



info@skyside.co.za | +27 (31) 100 - 1300

Ninians Business Park, 33 Richmond Rd, Pinetown, Durban,

PO Box 1726, Westville, Durban, 3630

Skyside (Pty) Ltd 2014/276266/07

Director: Quentin Hurt

16 June 2020

Charmane Nel  
MacGregor Erasmus  
*Per e-mail*

Dear Charmane

**Opinion on Enviroserv Licence Extension Ref 12/9/11/L191016090639/4/R**

Your request for review of the Enviroserv's Waste Management Licence (Ref 12/9/11/L191016090639/4/R) refers. The focus of the opinion relates to the air quality aspects of the licence, air quality complaints being the primary concern regarding the site voiced by residents living within 30 km of the Enviroserv site over the last five years.

The licence is for 10 years and is issued by Ms Mishelle Govender, Chief Director: Hazardous Waste Management and Licensing of the Department of Environmental Affairs in favour of Enviroserv (Pty) Ltd for the Shongweni Waste Management Facility.

At the outset, it is noted that whilst this is a time-limited Licence, the Director has not dated it; at best an omission caused in haste and, at worst, rendering the Licence invalid because one cannot determine the period of intended application: we cannot say when the licence was issued and when it will expire.

The Director presents a bibliography of 19 documents used in reaching the decision. Seven of the 19 were issued in the last century. Only four were issued after 2015, when the very serious public outcry regarding the site came to the fore. Of these four, two relate to decisions about the Licence itself, one relates to water monitoring protocols and only one purports to be an assessment of the status of the

site: the Dorean audit. According to the Record of Decision therefore, the Department of Environmental Affairs ignored the substantial body of information regarding the site and its continued nuisance put forward by the local community. Ironically, the footer on each page trumpets: "*Batho pele- putting people first*". The cynic must wonder "which people"?

Both Enviroserv and Upper Highway Air have publicly and extensively studied the impact of this site. Legal challenges, most involving the Chief Director directly have been pursued. Much of this related to air quality data but the Licence largely ignores this aspect of the site environmental impact. This is inconceivable in the context of the public debate about this site.

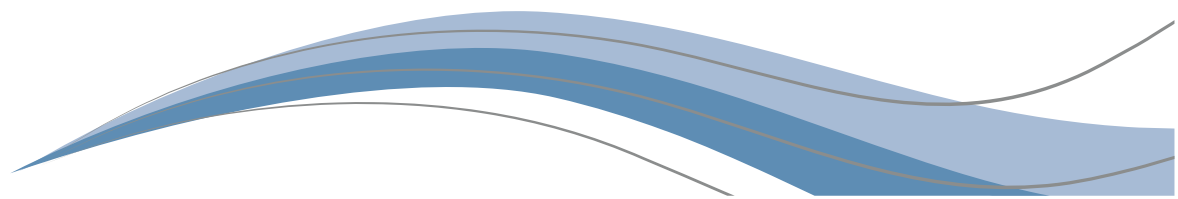
As mentioned, one must assume that the Director based her decision to a large extent on the Dorean Compliance Audit. The Audit is published on the Enviroserv website under the "About us" section. As such a critical component of the decision, I reviewed the report, particularly to determine how the public complaints and air quality data were interpreted. The Licence requires that:

*The audit report must:*

- a) Specifically state whether conditions of this licence are adhered to;*
- b) Include an interpretation of all available data and test results regarding the operation of the site and all its impacts on the environment;*
- c) Specify target dates for the implementation of the recommendations by the Licence Holder to achieve compliance;*
- d) Contain recommendations regarding non-compliance or potential non-compliance and must specify target dates for the implementation of the recommendations by the Licence Holder and whether corrective action taken for the previous audit non-conformities was adequate.*
- e) Show monitoring results graphically and conduct trend analysis.*

It is worth reiterating that this Audit report was reviewed by no less than the Chief Director, who is no doubt aware that the site is not without environmental controversy. The Chief Director had instructed that the Licence Holder must "minimise the occurrence of nuisance conditions or health hazards". In this regard, the Independent Auditor, Mr Monty van Eeden, deals with the history and status of peoples' complaints as follows:

[Section 5.18.4]: *The previous audit was conducted in 2018 by Dorean Environmental Services. The report was sent to the DEA as required in condition 9.8. One partial compliance was raised that related to conditions 5.1.4 and 5.1.5 due to the odour complaints directed at the Site. Recommendations were made regarding the partial compliance to the conditions of the licence. Due to the drastic decrease in*



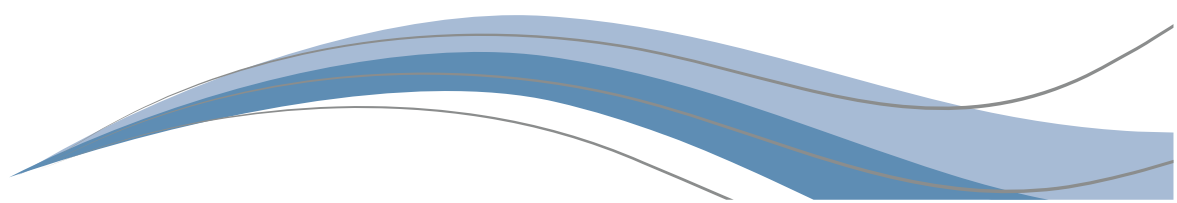
*complaints for this period under review, the auditor is of the opinion that the site is complying with conditions 5.1.4 and 5.1.5.*

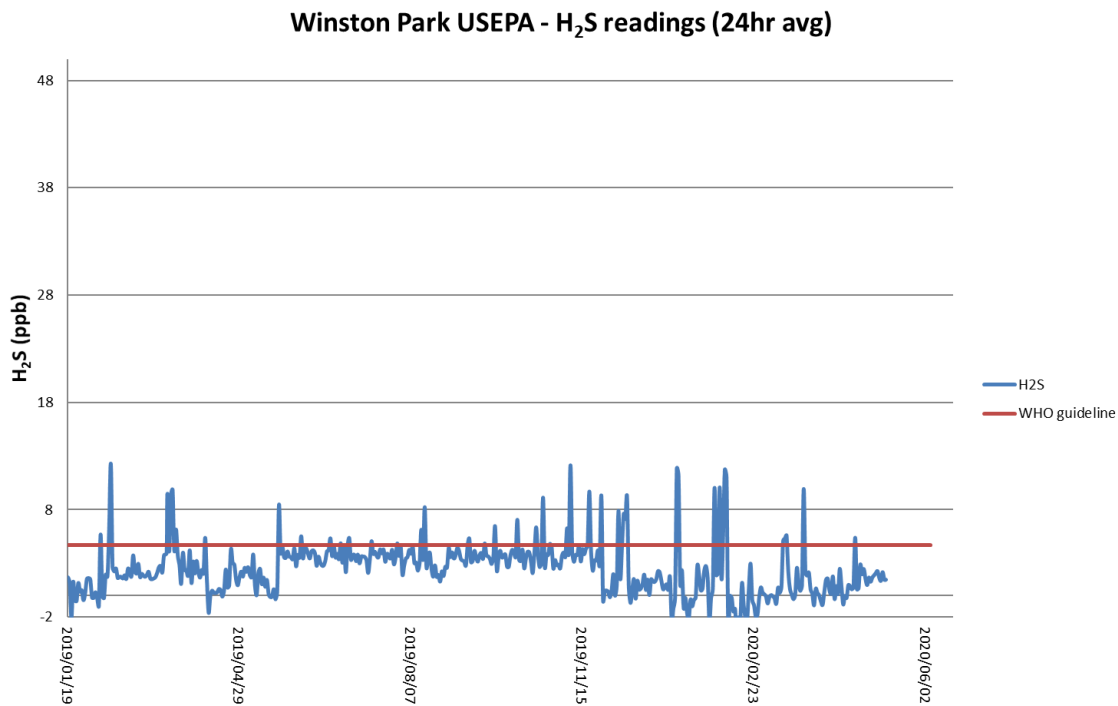
*Rating: Full Compliance*

The independent auditor publishes a graph issued by the Upper Highway Air group (page 76). Despite the report being dated June 2019, the graph includes data for the months of June, July and August 2019. While the graph shows a decrease from the astounding 21278 complaints during the month of April 2017, in the year preceding the report, the UHA continued to log on average 36 complaints per day about the Shongweni site. This is hardly a trivial number and yet it receives less than a one sentence mention in the report. In fact, it receives an absurd “Full compliance” assessment. The auditor ignores data from both Enviroserv and the very Department of Environmental Affairs, who themselves had placed a monitoring station close to the site. The auditor is obliged to consider *all available data* but chooses to ignore this.

