



**MINISTER
ENVIRONMENTAL AFFAIRS
REPUBLIC OF SOUTH AFRICA**

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Dear Mr R Du Randt

APPEAL AGAINST THE ISSUANCE OF A DIRECTIVE IN TERMS OF SECTION 28(4) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) IN RELATION TO POLLUTION AND ENVIRONMENTAL DEGRADATION CAUSED BY THE OPERATIONS AT FG LANDFILL SITE, OLIFANTSFONTEIN, IN THE GAUTENG PROVINCE

The Acting Minister of Environmental Affairs, Mr D A Hanekom, MP, has considered the appeal lodged against the decision of the Deputy Director-General: Legal, Authorisations, Compliance and Enforcement (DDG: LACE) of the Department of Environmental Affairs (the Department) to issue the directive to Interwaste (Pty) Ltd on 10 February 2017.

After evaluating the appeal and relevant information submitted to him, the Minister has reached a decision, a copy of which is attached hereto.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'A. Hanekom'.

MINISTRY OF ENVIRONMENTAL AFFAIRS

DATE: 03/11/2018



**MINISTER
ENVIRONMENTAL AFFAIRS
REPUBLIC OF SOUTH AFRICA**

Ref: LSA 160665

APPEAL DECISION

**APPEAL AGAINST THE ISSUANCE OF A DIRECTIVE IN TERMS OF SECTION 28(4)
OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF
1998) IN RELATION TO POLLUTION AND ENVIRONMENTAL DEGRADATION
CAUSED BY THE OPERATIONS AT THE FG LANDFILL SITE, OLIFANTSFONTEIN, IN
THE GAUTENG PROVINCE**

1. INTRODUCTION

This is my decision in the appeal by Interwaste (Pty) Ltd (the Appellant) against the Directive dated 10 February 2017 by the Deputy Director General: Legal, Authorisations, Compliance and Enforcement (DDG: LACE) of the Department of Environmental Affairs (the Department). The Directive was issued in terms of section 28(4) of the National Environmental Management Act No 107 of 1998 (NEMA).

The Directive requires the Appellant to cease the disposal of all waste at the FG Landfill site operated by the Appellant in Olifantsfontein until the Department consents to the recommencement of disposal, to take specified steps, to appoint experts to review the air quality and health risks associated with the site, and to submit reports compiled by those experts.

2. DECISION

2.1 The appeal provision contained in section 43(11) of the NEMA provide for very wide powers on appeal. It encompasses a complete re-hearing of and fresh determination on the merits of the matter with or without additional evidence or information. This implies that, when determining the appeal, I may have regard to all information relevant to the appeal, including information or evidence that only emerged after the issue of the Directive. The parties were given an opportunity to respond to all additional information emerging after the date of the Directive. They also had an additional opportunity to respond to information that arose before the date of the Directive. In the circumstances, the appeal is a rehearing and fresh determination on the merits.

2.2 In reaching my decision on the appeal against the aforementioned Directive, I have taken the following into consideration:

2.2.1 Relevant material information contained in the project file (159711) including the pre-directives issued in 2016 together with the respective representations made thereto;

2.2.2 The appellant's grounds of appeal, dated 16 February 2017, 9 March 2017 and 29 March 2017 respectively;

2.2.3 Individual responding statements from registered Interested and Affected Parties, dated February 2017;

2.2.4 The Greater Mainstream Forum (GMF) responding statement to the grounds of appeal, dated 30 March 2017 and 24 April 2017 respectively;

