

"UHA"

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July 11, 2017

CONFIDENTIAL

Upper Highway Air NPO
19 La Vigna
Plantations Estate
Hillcrest 3610

Attention: Charmane Nel

Subject: APPEAL BEFORE THE MINISTER OF ENVIRONMENTAL AFFAIRS 12 JUNE 2017

EnviroServ have appealed the terms and conditions of the suspension notice issued by the the Department of Environmental Affairs in 4 April 2017.

EnviroServ have proposed revised operational and remedial actions to comply with the notice but have highlighted concerns about the reasonableness, appropriateness and practicality of implementing certain requirements.

It is claimed that certain measures are precluded given the prevailing interim court order:

19.3.1 'continue p H via treatment of incoming waste'

There is no restriction on EnviroServ undertaking p H amelioration on the existing waste piles and into the landfill. The fact that EnviroServ has not suggested this as a remedial action is an admission that this is a merely cosmetic measure and is only proposed to allow continued waste acceptance.

19.3.2 'acceptance of metal containing waste'

The metal containing waste would have to be relatively soluble and in large enough quantities and be mixed in the existing waste pile to have any positive remedial action on the release of H₂S. Alternatively metal containing waste could form part of reactive capping for final closure. There is nothing preventing EnviroServ undertaking direct injection of zero valent iron into the leachate in the landfill in order to provide in-situ remediation of the odour problem. However, this would be a high cost remedial measure rather than an on-going waste disposal operation.

19.3.4 'limit sulfate content in waste to <1.5%'

As all experts agree that the odour problem is related to the reduction of sulphate containing wastes. It would be preferable to prohibit disposal of any wastes with soluble sulphates. This proposal is presumably a motivation to allow the continued disposal of the ash waste streams which already form over 15% of the Valley 2 waste pile and Have been identified as a potential source for the generation of H₂S.

EnviroServ note

22.1 'based on monitoring conducted at the site, it can be shown that the increase of the p H in the site appears to be succesful up to the date of the interim court order prohibiting further 'acceptance, treatment and disposal ' of waste at Shongweni. This is shown in the accompanying graph. When the p H of the leachate generated in Valley 2 is maintained towards the higher p H range the site has low fugitive H₂S.'

This statement is considered disingenuous. The correct interpretation of the leachate p H data is that the p H is influenced by the dissolved concentration of H₂S, which acts as a mild acid. The more H₂S generated in the landfill the lower the p H of the leachate. In order to demonstrate the active role played by the addition of lime it would be necessary to compare p H with parameters such as dissolved calcium and alkalinity, which would be indicative of an active role in buffering leachate p H. It is therefore unproven that further alkaline treatment of new wastes has played any role in reducing H₂S emissions.

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22.4 'EnviroServ maintains that improvement would take place more rapidly were waste to be continued to be accepted, treated and disposed since this would enable additional pH treatment of the waste body'

There are no restrictions of EnviroServ treating the existing waste pile to achieve the same objective. We can only assume that EnviroServ have no confidence in the effectiveness of these remedial measure, or is unwilling to bear the costs of remediation without maintaining its revenue from waste disposal..

Yours sincerely,



Dr Jon McStay
Director