In a presentation to its Monitoring Committee in May of 2020, Enviroserv itself, published data from its monitoring stations at the Gate and in Winston Park. This is important to consider as an independent assessment of the conditions on the site. As it was not done, I include this data in my response.

*Figure 1: Extract from Enviroserv Shongweni Update to Monitoring Committee - May 2020 (page 14). [Note that the original includes 5 indications of “Cal” above the data that do not appear in the copy below].*





The Winston Park H<sub>2</sub>S data indicates the following:

1. Enviroserv persist in publishing the data on a 24-hour average basis. The World Health Organisation recommends a 30-minute average basis for assessment and sets a guideline of 4,7 ppb H<sub>2</sub>S (over the half-hour). A 24-hour average represents 48 half-hour periods. If the 24-hour average exceeds 4,7 ppb, the inference is that limit was exceeded for the entire day or that there were some rather severe events during the day that saw the levels well above the limit for a period of time.
2. The monitoring data presented show that around the time of the audit, the ambient air 3 km from the site was regularly close to and above the World Health Organisation limit for the whole day.
3. The Auditor excluded or ignored this inconvenient data that showed the site was operating on and over the limit and made a sweeping assessment that 36 complaints per day did not even constitute a nuisance. A comparison of the requirements of the licence insofar as the interrogation of the data proffered by Enviroserv goes, the following assessment may be useful.

<b>Licence condition for audit report</b>	<b>Comment</b>
a) <i>Specifically state whether conditions of this licence are adhered to;</i>	<i>No observation made regarding compliance despite that it is a specific condition of the Licence that nuisance is minimised not just reduced.</i>
b) <i>Include an interpretation of all available data and test results regarding the operation of the site and all its impacts on the environment;</i>	<i>Not all data sets and test results included. No comment on the impact of air pollution on the environment. (See further note on the flare monitoring data and compliance below).</i>
c) <i>Specify target dates for the implementation of the recommendations by the Licence Holder to achieve compliance;</i>	<i>No recommendations or dates set for compliance</i>
d) <i>Contain recommendations regarding non-compliance or potential non-compliance and must specify target dates for the implementation of the recommendations by the Licence Holder and whether corrective action taken for the previous audit non-conformities was adequate.</i>	<i>No recommendations and no targets specified, presumably because air pollution is disregarded.</i>
e) <i>Show monitoring results graphically and conduct trend analysis.</i>	<i>No measurement data is included despite several air monitoring stations and flare monitoring being conducted on and off site.</i>

The operation of the then temporary gas extraction and flaring system is completely ignored. The new Licence confirms that this should be operated in terms of the National Standards for Extraction, Flaring and Recovery of Landfill Gas, No. 924, 29 November 2013. Section 10(10) of this Standard particularly imposes a few requirements on the Annual Environmental Performance Audit, all of which are ignored. Given the documented concerns expressed by the UHA regarding inter alia, the absence of continuous emission monitoring data as per the Department's own requirements, the questionable quality of the data provided and the absence of information related to heavy metals, especially mercury, in the flare gas, this represents another complete omission for consideration by both the Auditor and the Chief Director.