2.2.5 The appellant's answering statement to the GMF's responding statement, dated 22 May 2017;

2.2.6 Specialist reports by Infotox (Pty) Ltd and Airshed Planning Professionals dated March 2017;

- 2.2.7** GMF and the appellant's comments in respect of specialist reports referred to in paragraph 2.2.6 above, dated 26 April 2017 and 22 May 2017 respectively;
- 2.2.8** Responding statement, together with Specialist reports by Infotox (Pty) Ltd and Airshed Planning Professionals dated July 2017, by the Chief Directorate: Enforcement in respect of the grounds of appeal dated, 12 July 2017;
- 2.2.9** GMF and the appellant's answering statement in respect of the Department's responding statement, dated 10 August 2017;
- 2.2.10** Specialist report by Airshed Planning Professionals dated December 2017;
- 2.2.11** Specialist reports by Infotox (Pty) Ltd dated 12 February 2018, 16 February 2018 and 23 February 2018 respectively;
- 2.2.12** GMF and the appellant's comments in respect of specialist reports referred to in paragraph 2.2.10 and 2.2.11 above, dated 16 March 2018 and 19 March 2018 respectively;
- 2.2.13** Report on the General Overview of the State of Landfills in Gauteng prepared by Kobus Otto and Associates Waste Management Consultants, dated April 2018;
- 2.2.14** Dr Broomfield's report ("Broomfield report") dated 3 July 2018 and the appellant's letter dated 4 July 2018;
- 2.2.15** Comments in respect of Broomfield report by Airshed Planning Professionals, Infotox (Pty) Ltd and GMF dated July 2018, 30 July 2018 and 8 August 2018 respectively; and
- 2.2.16** Comments by Infotox (Pty) Ltd dated 4 August 2018 in respect of the report referred to in paragraph 2.2.13 above.

- 2.3 In terms of section 43(11) of NEMA, I have the authority, after considering the appeal lodged in terms subsection (8), confirm, modify or cancel a directive or any part of a directive and specify the period within which the person who received the directive must comply with any part of the directive that is confirmed or modified.
- 2.4 Having considered the above mentioned information, and in terms of section 43(11) of NEMA, I have decided to dismiss the appeal by the appellant and to confirm the decision by the DDG: LACE of the Department on 10 February 2017.
- 2.5 In arriving at my decision on the appeal, it should be noted that I have not responded to each and every statement set out in the grounds of appeal, and where a particular statement is not directly addressed, the absence of any response should not be interpreted to mean that I agree with or abide by the statement made.
- 2.6 Furthermore, should a party be dissatisfied with any aspect of my decision, it may apply to a competent court to have this decision judicially reviewed. Judicial review proceedings must be instituted within 180 days of notification hereof, in accordance with the provisions of section 7 of the Promotion of Administrative Justice Act, 2000 (Act No. 3 of 2000).

3. THE REASONS FOR MY DECISION ARE AS FOLLOWS:

- 3.1 The grounds of appeal are broadly premised on procedural unfairness and irrationality/unreasonableness.
- 3.2 Firstly, the appellant contend that the Directive was procedurally unfair because the DDG: LACE of the Department failed to disclose the nature of the exchanges or relevant information that was apparently taken into account when issuing the Directive.
- 3.3 In this regard, the appellant contend that a functionary exercising a statutory power or discretion must do so procedurally fairly. That means that the DDG: LACE should have

given the appellant an opportunity to be heard on the information and material relied upon for the Directive.

- 3.4 The appellant contend that, in the Directive, the DDG: LACE repeatedly relied on "several thousand complaints" by the community to substantiate its claim that the appellant is, has or may cause significant pollution and degradation to the environment. In this regard, the appellant submits that, despite requesting complete records of these complaints on 3 February 2016, complete records have not yet been made available to the appellant. Only a summary of under a thousand complaints has been made available to the appellant.
- 3.5 The appellant also contend that the DDG: LACE relied on consultations with other state organs, but Interwaste has not been given the record of those consultations.
- 3.6 The appellant further contend that, in August 2016, the community members of Midstream Estate installed a Draeger air quality monitoring device opposite the FG Landfill to measure air quality in respect of (i) hydrogen sulphide; (ii) sulphur dioxide; (iii) volatile organic compounds; (vi) nitrogen dioxide; and (v) cyanide.
- 3.7 The appellant contend that the DDG: LACE relied on an analysis of the data obtained from this device to show that the appellant is generating significant pollution, but failed to make available to the appellant the information obtained from this device, such as its location, calibration and the wind direction when the results were recorded. The appellant submit that it could not properly consider the scientific integrity of the data that gave rise to the complaints levelled against it.
- 3.8 The appellant contend, furthermore, that on 13 November 2015, 8 January 2016, and between 4 and 18 February 2016, the Department's Environmental Management Inspectors (EMI's) carried out various inspections at the site. The inspections related mainly to the leachate dams and smells supposedly emanating from those dams. The appellant submit that the DDG: LACE relied on these inspections or the observations made during these inspections but no inspection reports were provided to the appellant.

