



## **environmental affairs**

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Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

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### **REQUEST FOR REVIEW OF APPEAL DECISION**

**TITLE: Request to lift the Suspension Notice dated 4 April 2017**

**PROJECT LOCATION: Shongweni landfill site, KZN**

**PROJECT REFERENCE NUMBER: LSA 162340 / 158911**

**DATE OF APPEAL DECISION: 09/12/2017**

**DATE NOTIFIED OF APPEAL DECISION: 11/12/2017**

**DATE OF FIRST AMENDMENT TO APPEAL DECISION: 5/03/2019**

DETAILS OF THE REVIEW APPLICANT	DETAILS OF THE I&AP
Name of applicant: EnviroServ Waste Management	Name of I&AP: UHA NPC obo Affected communities
Appellant's representative (if applicable): Dean Thompson	I&AP's representative (if applicable): C A NEL, Macgregor Erasmus Attorneys.
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GROUNDS: REQUEST FOR REVIEW	RESPONDING STATEMENT BY I&AP	COMMENTS BY CHEMICAL AND WASTE MANAGEMENT	COMMENTS BY AIR QUALITY MANAGEMENT
<p>1. We believe that Shongweni has reached the point in its restoration where the original purpose of the suspension notice has been met and is no longer required. Paragraph 4 of the suspension notice of 4 April 2017, recorded that exceptional circumstances existed at the site at the time which potentially posed a threat to human health and/or the environment.</p> <p>Since then, the remedial work we have undertaken, the numerous studies that we have commissioned, and the extensive and continuous monitoring of the site and surrounding areas undertaken in compliance with the conditions of the original and varied wording of Annexures A to the suspension notice, have confirmed firstly that the exceptional circumstances no longer exist, and secondly that the risks of concern have been addressed.</p> <p>Paragraph 5 of the suspension notice</p>	<p>1. There has been no demonstrable change in circumstances since the decision of 7 March 2019, justifying the latest request for a further relaxation of conditions, including the upliftment of a restriction on liquid wastes, wastes containing any sulphur or reactive wastes (including aluminium) in the wide terms sought by EnviroServ. Complaints have steadily increased since commencement of trading on 5 October 2018 and a proper analysis of complaints, air quality monitoring data, and wind direction as well as wind speed as required in the Minister's original appeal decision of 9 December 2017, by a suitably qualified expert, demonstrates that by far the majority of complaints are attributable to the Shongweni Landfill. EnviroServ has deliberately failed to conduct the complaints analysis forming the foundation of its request in accordance with the express conditions imposed by the Minister at conditions 4.2 of Annexure "A" to the Minister's December 2017 decision. WSP's analyses of complaints in compliance with the correct scientific methodology as required by the Minister are attached hereto marked "UHA1" and "UHA2". They reveal in particular concerning the period March – April 2019 (the period since the last</p>		

