



REFERENCE: 16/3/3/1/A1/20/3027/22
NEAS REFERENCE: WCP/EIA/0001109/2022
DATE OF ISSUE: 06 March 2023

The Board of Directors
Ikamva Green Holdings trading as Platinum Pride Crematorium
P.O. Box 791

VREDENDAL
8610

Attention: Mr. Sybrand Teubes

E-mail: sybrand.teubes@platinumpride.co.za

Dear Sir

APPLICATION 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): PROPOSED ESTABLISHMENT OF A CREMATORIUM AND ASSOCIATED INFRASTRUCTURE AND INSTALLATION OF LIQUID PETROLEUM GAS TANKS AS A FUEL SOURCE FOR CREMATORS ON ERF NO. 2433, MONTAGUE GARDENS.

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 instructed to ensure, within 14 days of the date of the decision on the application, that all registered interested and affected parties are provided with access to and reasons for the decision, and that all registered interested and affected parties 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 summarised in the attached refusal of Environmental Authorisation.

Yours faithfully

MR. ZAAHIR TOEFY

DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

CC: (1) Ms. Ameesha Sanker (Sharples Environmental Services cc)

E-mail: ameesha@sescs.net

(2) Ms. Sonja Warnich-Stemmet (City of Cape Town: ERM)

E-mail: sonja.warnichstemmet@capetown.gov.za

(3) Mr. Ian Gildenhuys (City of Cape Town: Air Quality)

E-mail: Ian.Gildenhuys@capetown.gov.za



REFERENCE: 16/3/3/1/A1/20/3027/22
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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) ("NEMA") AND THE ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") REGULATIONS, 2014 (AS AMENDED): PROPOSED ESTABLISHMENT OF A CREMATORIUM AND ASSOCIATED INFRASTRUCTURE AND INSTALLATION OF LIQUID PETROLEUM GAS ("LPG") TANKS AS A FUEL SOURCE FOR CREMATORS ON ERF NO. 2433, MONTAGUE GARDENS.

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 NEMA and the 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 as included in the Basic Assessment Report ("BAR") dated 28 October 2022.

A. DETAILS OF THE APPLICANT

Ikamva Green Holdings trading as Platinum Pride Crematorium
c/o Mr. Sybrand Teubes
P.O. Box 791
VREDENDAL
8610

E-mail: sybrand.teubes@platinumpride.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	Activity/Project Description
<p>Listing Notice 1 of the EIA Regulations, 2014 (as amended):</p> <p>Activity 14: <i>"The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres".</i></p>	Installation of LPG tanks with a combined capacity in excess of 80m ³ .

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

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

The proposed establishment of a crematorium and the installation of LPG tanks in excess of 80m³ as a fuel source for cremators on Erf No. 2433, Montague Gardens.

Phase 1 consists of the installation of two cremators operating 24 hours per day. Each cremator has a maximum cremation capacity of 24 cadavers per day. Thus, the development will have the capacity to cremate 48 cadavers per day.

Phase 2 consists of the installation of an additional four cremators, also operating 24 hours per day. After the completion of phase 2, the site will have the capacity to cremate 144 cadavers per day. A total of 6 X BA2 cremators and associated infrastructure will be installed.

The development also includes the renovation of the existing warehouse facility, as follows:

- 6 x chimney stacks approximately 0.35m in diameter, and approximately 6m above the nearest building; and
- 3 x reefer coolers and one cool room. Each reefer will accommodate 60 units with three reefers and one cool room.

Access will be obtained from Stella Road.

C. LOCATION AND SITE DESCRIPTION

The site where the listed activity was proposed is Erf No. 2433, Montague Gardens.

The site is bordered by a drainage line to the north, existing industrial buildings to the east and west, and Stella Road to the south. All areas to the north, east and south are developed for commercial or industrial purposes. To the southwest, is the Milnerton Fire Station and Milnerton Traffic Department and just west of the Fire Station are buildings.

