is transformed as the crematorium was proposed in an existing warehouse. As such, no biophysical impacts are anticipated. The nearest aquatic and terrestrial Critical Biodiversity Area (associated with a drainage channel and stormwater pond) is located alongside the RDP housing, approximately 400 m from the site.

3.2 Air Quality Impacts

An Air Quality Impact Assessment Report dated 21 October 2021 was compiled by WKC Group CC, in order to assess the potential air quality impacts associated with the proposed crematorium. The predicted air quality impacts are rated as low since air dispersion model results indicate maximum Ground Level Concentrations of priority pollutants from the project for all averaging periods are below 1% of the relevant National Ambient Air Quality Standards ("NAAQS") except for NO₂, but that health and odour impacts from NO₂ exposure from the project and / or cumulative emissions in the area are unlikely.

Potential health impacts have been considered and reported on in the Air Quality Impact Assessment as health impacts are associated with the findings of the predicted (based on Air Dispersion Modelling⁴) ground level concentrations of emissions (as a result of the project) and predicted concentrations of emissions at the stacks (based on data provided by the equipment vendor).

The Air Quality Impact Assessment found that modelled ambient air quality (i.e. incorporating baseline air quality and emissions from the crematorium) does not exceed the NAAQS for any priority pollutants across all averaging periods for all stack height alternatives and cumulative NO₂ concentrations fall to below 30% of the NAAQS, within the boundaries of the industrial area, at the NRP (150 m away) and all other sensitive receptors for 10 m and 13 m high stacks and concentrations reduce to below 15% of the NAAQS at the NRP and all other sensitive receptors if a 15 m high stack is selected.

According to the Air Quality Impact Assessment Report, modern cremators, such as the model selected for this project, include as standard a primary and secondary combustion zone. Wet scrubbers will also be installed on cremators to further abate emissions, and therefore odour. As such, it is unlikely that detectable odours will be emitted from the facility, provided that equipment is operating efficiently.

The findings of the EIAR are based on the assumption that equipment specifications provided by the vendors are correct and provided the essential mitigation measures included in the Environmental Management Programme and EIAR are implemented.

The EIAR and comments and responses report indicated that the applicant would mitigate potential air quality impacts (and associated health impacts to sensitive receptors) by maintaining equipment to high standards and installing and operating abatement equipment (wet scrubbers) to reduce emissions (CO, PM, SO₂, NO₂ and Hg) to a concentration that will not adversely impact air quality and human health or result in offensive odours. BCF acknowledge the operation of the crematorium must be within the Minimum Emission Standards (except NO_x must be <200mg/Nm³).

Therefore, the assessment of impacts in the EIA from the emission of odorous fumes focuses on potential annoyance/discomfort from NO₂ exposure only. Odour perception threshold for NO₂ is between 100 and 200 ug/m³ (European Commission, 2014) – conservatively assumed to be 100 ug/m³ for the purposes of this assessment – nearly twice the modelled cumulative GLC for NO₂ at the NRP during the worst 1% of all air quality conditions, and 5 times higher than the modelled average cumulative NO₂ GLC at the NRP. As such, annoyance from cumulative NO₂ emissions (including from the project) according to the specialist, is improbable.

The Air Quality Impact Assessment Report found that health and odour impacts from emissions from the project when combined with baseline air quality are unlikely.

It was concluded that, air dispersion modelling shows that the proposed crematorium and associated infrastructure is unlikely to lead to health or odour impacts in the community for all three stack height alternatives assessed in the EIA, provided that the essential mitigation measures listed in the EIA are implemented. In other words, the crematorium will not be harmful to (everyone's) health or well-being.

3.3 Need and Desirability

According to the information contained in the EIA Report, the applicant owns and operates a funeral home in Gordons Bay and provides a funeral planning and implementation service to their clients, including burial or cremation. At present Blue Crane Funerals ("BCF") outsources the cremation service, but intends to provide the service of cremation to their clients at the site in Strand. There are no other crematoria in the Helderberg area, and according to BCF other crematoria within the City of Cape Town did not have sufficient capacity, even before the COVID-19 pandemic. BCF believe that there would be strong demand for their proposed cremation service in the Helderberg area.

The site is located inside the urban edge and is located on a site zoned as General Industrial 1 and therefore the proposed development is in line with the approved zoning.

Whilst this is noted, and the Directorate acknowledges that applicant wishes to establish a crematorium in the area, the proposed site is not regarded as appropriate given the number of sensitive receptors in the area.

According to the Regulations Relating to the Management of Human Remains, 2013, published under the National Health Act, 2013 (Act No. 61 of 2013), the following minimum requirements in respect of any proposed cremation facility must be noted and adhered to:

- The facility must be located at least 500 meters away from any habitual dwelling;
- The chimney must have a height of not less than 3 meters above the apex of the roof;
- The premises shall be kept in a clean, sanitary and in good repair;
- The facility shall be adequately ventilated and illuminated;
- The facility shall be operated and managed in such a manner as to prevent the dispersion of ash into the atmosphere; and
- Emission levels shall conform to the Minimum Emission Standards, as determined in the AEL, in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004).