<p>records that it will remain in place until the Department notifies us in writing that the disposal of waste may recommence and under what conditions. As you are aware, the initial steps towards this end have already been taken, firstly with former Minister Molewa's variation of Annexure A in her appeal decision of 9 December 2017 permitting us to accept limited waste streams, and secondly through your decision of 5 March 2019 extending the scope of the waste streams which we may accept.</p> <p>We accordingly write to you to request that you consider the lifting of the suspension notice entirely so that we can resume normal operations under the conditions of our waste management licence at Shongweni. As a precautionary measure we recommend to continue the following conditions currently imposed:</p> <ol style="list-style-type: none"> <li>1. No trenching into the existing waste body;</li> </ol>	<p>decision), that:</p> <p><i>“As evident from Table 1, 68.8% of the complaints over March and April 2019 are accounted for by hourly average wind trajectories within the quadrant from the landfill to the complaint, and 52.5% within the octant of the trajectory from the landfill to the complaint. During all the complaint peaks identified by WSP (Table 1), these percentages increase (e.g. 5 April 2019 when 100% of the 39 complaints are accounted for by hourly average wind trajectories within the quadrant of the trajectory from the landfill to the complainant and 89.7% within the octant of the trajectory from the landfill to the complainant). These are significant proportions of the complaints database that can be related to airflow from the landfill towards the complainant. It is highlighted that this does not mean that the remaining complaints are unrelated to landfill odour. When considering the human element of the complaints database (peak complaint periods can coincide with the morning wake-up period and the early evening when residents return home from work) and the persistent ('sticky') nature of the odour, complaints could be reported some time after the odour reached a specific location.”</i></p> <p>The analysis has been conducted using the DEA meteorological data, which highlights serious discrepancies with that used by</p>		
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<p>2. No recirculation of leachate or contaminated storm water;</p> <p>3. No waste streams with a leachable sulfate concentration &gt;250 mg/l will be disposed at the site;</p> <p>4. No waste streams containing aluminium that have the potential for reactivity under landfill disposal conditions will be disposed at the site; and</p> <p>5. Continuation of the reporting requirements as per the 5 March 2019 appeal decision by the Minister.</p> <p>It is further recommended that the above conditions be reviewed within 3 (three) months of commissioning of the permanent flare.</p>	<p>EnviroServ. The serious shortcomings in the approach adopted by Schoonraad are highlighted in the report.</p> <p>There are clearly impacts contrary to what is alleged and in accordance with the DEA's own statement on 14 December 2018, wherein it stated:</p> <p>"odour episodes" are still being experienced by the communities.</p> <p>Moreover, in the DEA response to UHA's review of the Minister's appeal decision, the DEA positively linked the odour to EnviroServ's Shongweni landfill site and both the DEA and EThekwini enforcement arms have not taken any steps against an alternative alleged polluter - the mystery polluter still pursued by EnviroServ.</p> <p>The EnviroServ lab is not accredited to conduct the waste analysis it contends. Hurt of Skyside has commented on this in the reports submitted during December 2018.</p> <p>EnviroServ's latest application for a Scheduled Trade Permit to EThekwini has been based on the promise that additional waste permitted does not contain sulphur and is severely limited, in order to obtain its approval for the</p>		
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	<p>final flare. It now seeks to undermine that undertaking by requesting the Minister to allow all waste streams including the problematic ones from before. The restrictions sought are insufficient. The relevant replies by EnviroServ to EThekwini on 19 February 2019, relying on the <b>no sulphur</b> containing waste is annexed marked “<b>UHA3</b>”.</p> <p>EnviroServ has also stated in its STP application dated 25 April 2019 (extract attached as “<b>UHA4</b>”), that the flare was to be commissioned within 7 weeks from commencement. More than 3 months have elapsed since approval and there is no indication the installation of the final flare has been commenced. Now EnviroServ contends the flare will take 6 months to commission. Two months have already elapsed on its transitional plan programme with no steps being taken. Envitech reiterates that this is the most important step but no effort is taken to incur this expense by EnviroServ. The most recent monitoring data submitted by EnviroServ indicates that the flare operation is not being monitored in accordance with either DEA or eThekwini compliance requirements.</p> <p>There are no expert reports which support the introduction of any sulphur containing wastes</p>		