The SG 21-digit code is: C01600360000243300000

Co-ordinates:
Latitude: 33° 51' 04.42" S
Longitude: 18° 31' 18.69" E

Refer to Annexure 1: Locality Plan.

hereinafter referred to as "the site".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

Sharples Environmental Services cc
c/o Ms. Ameesha Sanker
P.O. Box 443
MILNERTON
7435

Fax: (086) 575 2869
E-mail: ameesha@sescs.net

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 14 (fourteen) calendar days of the date of this decision –
 - 2.1 notify all registered interested and affected parties ("I&APs") of –
 - 2.1.1 the outcome of the application;
 - 2.1.2 the reasons for the decision;
 - 2.1.3 the date of the decision; and
 - 2.1.4 the date of issue of the decision;
 - 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);
 - 2.3 draw the attention of all registered I&APs to the manner in which they may access the decision; and
 - 2.4 provide the registered I&APs with:
 - 2.4.1 the name of the holder (entity) of this refusal,
 - 2.4.2 name of the responsible person for this refusal,
 - 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;
 - 2.4.6 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).

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 20 (twenty) calendar days from the date 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 and the responding statement must be submitted to the address listed below:

By post: Attention: Mr. 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. Marius Venter (Tel: 021 483 3721)

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 to 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 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 appreciated.