- 3.9 The appellant further contend that the Directive is irrational and unreasonable because (i) no significant pollution or environmental damage has been shown to exist; (ii) whatever pollution has been shown to exist cannot be casually linked to the appellant; (iii) the DDG: LACE has failed to take into account measures proposed by the appellant; and (iv) closure of the site is disproportionate to the purpose sought to be achieved by the Directive.
- 3.10 In this regard, the appellant contend that in respect of all allegations that its operations are causing significant pollution which is harmful to the community and which significantly impact "the well-being of many people living in nearby communities", the DDG's conclusions are unsubstantiated by scientific data or evidence, which amount to mere conjecture and speculation. The appellant submit that no air pollution, whether significant or otherwise, is caused by the FG site and no proof to the contrary has been provided by the Department.
- 3.11 The appellant further contend that the DDG relied heavily on the complaints the Department allegedly received in concluding that the odours are emanating from the FG site. The appellant, however, submit that the summary of complaints are insufficient to draw a causal link between emissions from the FG site and the alleged odours.
- 3.12 The appellant contend, furthermore, that the DDG relied on the physical experiences of a handful individuals to draw a link between the disposal of waste to the FG site and complaints received by such individuals. The appellant submit that complaints of any physical conditions cannot, without more evidence, be attributed to Interwaste and any allegations in this regard are mere conjecture, unsupported by facts or scientific evidence.
- 3.13 It is the appellant's contention that the DDG has failed to provide scientific or any other evidence that the FG site has or may cause pollution and environmental degradation that is significant in nature. The appellant submit that no significant pollution or degradation has been established by the DDG to warrant the issuance of the Directive in terms of section 28(4) of NEMA.

- 3.14 The appellant also contend that, even on an assumption that the Department has reason to believe that there has been some significant pollution and/or degradation to the environment, it is not reasonable to close the landfill in order to prevent or minimise such pollution. The appellant submit that the Directive to cease disposal of all waste at the FG site will not address the alleged harm being suffered and is in any event disproportionate to the harm allegedly suffered.
- 3.15 In response to the appeal by the appellant, the GMF contend that the appellant must ensure that emissions from the activities are free from odours at levels likely to cause annoyance outside the site. The appellant must also ensure that the site is operated in such a manner that nuisance conditions or health hazards or the potential creation of nuisance conditions or health hazards are prevented. The GMF submit that the obligation is squarely on the appellant to ensure and continue to ensure that the waste disposed of does not cause pollution and/or nuisance.
- 3.16 The GMF further contend that the pre-directive dated 13 October 2016 (i) clearly indicates the various correspondence and documentation that have been circulated; (ii) clearly quotes the required actions to be taken by the appellant; (iii) clearly took into consideration the appellant's supplementary submissions of 30 November 2016; (iv) identified the relevant discussions with the Department; and (v) considered arguments in relation to the cessations of the waste disposal. The GMF submit that, after due consideration of all of the above, the Department and DDG came to a conclusion that there are reasonable grounds to believe that the activities at FG site are conducted in a manner which causes significant pollution and environmental degradation.
- 3.17 It is the submission of the GMF that the closure of the site and cessation of the appellant's unlawful activities in terms of the Directive are the result of the persistent failure by the appellant to comply with environmental directives, applicable legislation and the licencing conditions.
- 3.18 The GMF further contend that the findings obtained by the GMF based on scientific research and scientific figures, clearly indicate that the finding of the DDG, as stipulated

above, are based on reasonable grounds after due consideration of all relevant facts and after compliance with all legal requirements, inclusive of the *audi alteram partem* rule and having afforded the appellant with sufficient time to take remedial actions.