An interesting insight into the mechanism used by Enviroserv to deal with complaints from the public is provided on pages 63 and 64 of the report in the extract from the Complaints Register. Note that Enviroserv does not acknowledge responsibility for one complaint in the Appendix to this report. On the 6th October 2018, within a short space of time, three complains are logged regarding odour. Wind was calm but a wind direction blowing from the direction of the landfill towards the complainants is

noted for two of the three complaints. All three are dismissed with the observation that CK (presumably the Site Manager, Mr Clive Kidd) and family were in the area at the time and could not smell anything. The independent auditor makes no observation regarding the reliability or independence of this assessment. In fact, one leaves this report with the impression that the Auditor is rather star-struck, concluding in the second paragraph of the Executive Summary that *due to the design, engineering controls and expertise of the staff, the Shongweni Landfill Site does not pose a significant environmental risk to the environment*. The UHA and the 226 437 complainants listed on the last page of the Audit report might choose to differ. As of today (18 June 2020), the confirmed number of COVID cases for South Africa is almost one third of this total at 83 890. COVID is regarded as a pandemic but Enviroserv Shongweni is insignificant, potentially even a beacon of excellence.

The result of these oversights is that the substantive questions of air quality are completely excluded in the assessment for and apparently therefore in the issue of the Licence. They are dismissed as receding complaints. Measurable, frequent and ongoing exceedance of the World Health Organisation guidelines for hydrogen sulphide at at least 3 km from the site is overlooked and the flare system operation, with the potential for the emission of a range of hazardous substances is disregarded.

It is therefore difficult to comment on a Licence issued by the Department of Environmental Affairs that ignores potentially the primary environmental impact of the facility it seeks to regulate. The premise of the Licence is based on a flawed report which is itself a very small subset of the objective measured data and opinions regarding the operations. I make only the following observations:

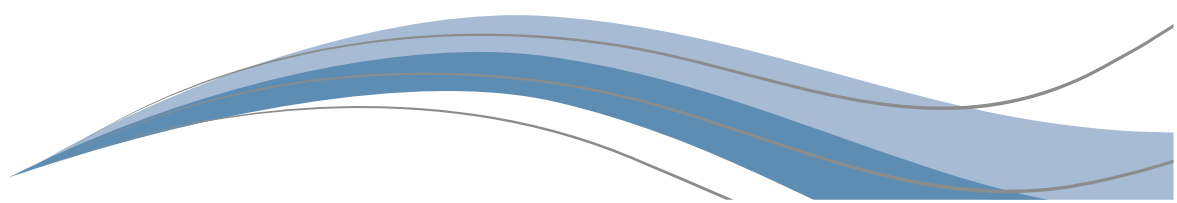
## Management

The Licence delegates authority to an undefined Environmental Management Programme (EMPr) in 2.2.1. One would imagine that the EMPr should be bound into the Licence and subject to public comment if its status is thus elevated. It is noteworthy that the Audit referred to above related to the Licence and not the EMPr despite this status.

## Section 5. Impact and operation management

Much of the wording of this section provides surprising leeway to the licence holder. The appearance is that while the Chief Director is well intentioned, she does not want to unduly inconvenience the licence holder. Contrast the provisions of Section 5 with those of Section 6, for instance, and it appears that the two sections are written by different people. Whereas Section 5 is deferential and accommodating, Section 6 is definitive and explicit. Paragraph 5.10 even potentially contradicts Section 6 as but one example of this juxtaposition.

In the subsequent sections, my use of italic text reflects the Licence condition.



## 5.5 Prevention of spillages

*The Licence Holder must prevent spillages on Site. Where they happen nonetheless...* [The use of the word nonetheless is possibly symptomatic of much of the conditional and somewhat resigned stipulations to prevent harm to the environment imposed by this Licence].

## 5.6 Leachate

*The leachate must not impact on a water resource or on any other person's water use, property or land and must not be detrimental to the health and safety of the public and the environment in the vicinity of the activity.* [There is no definition of how "impact" will be assessed. This paragraph contradicts the more explicit requirements set out in 7.1.]

## 5.7 Odour impacts

*The Licence Holder must ensure that impact of odour from emissions from the Site is minimised.* [In other words, we understand that you will impact, but try and contain it].

## 5.8 Nuisance conditions or health hazards

*The Licence Holder must minimise the occurrence of nuisance conditions or health hazards.* [One wonders how many health hazards are tolerable].