Yours faithfully

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

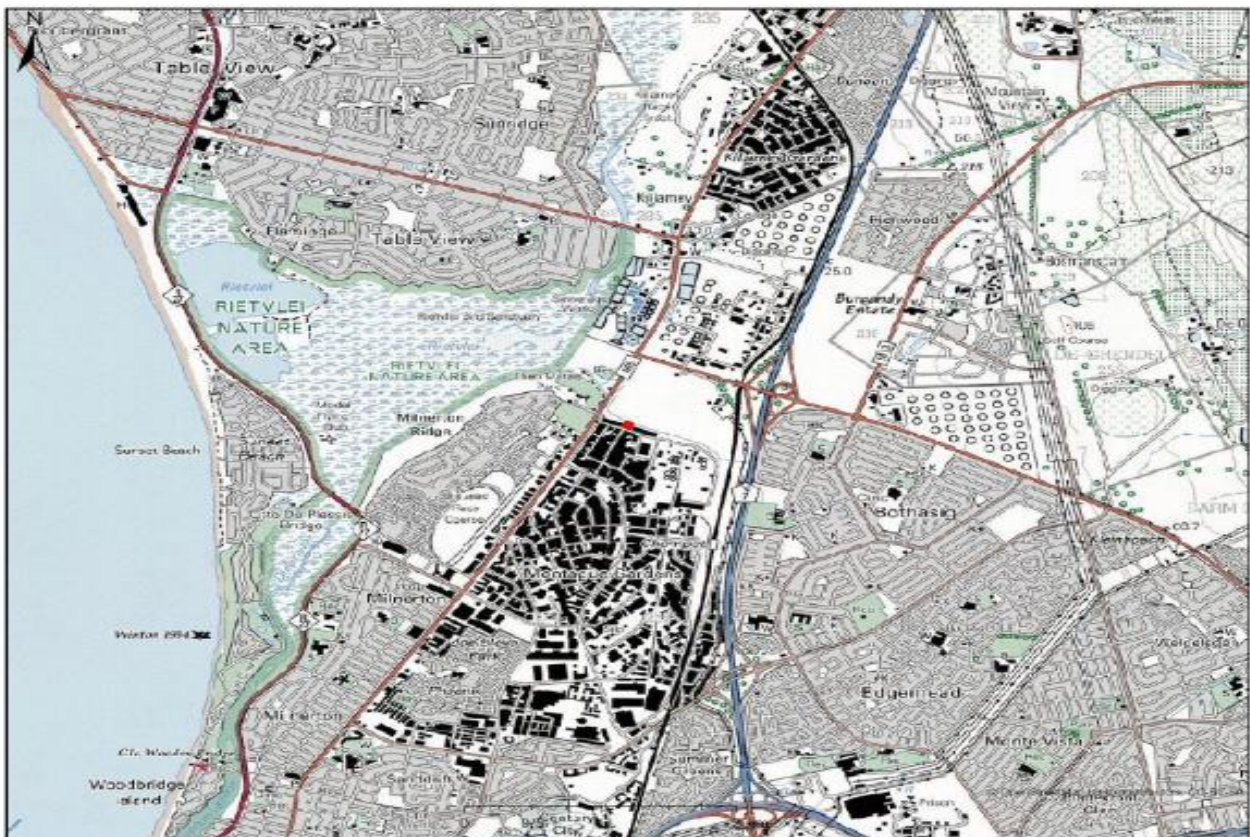
DATE OF DECISION: 06 MARCH 2023

CC: (1) Ms. Ameesha Sanker (Sharples Environmental Services cc) E-mail: ameesha@sescs.net
(2) Ms. Sonja Warnich-Stemmet (City of Cape Town: ERM) E-mail: sonja.warnichstemmet@capetown.gov.za
(3) Mr. Ian Gildenhuys (City of Cape Town: Air Quality) E-mail: Ian.Gildenhuys@capetown.gov.za

FOR OFFICIAL USE ONLY:

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ANNEXURE 1: LOCALITY PLAN



ANNEXURE 2: 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 by the competent authority via electronic mail correspondence on 06 June 2022; the BAR dated 28 October 2022, as received by the competent authority via electronic mail correspondence on 28 October 2022; the EMPr submitted together with the BAR; the information received via electronic mail correspondence on 03 November 2022; the correspondence from the City of Cape Town received via electronic mail correspondence on 25 November 2022; the Peer Review Report from Takealot received via electronic mail correspondence on 25 November 2022; the correspondence from the City of Cape Town received via electronic mail correspondence on 28 November 2022; the Comments and Responses Report received from Sharples Environmental Services cc received via electronic mail correspondence on 15 December 2022; and the additional information received via electronic mail correspondence on 20 January 2023.
- b) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the NEMA.
- c) The comments received from I&APs and the responses provided thereon, as included in the BAR dated 28 October 2022.
- d) The meeting held on 25 August 2022 -

Attended by Ms. Taryn Dreyer and Ms. Rondine Isaacs of the Department of Environmental Affairs and Development Planning ("DEA&DP"); Ms. Ameesha Sanker, Ms. Betsy Ditcham and Ms. Jamie Cloete of Sharples Environmental Services cc; Ms. Caitlin Dunn of Yellow Tree; Mr. Simon Rieckert and Mr. Aresh Mohabeer of Thermal Systems; Ms. Wendy Kloppers, Ms. Sonja Warnich-Stemmet, Ms. Susan Brice, Mr. Shamile Manie, Ms. Margaret Murcott, Ms. Katy Spalding, Mr. Ian Gildenhuys, Mr. Gerswain Manuel, Ms. Annelise de Bruin and Mr. A'aron Adams of the City of Cape Town.
- e) The site visit conducted on 03 March 2023, attended by Mr. Zaahir Toefy of the DEA&DP.

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 comprised of the following:

- A notice was placed on site on 06 July 2022;
- Two additional site notices were placed along Pienaar Road (one at the local Milnerton Library and another at the City of Cape Town Municipal Administrative Offices);
- Letter drops were conducted to the landowner and adjacent landowners on 06 July 2022;
- An advertisement was placed in the "Tabletalk" newspaper on 06 July 2022;
- An advertisement was placed in the "Cape Times" newspaper on 15 July 2022;
- A copy of the draft BAR was placed at the Milnerton Public Library;
- E-mails were sent on 11 July 2022 to announce the availability of the draft BAR;
- The draft BAR was made available from 11 July 2022 until 11 August 2022;
- A meeting was held on 29 August 2022 with registered I&APs;
- E-mails were sent on 09 September 2022 to announce the availability of the revised draft BAR;

- A copy of the revised draft BAR was placed at the Milneron Public Library;
- The revised draft BAR was made available from 12 September 2022 until 12 October 2022; and
- The Comments and Responses Report were made available via e-mail on 28 October 2022.