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	<p>as sought.</p> <p>The Envitech report (Annexure “5”) read together with the original Technical report, which it incorporates as still being applicable, does not support the total upliftment as requested by EnviroServ. In particular, there is no support for the receipt of liquid wastes as it reiterates the need for maintaining an unsaturated zone, including preventing water ingress from rainfall, and in relation to the disposal of future waste streams, makes it clear any future waste streams would need to be carefully assessed and permitted on a case by case basis, having regard to the interaction of waste streams. The report states as follows:</p> <p><i><u>“In the consideration of suitable waste streams for future disposal, it is suggested that while obviously problematic reactive wastes are diverted, such as aluminium dross, not all metal wastes should necessarily be automatically discarded from consideration. Each waste stream identified for disposal should be carefully considered on its own merit, also taking into account other targeted waste streams and potential incompatibility.”</u></i></p> <p>Page 9 of the original Envitech technical report from March 2017 makes the point that all aluminium and sulphate containing wastes are problematic. Indeed Envitech states that <i><u>“it is not possible to consider an appropriate concentration limit for the disposal of sulphate</u></i></p>		
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	<p><u>containing wastes...</u></p> <p>Reactive wastes were in issue, in this particular instance aluminium dross was of particular concern, but Dr. Jon McStay of WSP points out that reactive wastes are not limited to aluminium wastes. Hence Envitech's comment above regarding each waste stream must be identified and considered for authorisation particularly in the context of co-disposal.</p> <p>Co-disposal again will impact on baldly adopting a leachable concentration level applicable only to keeping soluble sulphate within safe drinking levels in order to protect water resources. Co-disposal makes this risk measure as a safeguard inapplicable. Hence, Envitech's report stating that there is no possibility of setting an appropriate sulphate concentration limit for disposal of sulphate containing wastes. Hence the Minister's prohibition against Sulphur containing waste including at 7 March 2019.</p> <p>Pictures of the site taken on 2 May 2019 (sent herewith) evidence the lack of liquid management. Valley 2 CSW dam is again high and water pooling on the geomembrane evidences the effect of water ingress into the waste body.</p>		
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<p>2. We believe that the current condition of the site, as confirmed by our monitoring data and inspections by both the Department's officials and our independent consultants, justifies this request.</p> <p>In this regard:</p> <p>In paragraph 4.10 of your decision of 5 March 2019, you noted that emissions from Shongweni had significantly reduced since 9 December 2017 and that you are convinced that we have demonstrated a containment of odours that are likely to be a nuisance. This trend of improvement and stability has continued since then. With respect to odour impacts from the site, measured H<sub>2</sub>S emissions show a continued downward trend and data from our community US EPA approved monitoring station reveals H<sub>2</sub>S emissions in the area are currently significantly below the World Health Organisation (WHO) odour nuisance guideline value and orders of magnitude</p>	<p><b>2.</b>As stated above, the analysis conducted by EnviroServ is scientifically flawed and not based on an acceptable scientific method when investigating the source of odour, nor the express conditions imposed by the Minister on 9 December 2017. Wind speed and wind directions are used to establish wind trajectories which must be considered against complaint and monitoring data. A basic scientific principle which Schoonraad either cannot or refuses to understand. In some instances he does not even refer to wind direction, let alone wind speed. Trajectories are apparently an unknown concept to Schoonraad. UHA experts confirm that a first year student would be able to perform this analysis which Schoonraad refuses to.</p> <p>The EnviroServ wind data is further seriously questionable and at odds with that of the DEA meteorological data provided with permission of the DEA .</p> <p>Airshed again misstates the detection and odour annoyance thresholds in the reports relied upon by EnviroServ and refuse to use EnviroServ monitoring results from its own monitors to demonstrate the absence or presence of impacts and the thresholds necessary for emissions at site. Why?</p>		