The proposed crematorium is located approximately 150 m from the nearest habitable dwelling and therefore does not meet (at least one of) the minimum requirement to be located at least 500 m away from habitable dwellings. In terms of Chapter 2, Regulation 2(2) of the Regulations Relating to the Management of Human Remains, 2013, the City of Cape Town (CCT) may, with the approval of the Director General of the Department of Health exempt any person from compliance with any provisions of these Regulations where, in the opinion of the CCT, non-compliance does not, or will not, create a health nuisance, health hazard or endanger human health.

The potential air quality impacts were identified and assessed to be low negative post mitigation and the EIAR indicates the facility will not be harmful to people's health and well-being. However, this statement is questionable.

The World Health Organisation defines health as: "*A state of complete physical, mental and social well-being.*"

Considering the above definition, the impacts associated with the proposed crematorium not only relates to air quality impacts and its associated impact on the health and physical well-being of people. The potential negative impacts include the social well-being of local residents. In comments provided during the public participation process, many residents expressed concerns regarding the proximity of the facility to their homes and school facilities and have expressed their fears regarding impacts the facility will have on their health and nuisance impacts.

The potential negative social impacts have not been adequately assessed in the EIAR nor adequately addressed.

4. In considering all the above aspects and having considered all the relevant factors, the competent authority is compelled to follow a risk-averse approach. The following aspects motivated the competent authority to following such an approach, that is:

4.1 The applicant argued in the EIAR that air dispersion modelling shows that the development of the proposed crematorium is unlikely to lead to health or odour impacts in the community for all three stack height alternatives assessed in the EIA. Further, it was argued that the crematorium will not be harmful to (everyone's) health or well-being.

The competent authority is of the view that the proposed facility may significantly negatively impact on the well-being of nearby residents, as a number of I&APs have expressed their fear that the facility may impact negatively on their health. As indicated in aforementioned paragraphs, human health and well-being not only relate to physical well-being but includes mental and social well-being. I&APs are also of the view that the 500m buffer from habitable dwellings, as contained in the Regulations Relating to the Management of Human Remains, 2013 must be upheld, on the basis that there are residential dwellings on at least three sides (south, north and east) of the site and some as close as 150m of the site, schools within 500m of the site and thus, the location of the facility is therefore not regarded as appropriate and not supported.

4.2 It was further stated throughout the EIAR and comments and responses report, that the applicant acknowledges the relatively close proximity (approximately 150m) of the proposed crematorium to residents. However, distance to receptors is not the only determinant of air quality (and associated health and odour). Air quality and associated health and odour impacts are dependent on a number of other factors such as climatic conditions, existing air quality and importantly, the abatement technology, all of which have been taken into account in the air dispersion modelling study, upon which the findings of the EIA are based.

While the impacts were assessed, the conclusions are based on the predicted modelling and on the assumption that the equipment specifications provided by the vendors are correct and provided the mitigation measures recommended by the Air Quality Specialist, as included in the Environmental Management Programme and EIAR are implemented.

Further, the City of Cape Town: Air Quality Management Department noted in correspondence that the supplier cannot guarantee the effectiveness and efficiency of the cremators and abatement equipment, to meet the new plant Minimum Emission Standards for the listed activity Sub-Category 8.2, in relation to Regulation 89 when overloaded. The response provided by the EAP stated that *"The equipment vendor has guaranteed that the equipment (design specifications) meets the MES under normal operating conditions. The EMP includes operational management measures aimed at ensuring that equipment is used as per design specifications."*

4.3 In terms of the socio-economic impacts, the EIAR states that the crematorium will generate limited economic opportunities for local communities, as it is an industrial activity proposed within an existing industrial zoned area that will provide up to eight permanent jobs. Further, the project will provide a cremation service to the community. Based on the information provided in the EIAR, the need for the development is to afford BCF an opportunity to provide the service of cremation to their clients in the Helderberg area, and not exclusively to the benefit of the receiving community. The negative social impacts have not been adequately assessed and considered in the EIAR and therefore the development is not deemed as socially sustainable. The need for and desirability of the facility in the area has not been substantiated in detail and the applicant's motivation is acknowledged, however additional site alternatives located further away from habitable dwellings should have been investigated and assessed.

5. **National Environmental Management Act, 1998 (Act No. 107 of 1998) 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 activity (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.

6. **Conclusion**

The Department applied a risk-averse and cautious approach with respect to this development proposal. The Department therefore took into consideration the potential negative impacts (as identified above) and that although some impacts can be minimised, it cannot altogether be prevented.

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