- 3.19 The GMF contend, furthermore, that the pre-directive was issued by the Department to comply with and as preventative measures in terms of environmental legislation to reduce and or cease the adverse health conditions, nuisance conditions, pollution and degradation of the environment, including malodours. The GMF submit that the appellant failed to comply with their commitments made to the pre-directive and the failure still stands as of date hereof. The GMF further submits that the Directive cannot be set aside until all the requirements of the Directive have been complied with.
- 3.20 It is the GMF's contention that the appellant failed to comply with any of the commitments made by the appellant in response to the pre-directives intended instructions the Department had no choice but to issue the Directive.
- 3.21 In essence, the contention from individual registered I&APs is that residents in the area surrounding the site have suffered severe health effects as a result of odours emanating from FG site, which include:
- 3.21.1 Inability to breathe – Asthma conditions worsened severely;
 - 3.21.2 Severe bronchial disorders such as emphysema, pneumonia, lung oedema asthma and sinusitis;
 - 3.21.3 Chronic neurological disorders such as hand eye co-ordination, spatial disorientation, memory loss and inability to process logical thought sequence;
 - 3.21.4 Children are constantly sick, with bleeding noses, sinus infections, bronchitis, chest infections which always needs antibiotics to treat;
 - 3.21.5 Burning eyes, throat, coughing, bleeding noses, struggling to breathe and acid, diesel, foul smell in the air;
 - 3.21.6 Blurry vision, burning eyes and nostril; and
 - 3.21.7 Chronic symptoms and there have been mass bird deaths numbering in the thousands.

3.22 In evaluating the grounds of appeal, I take note of the comments in the Department's responding statement that the Department provided the appellant with the information sought in relation to the first ground of appeal, which included:

3.22.1 A register of the various complainants;

3.22.2 A document that was compiled setting out the consultation the Department had with other organs of state; and

3.22.3 A set of data generated from the Dräger machine that was installed on a property opposite the FG landfill site.

3.23 I further note that the Department provided the appellant with an opportunity of over a year to conduct the external reviews and also that the appellant made commitments and agreed, in a letter dated 30 March 2016, to:

3.23.1 Appoint an external reviewer of the air quality study; and

3.23.2 Appoint a health specialist to determine whether the air emissions are harmful to health.

3.24 I further note that the Department obtained data generated from a monitor which details are set out in the following:

3.24.1 A report from C&M consulting engineers;

3.24.2 A report by Dr Willie van Niekerk of Infotox (Pty) Ltd; and

3.24.3 A report by Dr Lucian Burger from Airshed Planning Professionals.

3.25 The information before me indicates that the findings contained in these reports are substantive in nature and provide additional evidence which supports the Department's reasonable belief that the malodours originate from the FG landfill site and that these odours causes significant environmental pollution or degradation. In this regard, it is important to point out that the reports submitted by Infotox (Pty) Ltd (Report No. 040-2017 Rev 1.0, dated 1 July 2017) and Airshed Planning Professionals (Report No. 16DEA02-P2a, dated July 2017) (the 2017 reports) were based on measurements taken by a device that was installed by C&M Consulting Engineers, an entity holding SANAS certificate of accreditation in gas metrology, thus an expert in measuring gasses.