<p>below the WHO health threshold guideline value. It is notable that in the course of its extensive investigations, EnviroServ has neither itself uncovered any evidence, nor received any expert reports, which indicate that the H<sub>2</sub>S emissions from the site have had any negative health impact on either its employees or residents of surrounding communities. All other monitoring data considered by our expert team supports our monitoring data. The other data sources include data from the Department of Environment Affairs, eThekweni and the Upper Highway Air NPC (UHA).</p> <p>The Department's approval letter of 14 December 2018, did not just grant approval for the gas extraction system, but also stated: <i>"The Department also wishes to inform you that this decision serves to close out the issues as well as the subsequent processes (which includes the respective reporting requirements) arising therefrom that were raised in the Compliance Notice</i></p>	<p>Airshed proposes that the way to manage the emissions from the Shongweni landfill site is to make sure that the H<sub>2</sub>S measured from the two monitors located on the site are below 369 and 749 ppb on a running 24 hr average. At no point has EnviroServ presented a 24-hour rolling average or indicated how this is calculated on the fly. Also, the impact on the community occurs when H<sub>2</sub>S reaches a concentration of 7µg/m<sup>3</sup> for 30 mins, so the only way for this management strategy to work is to say that by way of example, Valley 2 should not exceed 369 ppb for 5 mins on a wind direction of 265 degrees. When such an event did occur, EnviroServ has no way of controlling emissions for the next 23 hours in any event so all it could do in this unhappy event is to stand back and observe the ensuing misery. <b><u>EnviroServ's proposal would however require no management whatsoever.</u></b></p>		
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<p><i>dated 21 October 2016 and as such this particular file is considered closed.”</i></p>	<p>UHA experts have also expressed reservations regarding the reliability of the two instruments operated in Valley 2. We have pointed out that TRS should always be greater than the measurement of H<sub>2</sub>S but this is not the case suggesting that the TRS measurement is defective.</p> <p>The DEA letter of 14 December 2018 records that there are still odour impacts from the Shongweni site (quoted above).</p> <p>EnviroServ have failed to comply with its Scheduled Trade Permit conditions, including those pivotal provisions dealing with the demonstration that the air monitoring equipment is being operated and maintained in accordance with recognised and documented quality assurance procedures. This undermines the entire evidential basis for the STP application and similarly the data used in support of this request. This lacuna and details</p>		
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	<p>relevant thereto are set out in the expert reports delivered herewith by Skyside and Argos, marked “UHA5” to “UHA8”.</p> <p>Even when calibration certificates were requested in support of the claims of compliance with the STP conditions, what was produced demonstrated non-compliance.</p> <p>EThekwini also deliberately excluded from its assessment of the nuisance impacts all exceedances <b>at</b> 7µg/m<sup>3</sup> per 30 mins as per the Argos monthly monitoring reports at Winston Park for UHA NPC, and only included exceedances <b>above</b> the WHO odour annoyance threshold. This is a deliberate misrepresentation of the odour annoyance being experienced in the communities. WHO odour annoyance threshold is 7µg/m<sup>3</sup> for 30 mins. <b><u>Not above</u></b> 7µg/m<sup>3</sup> per 30mins. Argos’s report highlighting this is annexed marked “UHA9”.</p> <p>Similarly EnviroServ has not been complying</p>		
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	<p>with the monitoring requirements in respect of the flare as pointed out by Skyside. Data points are days apart as opposed to twice daily per the STP. The flare design has also not catered for material aspects of its operation and potential for impacts as set out in the Skyside report.</p> <p>The logical and technical failings highlighted by Hurt in the Skyside report in regard, inter alia, to the data reporting, equipment maintenance and /or operation, and resultant data interpretation, by example with reference to the TRS data, leads to the inescapable conclusion that the company operating one of the biggest hazardous landfill sites in KwaZulu-Natal, has no idea what they are doing.</p> <p>EThekwini has stated it has no monitoring data of its own, hence there cannot be any reliance by EnviroServ on alleged EThekwini data which it has not produced.</p> <p>Attached to Skyside's report is clear literature concerning the health impacts of H2S</p>		
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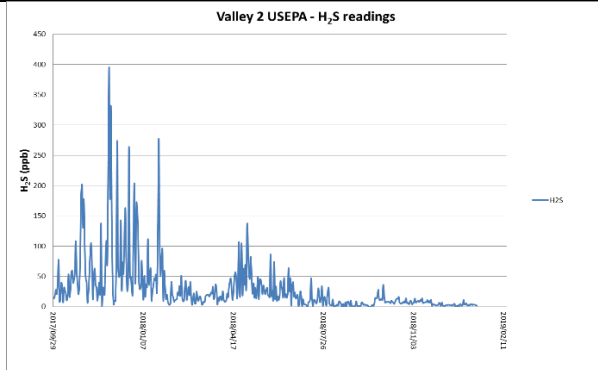
	<p>exposure. Actual health impacts reported by the community associated with odour impacts are direct evidence of health impacts. EnviroServ's own experts concede health impacts from H2S exposure, including nausea and headaches.</p> <p>In addition to the above, both in so far as possible health impacts are concerned as well as the failure of the current and future flare to adequately address possibly harmful emissions, UHA investigated the presence of Mercury in the soil surrounding the landfill and in the Upper Highway area. The report reveals a possibility of deposition in the soil caused by the flare which needs to be further investigated by the DEA through an independent expert, not EnviroServ commissioned and paid for "experts". Shongweni being the possible source of Mercury deposition in the soil is compounded by the deliberate alternation of waste stream data provided by EnviroServ to UHA whereby all quantities of Mercury containing waste were set to zero. DEA has</p>		
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	<p>the right to call for waste streams and is required to investigate this. The report is annexed hereto marked "UHA10".</p>		
<p><b>3.</b> EnviroServ has implemented and continues to implement additional remedial measures to ensure that the site has no impact on surrounding communities. Some of the major remedial measures implemented include, amongst others:</p> <ul style="list-style-type: none"> <li>a) Continual lime dosing of the site to maintain leachate pH levels &gt;pH8.</li> <li>b) Improvement and optimisation of the LFG extraction system installed to capture the gas.</li> <li>c) The lifting of the temporary HDPE liner introduced to control gas emissions and ingress of rainwater on an as-needed only basis to allow for additional disposal areas for renewed waste stream disposal.</li> <li>d) Continued removal of contaminated storm water from site for discharge to the SWWTW.</li> <li>e) Treatment of the leachate generated via the</li> </ul>	<p><b>3.</b>The allegation that there are no impacts are contradicted by the complaints data. Removal of any duplicate complaints still shows significant impacts.</p> <p>Independent monitoring by Argos does not show remediation is complete or that there is a containment of odours.</p> <p>The complete upliftment of the suspension will not see these necessary measures continued. The pictures attached demonstrated the liquid management is not as stated.</p> <p>The geo-membrane will not remain in situ as full scale trading resumes, and EnviroServ has admitted that increased waste will result in increased emissions. It has misrepresented to EThekwini that the prohibition against any sulphur containing wastes will address concerns EThekwini raised prior to flare approval in February 2019, now seeks to undermine those</p>		