Authorities consulted

The authorities consulted included the following:

- DEA&DP Directorate: Pollution and Chemicals Management;
- DEA&DP Directorate: Waste Management;
- DEA&DP Directorate: Air Quality Management;
- Department of Water and Sanitation;
- Western Cape Department of Transport and Public Works;
- Western Cape Department of Human Settlements;
- Western Cape Department of Health;
- Heritage Western Cape;
- CapeNature;
- City of Cape Town; and
- South African Civil Aviation Authority.

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:

- Multiple objections were received from neighboring properties and I&APs regarding health and air quality related impacts.
- 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 500m away from any habitable dwelling.
- The City of Cape Town: Air Quality Management Branch requested that the holder investigate and consider suitable, alternative abatement equipment that is compatible with the cremators and prove compliance with the National Ambient Air Quality Standards. The Branch furthermore required that alternatives be investigated and comprehensive information be provided, to specifically address which mitigation measures will be undertaken so that the nitrogen dioxide will not be exceeded. The response provided by the EAP stated that *"the equipment manufacturer has stated that an increased stack height is not compatible with the cremators that they manufacture. Thus, the proposed cremators' stack heights will not be increased."*

Although responses were provided to the comments raised by I&APs, these comments were not adequately addressed, the proposed development is not deemed as appropriate, as the site is located within 450m of a habitable dwelling (and no feasible alternative sites were considered) and a number of I&APs have expressed concerns in this regard.

2. Alternatives

According to the BAR, an alternative site was investigated, which is located on Erf No. 358, Blackheath Business Park. This site is accessible via Chardonnay Road and located in close proximity to Zevenwacht Shopping Mall, as well as the R102 and the M12. This site is located

within 400m of a dense residential area (zoned as General Residential), is adjacent to a main road, and opposite a shopping mall.

The following design alternatives were investigated:

Holder's design: 12m stack height:

The preferred stack height of 12m from ground level, will be approximately 6m above the height of the building.

Alternative 2: 16m stack height:

A stack height of 16m from ground level, will be approximately 10m above the height of the building.

Alternative 3: single stack:

A single stack was suggested by the City of Cape Town: Air Quality Branch.

Alternative 2 is not preferred by the holder since the JTE Cremators have been adopted on other sites with stack heights of 12m, and the technology is specifically designed for a 12m stack height. By changing the stack height will require a significant re-design which is not be feasible.

Alternative 3 is also not preferred by the holder as the manufacturer cannot guarantee compliance and re-design, which will result in substantial costs that are unfeasible.

Preferred alternative – herewith refused:

The proposed establishment of a crematorium and the installation of LPG tanks in excess of 80m³ as a fuel source for cremators on Erf No. 2433, Montague Gardens.

Phase 1 consists of the installation of two cremators operating 24 hours per day. Each cremator has a maximum cremation capacity of 24 cadavers per day. Thus, the development will have the capacity to cremate 48 cadavers per day.

Phase 2 consists of the installation of an additional four cremators, also operating 24 hours per day. After the completion of phase 2, the site will have the capacity to cremate 144 cadavers per day. A total of 6 X BA2 cremators and associated infrastructure will be installed.

The proposed development also includes the renovation of the existing warehouse facility, as follows:

- 6 x chimney stacks approximately 0.35m in diameter, and approximately 6m above the nearest building; and
- 3 x reefer coolers and one cool room. Each reefer will accommodate 60 units with three reefers and one cool room.

Access will be obtained from Stella Road.

"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 holder is not considered as the Best Practicable Environmental Option.