- 3.26 I also note confirmation from these expert reports that the situation as it stood in April, May and June 2017 attests that malodours were emitted from the FG landfill site and that these emissions exceeded the odour detection thresholds.
- 3.27 I note from the report by Airshed Planning Professionals that a visit of the FG Landfill Site on 2 May 2017 enabled an understanding of the landfill operation as well as to identify the main sources of air pollution emissions at the site. According to the report, the main sources of air emissions were identified as Cell 2 on the landfill working surface, the leachate collection dam, the stone drain layer system, the piggy back liner at the interface between Cell 1 and Cell 2, the covered Cell 1 surface and leachate transfer point.
- 3.28 In addition to the above, I proceeded by appointing both Infotox and Airshed to undertake a comprehensive assessment of the situation, a reasonable measure which the appellant had undertaken to do itself but which it failed to do. These reports were submitted to both the appellant and the GMF for comment. The findings contained in these reports at the very least indicate that serious environmental impacts are emanating from the site.
- 3.29 In respect of the Broomfield report, I have noted the following amongst others:
- a. Dr Broomfield did not, as a minimum, conduct a site visit of his own to familiarise himself with the setting whereas the Dr van Niekerk of Infotox (Pty) Ltd and Dr Burger of Airshed Planning Professionals conducted extensive data collection on the FG landfill site and produced several reports in respect of their own onsite observations.
 - b. Dr Broomfield agrees in section 4.3.1 of his report that *"the data in this document confirms that levels of hydrogen sulfide due to emissions from the FG landfill site comply with the well-established and widely applied World Health Organization guideline of 150 µg/m³ for 24 hour mean concentrations at all potential public exposure locations. Modelled levels of hydrogen sulfide comply with the WHO guideline at all times and all locations, even when considering the "Medium estimate" and "High estimate" scenarios. Furthermore, levels of hydrogen sulfide due to*

emissions from the FG landfill site comply with the AEGL-1 guideline of 710 µg/m³ for 1 hour mean concentrations at all potential public exposure locations. Again, modelled levels of hydrogen sulfide comply with the AEGL-1 guideline at all times and all locations, even when considering the "Medium estimate" and "High estimate" scenarios, apart from at Location F121 for the "Medium estimate" and "High estimate" scenarios."

- c. The dispersion model did take into account other sources and to imply that these exceedances would be far less due to the contribution from other sources is not correct since the emissions from the landfill and other sources would not coincide.

3.30 In conclusion, I find the following:

- (a) The results of the Airshed quality report supports the Department's reasonable belief that the malodours originate from the FG landfill site;
- (b) The results of both the Airshed and Infotox reports that were submitted in 2018 confirm that the concentration of H₂S emissions from the FG landfill site at particularly the F1 location shows an unsatisfactory exposure situation which is demonstrated by the modelled annual averaged concentration of 8.8 µg/m³, which is more than 4 times the chronic reference concentration ("RfC") of 2 µg/m³. The fact that the annual RfC is exceeded infers that hourly values are frequently in the high concentration range, thus resulting in an average above the RfC. at this location;
- (c) The appellant had made a commitment to obtain these reports. It never did. These reports demonstrate that the malodours originate from the FG landfill site. They show that steps taken by the appellant so far have been ineffective. They further show that steps must be taken to reduce or minimise environmental pollution or degradation that is harmful to the health and/or wellbeing of the surrounding communities; and
- (d) The Appellant has not placed any objective evidence compiled by independent specialists in the field of air quality before me which refutes the findings of the specialists which were appointed by me or the Department.

- (e) Temporary closure is necessary to reduce or minimise the environmental pollution and degradation currently caused by the site. It is necessary so that the Appellant can obtain the required reports that should advise on necessary and/or effective steps to be taken by the Appellant to enable it to operate the site in a legally compliant and responsible manner.

3.31 I hereby confirm the Directive that was issued by the DDG: LACE and consequently in terms of section 43(11) of NEMA, the appeal is accordingly dismissed. The effective date is the date which is reflected in this decision, subject to the following modifications to paragraph 9 of the directive:

- 9.1 Within ten (10) calendar days upon receipt of this decision, the appellant must cease the disposal of all types of waste at the FG landfill site until such time that I confirm, in writing, that the disposal of waste may recommence.
- 9.2 Appoint the services of an accredited air quality specialist experienced in ambient air and air emissions monitoring to develop a monitoring protocol/programme, for Departmental approval, which must include but must not only be limited to *inter alia* the following:
 - (a) The deployment of accredited and calibrated monitors that measure H₂S (hydrogen sulphide) and volatile organic compounds (VOCs) as informed by the Airshed Planning Professionals' Interwaste Landfill Dispersion Modelling report dated December 2017.
 - (b) The monitors mentioned in (a) must be located at the F1, G12, T1, M13 and T3 locations as described in the Infotox report dated 23 February 2018 as well as a site in Clayville.
 - (c) Deployment at the landfill of an accredited and calibrated weather station measuring wind direction, wind speed, ambient temperature and pressure.
 - (d) The monitoring programme to commence prior to the interventions identified in (9.3) and (9.4) and to continue for six (6) months thereafter.