<p>leachate treatment plant.</p> <p>f) Installation of additional power generators to ensure the gas management system is not affected by power disruptions affecting the UHA area.</p> <p>g) Optimisation of the bio-filters to maximize H<sub>2</sub>S removal from the LFG prior to destruction of the gas in the pilot flare system currently installed to manage odour release.</p> <p>h) Installation of a USEPA approved TRS monitor at the Valley 2 storm water dam to replace the USEPA approved monitor previously located there and which has subsequently been relocated to the Winston Park area.</p> <p>i) Installation of the USEPA approved monitor, previously sited at the Valley 2 storm water dam, to a site in Winston Park as approved by eThekweni Health.</p> <p>j) Review of effectiveness of remediation measures post implementation by various independent experts; and</p> <p>k) The gas extraction system, bio-filters and</p>	<p>assurances by seeking the permission it does from the Minister for a return to full trading including the wastes which Envitech concluded should not be received and despite Envitech contending that any future wastes should be carefully assessed and received only on a specific targeted basis, hence the Minister's very specific and limited approval in March 2019. No circumstances between then and now justify the upliftment sought.</p> <p>No excuse has been tendered for not complying with the installation of the flare, especially since approval took place in February 2019 already and EnviroServ represented to EThekwini the flare would be commissioned in 7 weeks.</p> <p>We note that the biofilters, which are intended to be a back-up for the flare system in the even that it fails, do not comply with the most recent STP variation notice which requires these to have a greater than 80% H<sub>2</sub>S removal efficiency.</p> <p>We note that EnviroServ uses three different methods to measure H<sub>2</sub>S concentrations in the gas extraction system, none of which</p>		
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<p>trial flare have continued to run. The final design has been approved by both the Department and eThekweni and the procurement of the permanent system has been completed. It is estimated that the construction, installation and commissioning of the permanent flare will take 6 (six) months to complete. During this period the trial flare will continue to operate as it has proven extremely successful and its sizing is more than adequate to deal with the landfill gas generated. Attached as Annexure 1 please find the Transitional Plan developed for the transition from the trial flare to the permanent flare.</p>	<p>could be a considered a standard method and/or is recognised in the DEA Minimum Emission Standards Regulations.</p> <p>We have raised our concern about the reliability of the newly-installed TRS analyser and we have pointed out that the treatment of the ambient monitoring data is inadequate to make a determination on a <math>7 \mu\text{g}/\text{m}^3</math> because the baseline concentrations vary between <math>-3</math> and <math>+2 \mu\text{g}/\text{m}^3</math>. The mere presence of an instrument does not equate to a reliable measurement.</p>		
<p>4. The effect of these measures is seen in the latest data from our US-EPA approved monitoring stations at both the site and in the community as summarised in the following graphs:</p> <p><b>Figure 1: Valley 2 USEPA approved monitor</b></p>	<p>4. There is no "US-EPA approved" monitoring station as repeatedly pointed out by Argos and Skyside.</p> <p>We have supplied EnviroServ with a list of Equivalent Methods Designated by the US EPA and asked EnviroServ to point out where the Serinius 51 is "approved". In fact, Schoonraad, at the DEA hearing conducted in Queen Elizabeth Park, Pietermaritzburg, agreed that there can be no "EPA approval" for H<sub>2</sub>S monitors, yet EnviroServ persist in</p>		