## 5.9 Requirement to record and investigate incidents

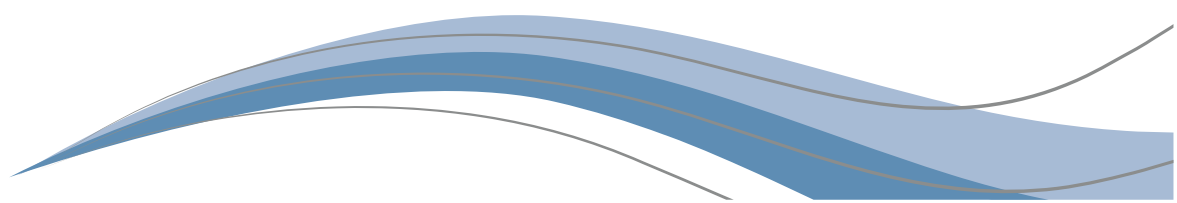
*The Licence Holder must ensure a system is in place to record and investigate complaints and incidents concerning the activities on site.* [Note that there is no requirement to respond to or resolve complaints and this is evident from the Complaints Register contained in the Appendices to the Audit Report].

## 5.10 Contaminated storm water

*The Licence Holder must ensure that contaminated storm water is not discharged to a water source, or to land where it could cause pollution.* [This is possibly a grammatical failure but the effect does present some unusual possibilities for the disposal of contaminated water in places where it might not cause pollution or to water that is not considered a "source". Surely it is the responsibility of the operator to ensure that no contaminated water is discharged (unless for treatment to a point where it can be safely discharged). Furthermore, this paragraph contrasts with the entire Section 6 and one wonders why it was included.]

## 5.12 Buffer zone considerations

The mechanism and logic of the proposed establishment of a buffer zone around the site is difficult to understand. Firstly, rather than establishing a contiguous area that the Chief Director is apparently suggesting should be sterilised, very specific and quite different dimensions are proposed for the North (180m) and East (600m), with the South and West, falling in between, at 350m. It is not clear how the distance would be defined for the other 356 degrees. Should the North-East exclusion, for instance, be 180, 600 or the average 390m? Furthermore, there is no time stipulation by which this sterilisation would be achieved and hence no sanction if it is not. It is difficult to understand how Enviroserv could control this given that it does not own the adjacent land. The Bisasar Road, Durban, landfill became a case in point where informal developments grew on the northern boundary of the landfill, causing much conflict and misery. Provision 5.12 seems fraught with ill-conceived possibility.



### 5.18 Dust control

*The Licence Holder must apply sufficient dust control measures to prevent windblown dust from causing nuisance conditions. [I have already noted that over 200 000 complaints about odour do not appear to constitute a significant impact, so one wonders what constitutes a nuisance condition for dust? This would have been better situated within the Dust Control Regulations where defined limits are clearly defined].*

### 5.23 Gas flaring

*The Licence holder must register and comply with the National Standards for the Extraction, Flaring or Recovery of Landfill Gas. [I note that in the May 2020 Monitoring Committee report back session that reflected the issue of this very Licence, Enviroserv was already not abiding by the conditions contained in the National Standards (No. 924 of 2013). The Standards require that per 10(8), “The environmental performance of the LFG extraction, flaring, or recovery project should be reported and discussed in the landfill site steering committee meetings”. Earlier comment regarding the absence of the flaring system review in the Annual Environmental Performance Audit are reiterated].*

The subsequent sections of the Licence are more demanding and often clearer, except for the final paragraph 16.6. This sets a review period as follows:

*This Licence is valid for a period of ten (10) years and shall be reviewed within two (2) years from the date of issue or at any time before or after that date.*

The use of the word “or” should be replaced by “and” if the Chief Director has intention of using the review process. As it stands, there is no reason to set the two-year window.

The Licence appears to be a document in two parts with Section 5 standing in contrast to the remainder of the requirements. The Chief Director has surprisingly limited the information on which this important Licence is based but must be aware of the raging scientific and political controversy surrounding the site. Instead, she has chosen an Audit that does not address Performance Standards (such as that for the treatment of landfill gas) or available measured data collected by Enviroserv itself and dismisses ongoing complaints as the sole recent basis for decision making.

Yours sincerely  
**SKYSIDE (Pty) Ltd**

*Quentin Hunt*

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