- 9.3 Within fifteen (15) calendar days of receipt of this decision submit, for approval, to the Enforcement Directorate of the Department an Environmental Impact and Pollution a Detailed Plan outlining proposed safety measures that must be implemented at locations F1, G11, G12, G13 and T3 (as indicated in the Infotox (Pty) Ltd report dated 23 February 2018) in order to reduce and/or prevent further environmental impacts at these locations;
- 9.4 Commence with the implementation of the recommendations and/or mitigation measures within the timeframes set out in the approved Detailed Plan set out in 9.3 above;
- 9.5 Appoint an independent and suitably qualified specialist, registered with a relevant professional Body, to develop a Decommissioning and Rehabilitation Plan for the capping, closure and rehabilitation of cell's 1 and 2. The appointment of the aforementioned specialist must be discussed with and agreed upon with the waste specialists within the Gauteng Department of Agriculture and Rural Development ("GDARD"), and as a minimum said specialist must be registered with a relevant Professional Body.
- 9.6 The Decommissioning and Rehabilitation Plan identified by instruction in paragraph 9.5 above, must be submitted to the GDARD for approval, within thirty (30) calendar days of its finalisation. In addition to the above, the Decommissioning and Rehabilitation Plan must contain clearly defined recommendations and/or mitigation measures, as well as clearly defined timeframes for the implementation of such measures.
- 9.7 Within twenty-one (21) calendar days upon receiving written approval of the Decommissioning and Rehabilitation Plan from GDARD, commence with the implementation of the recommendations and/or mitigation measures within the timeframes specified in the Decommissioning and Rehabilitation Plan.

9.8 Within thirty (30) calendar days upon receipt of this decision, submit the following for approval, to the Directorate: Enforcement, Environmental Impact and Pollution:

- (a)** A detailed Landfill Gas Management Plan;
- (b)** The Landfill Gas Management Plan mentioned in instruction 9.8(a) above, must include clearly defined measures for the safe and lawful extraction, recovery, re-use and / or disposal / destruction of said landfill gas; and
- (c)** On a monthly basis, commencing from the date of approval of the Landfill Gas Management Plan, provide the Department's Directorate: Enforcement: Environmental Impact and Pollution with progress or update reports, until such time as the Department confirms, in writing, that said reports are no longer required.

9.9 Within thirty (30) calendar days upon receipt of this decision, submit the following for approval, to the Department's Directorate: Enforcement: Environmental Impact and Pollution:

- (a)** A detailed Odour Management Plan;
- (b)** The Odour Management Plan mentioned in instruction 9.9(a) must include clearly defined mitigation measures and must identify abatement technology to be installed / used;
- (c)** This plan must also contain clearly defined time frames for the implementation of said measures, as well as the installation of the abatement technology; and

On a monthly basis, commencing from the date of approval of the Odour Management Plan, provide the Department's Directorate: Enforcement, Environmental Impact and Pollution with progress or update reports, until such time as the Department confirms, in writing, that the said reports are no longer required.

9.10 Within fourteen (14) calendar days upon receipt of this decision, contract the services of an independent and suitably qualified specialist(s) who must do the following:

(a) Conduct and finalise a Technical Assessment of the FG Landfill Site within thirty (30) calendar days after appointment, with a view of establishing the root cause of the odours generated from this site.

(b) The Technical Assessment mentioned in instruction 9.10 (a) above must, inter-alia, include the following:

- i)** the impacts of the current co-disposal ratio;
- ii)** hydraulic loading capacity;
- iii)** leachate generation and storage capacity;
- iv)** effectiveness of the Leachate Treatment;
- v)** options for effective waste and leachate treatment in order to reduce the generation of hydrogen sulphide ("H₂S"), as well as sulphur reducing bacteria ("SRB");
- i)** effectiveness of current landfill gas production and treatment measures;
- ii)** recommendations for improvement; and
- iii)** timeframes for the implementation of recommendation measures.