Airshed Planning Professionals were requested to model an emission limit for H<sub>2</sub>S such that the site would have no significant nuisance impact due to odour on surrounding communities. They proposed a 98th percentile H<sub>2</sub>S limit over a 24-hour period at Valley 2 Dam of 369 ppb (or 514 µg/m<sup>3</sup> at 25°C). Please refer to **Annexure 2** for a copy of the report prepared by Dr Lucian Burger from Airshed.

The RED line in the graph below represents the limit of 369 ppb as proposed by Airshed.

**Figure 2: USEPA approved TRS monitor (Valley 2 SW dam)**

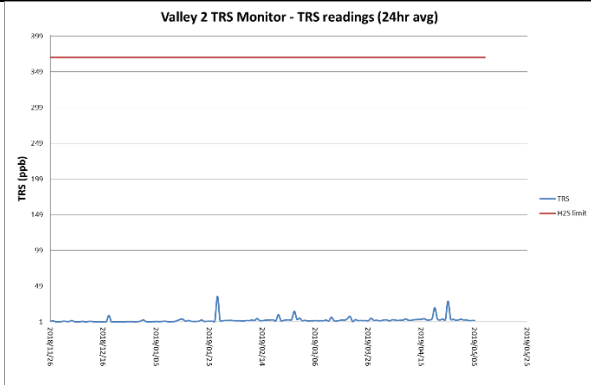
this claim.

The scientifically flawed and illogical approach contended for by EnviroServ in measuring impacts on the community with reference to emissions measured at a point on the landfill have been set out above and in the reports of Argos and Skyside delivered herewith.

It is worth noting that after two years of questioning the Scentinal data that EnviroServ previously relied on to justify its environmental performance, these data sets have been quietly dropped from its justification in support of this appeal. It is our suspicion that that these data sets no longer support their contention and that they are being ignored as a result.

We have raised our concern that the TRS should be equal to or more than the H<sub>2</sub>S (which is but one constituent of Total Reduced Sulphur) and that the TRS readings are therefore of questionable quality.

It is our understanding that Dr Burger suggested a rolling-24-hour average be



Please refer to **Annexure 3** for a copy of the latest detailed Shongweni Landfill Gas Extraction and Treatment Monitoring Report submitted to the authorities on a monthly basis. This report contains the detailed monitoring results for the 22 (twenty-two) month's period that the trial flare has been operational.

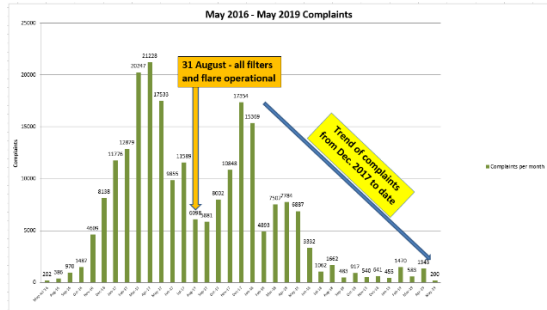
used as the control measure. The graph depicts a static limit and there is no attempt to express the data as a rolling average. Similarly, we have questioned what EnviroServ would do when this limit were exceeded.

5. Our management of storm water and leachate at the site, has also continued to show positive trends and compliance with both our waste management licence and eThekweni's scheduled trade permit requirements. All storm water generated on site is separated into clean and contaminated water, with the clean portion going directly to environment as required,

We have not seen any of these records and so submissions based on them should be ignored.