The holder was requested to investigate alternative sites and technologies, given the number of objections raised by property owners and I&APs, and the requirement of the Department of Health. This was, however, not addressed sufficiently, given the reasons highlighted above.

The competent authority is therefore of the view that the preferred alternative (development of crematorium on the proposed site) is not the Best Practicable Environmental Option.

3. Key factors affecting the decision

3.1 Receiving environment

The proposed site is transformed and the crematorium was proposed in an existing warehouse. The site is bordered by a drainage line to the north, existing industrial buildings to the east and west, and Stella Road to the south. Stella Road acts as the main access road for the two entrances located along each end of the southern fence line. The site is currently being utilised by Crous Chemicals cc, which manufactures numerous chemical products for a variety of industries.

All areas to the north, east and south are developed for commercial or industrial purposes. To the southwest, is the Milnerton Fire Station and Milnerton Traffic Department and just west of the Fire Station are buildings. All areas to the north, east and south are developed for commercial or industrial purposes. The closest residential areas just beyond 500m radius of the site include the following:

- The Milnerton Ridge residential area located approximately 540m west of the site and Bothasig residential area located approximately 1km east of the site.
- Approximately 2km north-northeast of the site is the Killarney Gardens industrial area.
- Approximately 2.6km southeast of the site is the Edgemoed residential area.
- The Joe Slovo Park informal settlement is located approximately 2.2km southwest of the site.
- The residential area of Summer Greens is located approximately 2.9km south-southeast of the site.

3.2 Activity Need and Desirability

The site is located inside the urban edge and zoned General Industry Subzone G11 in terms of the City of Cape Town Municipal Planning By-Law (2015), of which the primary uses are funeral parlours and crematoriums. Whilst this is noted, and the competent authority acknowledges that the holder 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 500m away from any habitable dwelling;
- The chimney must have a height of not less than 3m 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 Air Emissions License, in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004).

Although it is argued that the City of Cape Town's Zoning Scheme and General Industrial 1 zoning permit crematoriums as a primary land use right, there are habitable dwellings located within 500m of the site, namely the Milnerton Fire Station site, which is zoned Utility. Although the Utility zone permits authority use, there are dwellings located

on the Fire Station site which are inhabited by staff members and their families. These dwelling units have been in continual use since before 1980.

Since the proposed crematorium is located approximately 450m from the nearest habitable dwelling, it does not meet (at least one of) the minimum requirement to be located at least 500m 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 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 City of Cape Town, 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 BAR 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 I&APs expressed concerns regarding the proximity of the facility to their properties and places of work and the impacts the facility will have on their health and nuisance impacts. The potential negative social impacts have not been adequately assessed in the BAR, nor adequately addressed.

In this Directorate's comments on the draft BAR and in the meeting held on 25 August 2022, it was highlighted that should any dwellings be located within 500m of the site boundary, alternative sites will need to be investigated. The alternative site which was investigated is located in Blackheath and is not reasonable or feasible, as it is located even closer to densely populated residential areas. The holder and EAP thus failed to investigate reasonable alternative sites.

3.3 Air quality impacts:

An Atmospheric Impact Assessment Report dated 04 May 2022 and revised Atmospheric Impact Assessment Report dated 09 September 2022 were compiled by YellowTree (Pty) Ltd., to assess the potential air quality impacts associated with the proposed crematorium.

An emissions inventory was compiled for identified pollutants of concern from crematoriums, *i.e.*, particulate matter ("PM"), carbon monoxide, oxides of nitrogen, and mercury. Benzene and lead were determined to be of particular interest due to the existence of National Ambient Air Quality Standards for these pollutants. A Level 2 Air Dispersion Modelling was conducted for these pollutants using the AERMOD View Programme.

The Air Dispersion Modelling concluded the following:

Baseline ambient air quality in the area surrounding the proposed crematorium was collected from ambient air quality monitoring stations. Baseline data from the monitoring stations closest to the site, and with the highest level of data availability were chosen in the study.