9.11 The appointment of the specialist(s) referred to in instruction 9.10 above, must be discussed and agreed upon with the waste specialists within the Department, and as a minimum, the said specialist must be registered with a relevant Professional Body.

- 9.12 The Technical Assessment mentioned in instruction 9.10 must result in a detailed report, which must be submitted to the Department's Directorate: Enforcement: Environmental Impact and Pollution, for approval, within sixty (60) calendar days of receipt of this decision.
- 9.13 Within twenty-one (21) calendar days upon receiving written approval of the Technical Assessment from this Department, commence with the implementation of the proposed recommendations and/or mitigation measures within the timeframes specified in said assessment.
- 9.14 Within thirty (30) calendar days upon receipt of this decision, contract the services of a qualified community health risk assessment practitioner who must, in conjunction with the air quality specialist appointed in terms of instruction 9.2 above, do the following:
- (a) Conduct a scientific study focussing on the impacts and / or possible impacts on health and wellbeing associated with the operation of the FG Landfill Site.
 - (b) Examine the residents at the F1, G11, G12, G13 and T3 locations as identified in the Infotox (Pty) Ltd report dated 23 February 2018, and report on their current health status.
 - (c) This study must result in a detailed report, which must be submitted to the Department's Directorate: Enforcement: Environmental Impact and Pollution within 6 (six) months upon receipt of this decision for approval.
 - (d) Commence with the implementation of the proposed recommendations and/or mitigation measures within the timeframes set out in the written approval from the Department's Directorate: Enforcement: Environmental Impact and Pollution.
- 9.15 The appointment of the health risk assessment practitioner and air quality specialist referred to in instruction 9.14 above, must be discussed and agreed

upon with the air quality specialists within the Department, and as a minimum, the said specialist must be registered with a relevant Professional Body.

9.16 The study mentioned in instruction 9.14 above must be based on data which has been generated in accordance with the methodology and requirements of the monitoring protocol which has been approved in terms of instruction 9.2 above. In addition to the above the study must be based on a minimum of three months of data which has been generated from date of receipt of this decision.

9.17 The report(s) generated by the health risk assessment practitioner and air quality specialist referred to in instruction 9.14 above, must include their own independent specialist / professional opinion indicating what the baseline emissions limits were (prior to the implementation of the measures outlined above) and whether or not the implementation of the measures outlined above have changed the emission releases from the site and whether or not the impacts on the community have abated and the emission levels comply with all relevant domestic and international standards.

9.18 The following instructions must also be complied with by Interwaste:

9.18.1 Appoint external reviewer to undertake a review of the engineering designs (as per the agreement dated 18 March 2016), including the changes to the leachate detection sump, within seven (7) days of receipt of this Directive and submit the findings to Department and Department of Water and Sanitation (Engineering Services) within twenty-eight (28) days of receipt of this decision.

9.18.2 Construct sumps to vent gas from the bottom of the leachate dam within twenty-eight (28) days of receipt of this decision

9.18.3 Construct a vacuum between the liners and in the drainage layer on the leachate dam within twenty-eight (28) days of receipt of this decision

APPEAL AGAINST THE ISSUANCE OF A DIRECTIVE IN TERMS OF SECTION 28(4) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) IN RELATION TO POLLUTION AND ENVIRONMENTAL DEGRADATION CAUSED BY THE OPERATIONS AT THE FG LANDFILL SITE, OLIFANTSFONTEIN, IN THE GAUTENG PROVINCE

9.18.4 Appoint a groundwater specialist within seven (7) working days of receipt of this decision to review the findings of the hydrocensus in order to validate the findings and to recommend, amongst others, whether a groundwater remediation plan is required.

9.18.5 Submit the findings of the report required in 9.18.4 above to the DEA within sixty (60) working days of receipt of this decision for approval. The DEA will thereafter decide whether any additional measures need to be implemented following receipt of the report in 9.18.4 above.



MR D A HANEKOM, MP

MINISTER OF ENVIRONMENTAL AFFAIRS (ACTING)

DATE: 3 November 2018