<p>and the contaminated portion captured and contained within the built-for-purpose dams on site. The contaminated portion is tested to ensure compliance with specified limits and then ultimately transported to eThekweni's Southern Waste Water Treatment Works for lawful discharge.</p>			
<p>6. Leachate volumes generated are treated, analysed and the results reported to the relevant authorities. Due to the lime dosing applied to the site, seen as a critical component in suppressing fugitive H<sub>2</sub>S emissions, the key methanogenic parameters of chemical oxygen demand (COD), volatile fatty acids (VFA) and sulfates in the leachate have shown a general decline (i.e. improvement) and stabilisation.</p>	<p>We have not seen any of these records and so submissions based on them should be ignored.</p>		
<p>7. The trend of complaints logged on the Upper Highway Air (UHA) website inherently also provides clear evidence that mitigation measures implemented by EnviroServ have been successful. The downward trend seen (BLUE arrow)</p>	<p>7.The complaints have decreased from grossly unacceptable to a level which still falls within the concept of significant impacts. The provisions of NEM:AQA in particular s35 which post-date NEMA prohibit nuisance odours. The community complaints are still at levels which demonstrate significant impacts. There is not</p>		

demonstrates that the “containment of odours that are likely to be a nuisance” has been successful.



Despite the dramatic reduction seen in the graph above, EnviroServ remains committed to investigating all valid complaints and continues to do so. Careful interrogation of complaints by EnviroServ unfortunately shows deliberate manipulation and duplication of complaints data by various members of the UHA communities. A recent event investigated indicated 75% of the complaints on one day were logged by 1 (one) person. Please refer to **Annexure 4** for copies of the most recent investigations completed on the high complaints days. We only include 5 (five) of the most recent reports but further reports can be provided.

a containment of odours as alleged. Thousands of complaints in a single month and a steady increase in complaints since trading commenced on 5 October 2018 are not evidence of continued improvement or containment.

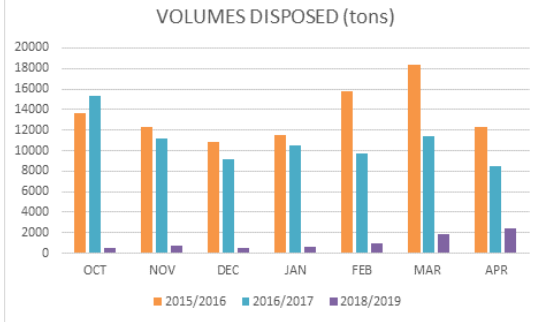
The complaints analysis by EnviroServ is scientifically flawed and non-compliant with the Minister’s decision of 9 December 2017. The proper analysis by an independent qualified expert, namely Dr Lisa Ramsay, is delivered herewith. It demonstrates the vast majority of complaints are associated with airflow from the landfill. This is based on DEA meteorological data. Dr Schoonraad is not independent, he is also clearly not capable of undertaking the scientific endeavour required of EnviroServ in properly analysing the complaints, wind direction and speed and monitoring data. EnviroServ’s monitoring data is still unreliable and it has failed to comply with the requirements imposed by EThekweni in relation thereto. It falls to be rejected for the reasons set out in UHA’s expert reports.