The ambient pollutant concentrations that were predicted by the AERMOD Model were added to baseline air quality data to obtain cumulative predicted concentrations. These concentrations were compared to the National Ambient Air Quality Standards and international guidelines where no National Ambient Air Quality Standards are available.

Ambient PM₁₀ (using the Table View baseline data), PM_{2.5}, carbon monoxide, mercury, and lead concentrations around the fence line of the site are predicted to remain in compliance with the National Ambient Air Quality Standards (and the international guideline for mercury) with the establishment of the proposed crematorium. The benzene concentration as a result of the proposed crematorium does not change the overall compliance status.

Maximum ambient hourly nitrogen dioxide concentrations at the fence line are predicted to exceed the hourly National Ambient Air Quality Standards.

When PM₁₀ data from the Edgemoor monitoring station is used as a baseline, the daily PM₁₀ concentrations are predicted to exceed the National Ambient Air Quality Standards at the fence line.

Although the engineering specifications of the cremators indicate that the stacks will be 12m high, the AERMOD Model was run using stack heights of up to 20m. The optimum height was determined to be 16m, which resulted in no National Ambient Air Quality Standards exceedances at the fence line for PM₁₀ or nitrogen dioxide.

The air quality specialist recommended that higher stack heights be considered by the holder to minimise the effect of the proposed crematorium on ambient air quality. However, the equipment manufacturer indicated that an increased stack height is not compatible with the cremators. Furthermore, there is no existing, tested abatement equipment that is available, that can be integrated into the JTE cremator design. Additionally, the cremator is designed with abatement measures to avoid air pollution.

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 City of Cape Town requested that the holder investigate and consider suitable, alternative abatement equipment that is compatible with the cremators and prove compliance with the National Ambient Air Quality Standards.

The Air Dispersion Modelling predicted that there will be exceedances of the National Ambient Air Quality Standards for nitrogen dioxide on the fence line, which is a concern, as it will negatively impact on the receiving environment.

The City of Cape Town further required that alternatives be investigated and comprehensive information be provided to specifically address which mitigation measures will be undertaken so that the nitrogen dioxide will not be exceeded.

The Atmospheric Impact Assessment Report indicated that an optimal stack height of 16m will result in the ground level concentrations of the emitted pollutants being compliant with the National Ambient Air Quality Standards. The optimum height was determined to be 16m, which will result in no National Ambient Air Quality Standards exceedances at the fence line for PM₁₀ or nitrogen dioxide.

The air quality specialist recommended that higher stack heights be considered by the holder to minimise the effect of the proposed crematorium on ambient air quality.

As such, a technical solution to demonstrate that the operations will not result in an exceedance of the National Ambient Air Quality Standards (hourly) for nitrogen dioxide of 200µg/m³, was to be presented to demonstrate that the matter had being satisfactory addressed.

The EAPs response indicated that according to the equipment manufacturer, an increased stack height is not compatible with the cremators and that the proposed cremators' stack heights will not be increased.

These concerns raised were not adequately addressed in the BAR.

- 4.2 The competent authority is of the view that the proposed facility may significantly negatively impact on the well-being of residents who reside within 450m radius of the site and nearby property owners, as a number of I&APs have expressed their fear that the facility may impact negatively on their health. As indicated in paragraph 3.2 above, human health and well-being not only relate to physical well-being, but includes mental and social well-being. The 500m buffer from habitable dwellings, as contained in the Regulations Relating to the Management of Human Remains, 2013 must be upheld, and thus, the location of the facility is therefore not regarded as appropriate and not supported.
- 4.3 While the impacts were assessed, the conclusions are based on the predicted modelling and on the assumption that the equipment specifications provided by the manufacturers are correct and provided the mitigation measures recommended by the air quality specialist, as included in the Environmental Management Programme and BAR are implemented. The concerns raised by the City of Cape Town in this regard, were not adequately addressed.

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 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.

Conclusion

The competent authority applied a risk-averse and cautious approach with respect to this development proposal. The competent authority 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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