<p>8. The bulk of the remedial measures that have been implemented at Shongweni have their origin in the technical assessment report prepared by Envitech.</p> <p>a) Mr Brendon Jewaskiewitz, the Managing Director of Envitech recently stated the following:</p> <p><i>“Our opinion at this time, as confirmed by the qualitative experience on site and the various monitoring data, is that the implemented remedial measures are having a positive effect in the reduction of fugitive emissions to acceptable levels.”</i> Please refer to <b>Annexure 5</b> for a copy of the review completed by Envitech.</p> <p>b) Dr Willie van Niekerk of INFOTOX recently concluded that in the human health risk assessments conducted in 2017, they (INFOTOX) had overestimated the actual H<sub>2</sub>S emissions and odour impacts. More importantly he commented on the “remarkable” improvement in H<sub>2</sub>S emissions. Please refer to Annexure 6 for a copy of the recent review by Dr Willie van</p>	<p>As referenced above, the Envitech Technical report of March 2017 and the updated reports submitted herewith by EnviroServ do not support the waste introduction of the waste streams sought by EnviroServ.</p> <p>Note Jewaskiewitz does not state that emissions have reached acceptable levels. It was on this basis that introduction of municipal solid waste was permitted based on his report in order to allegedly further remediation. No allegation is made by EnviroServ that this has been achieved or effective. Its refusal to acknowledge ongoing impacts makes the discussion around remediation nugatory and stalls efforts to achieve remediation. Indeed, EnviroServ’s stance is it is not responsible for any impacts and no further remediation is necessary. This is simply not true.</p> <p>We have expressed our reservations about these reports and conclusions. We have invested in the collection of reliable data about conditions near the site and:</p> <ol style="list-style-type: none"> <li>1. Cannot accept Mr Jewaskiewitz’s <i>qualitative</i> analysis or what must be a cursory summary of the <i>various monitoring data</i>.</li> <li>2. We reiterate our concerns about the data supplied by Infotox originally, which have never been addressed. Burger’s conclusions as based on this data and</li> </ol>		
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<p>Niekerk of INFOTOX.</p> <p>c) Dr Lucian Burger from Airshed reported that evaluating data off the 2 (two) USEPA approved real-time monitors on site, reveals an <i>“average dilution factor of ~4.35 over 280 m of the H<sub>2</sub>S emissions”</i> and that the reduction of H<sub>2</sub>S concentrations in residential areas based on 98<sup>th</sup> percentile predictions of Original and Latest Flux Sampling were ~60-fold. Please refer to <b>Annexure 2</b> for a copy of the report prepared by Dr Lucian Burger of Airshed.</p>	<p>on the measurements conducted by EnviroServ on site, both of which we have reservations about.</p> <ol style="list-style-type: none"> <li>3. In the most recent Burger analysis that we have had access to, UHA data formed the basis of most of the conclusions.</li> <li>4. Our own assessment conducted by Baird as requested by eThekweni City Health is that number of episodes for the first quarter of 2019 have not materially decreased. See reports attached.</li> </ol> <p>The only scientific data that has reviewed actual exposure data and is not subject to qualitative assessment or restatement of results, shows that EnviroServ’s performance has not improved to the extent that remediation or containment of odours can be claimed at this stage.</p> <p>Skyside and Argos have already commented on these comments of Burger and Van Niekerk, based on modelling and predicted data instead of actual monitoring data in the community and analyses thereof in accordance with recognised Scientific methods. This omission is telling.</p>		
<p>9. We believe that our request for the lifting of</p>	<p>9.It is clear that on the basis of EnviroServ’s own expert reports, its contradictory</p>		

<p>the Suspension Notice is supported by the motivation presented above and mitigates against any potential adverse impacts through the proposed continuation of selected restrictions. The continued reporting will allow the Department to remain informed about the state of the site. Returning to normal operations at Shongweni remains a business imperative that in turn has both social and economic implications in the local area. The volumes of waste disposed graph below reflects the cold reality regarding the small fraction of waste the site is currently receiving in context with what it used to receive prior to the issuance of the Suspension Notice.</p>	<p>statements and assurances given to EThekwini, and the independent, scientifically credible and reliable reports provided by UHA, the upliftment requested is not rational or justifiable.</p> <p>The threat of economic ruin is one paraded by EnviroServ repeatedly, for 2 years now, which has never materialised. Continued pollution at the expense of community well-being and the environment is not statutorily permissible.</p> <p>There has never been any evidence produced of illegal dumping, or the local economy suffering as a result. Any economic hardship suffered by EnviroServ has been directly attributable to its own conduct and its blatant refusal to conduct itself in accordance with the statutory prescripts or to incur the necessary expenditure to remedy the pollution caused, which is no more clearly demonstrated than scrutinising its inertia in installing the final flare and in properly monitoring emissions. It still refuses to monitor in accordance with a documented protocol as required by EThekwini and should not be allowed to rely on this data in support of the request to the</p>		
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If we are not permitted to return to normal operating conditions in the short term, the site will be forced to stop accepting waste, the board of EnviroServ will again be faced with the likely decision of having to close the site, and consequently the KwaZulu-Natal division of the company. The alternative, which will prevent job losses and permit EnviroServ to continue to provide a vital service to the community, is for the suspension notice to be lifted so that we continue to operate strictly under the conditions of our waste management licence.

Minister now, and then in turn rely on the Minister's approval (as it repeatedly does) to secure further concessions from EThekweni.

The request should be refused and additional conditions imposed by the Minister as highlighted above.