

16 August 2016

Warwick Meyer
Horowhenua District Council
Private Bag 4002
LEVIN 5540

File ref: APP-1995003658
SGS

Dear Warwick

LEVIN LANDFILL 15 AUGUST 2016 ROUTINE INSPECTION COMPLIANCE REPORT

A routine site visit of the Levin Landfill was carried out on 15 August 2016. The purpose of the routine site inspection was to determine how Horowhenua District Council was complying with the relevant resource consent conditions associated with the landfill. This compliance assessment does not assess the monitoring data contained in the Levin Landfill quarterly report.

The attached report relates to this site visit. It was observed during the site inspection that a landfill leachate breakout had occurred on Stage 2 resulting in leachate discharging into the stormwater drain. Because of the urgent nature of this non-compliance this report comments on this issue only. A separate compliance report will be issued in due course which will assess the remainder of the conditions.

As a result of this assessment Horowhenua District Council has been given an overall **Non-Comply** grading for resource consents 102259 and 6012. As a result of this grading 100 per cent the costs associated with this inspection and subsequent reporting will be charged to HDC. This is provided for in the HRC Annual Plan. This invoice will be sent to HDC at a later date.

Please find attached a copy of Horizons Regional Council's Compliance Assessment Guidelines for your reference.

If you have any queries about the attached report, please contact me via email stuart.standen@horizons.govt.nz or on 0508 800 800.

Kind regards



Stuart Standen
CONSENTS MONITORING OFFICER

COMPLIANCE REPORT

LEVIN LANDFILL

Consent

102259

6012

Reporting Period

15 August 2016 – Routine Site Inspection



16 August 2016



COMPLIANCE REPORT

On 15 August 2016 a Horizons Regional Council (HRC) compliance officer carried out a routine site inspection of the Levin Landfill. The purpose of the routine inspection was to determine how Horowhenua District Council (HDC) was complying with the relevant resource consent conditions associated with the Levin Landfill. Warwick Meyer, HDC Solid Waste Engineer, was present during the routine site inspection.

It was observed during the site inspection that a landfill leachate breakout had occurred on Stage 2 of the landfill. It was evident there were no measures in place to stop the leachate entering the stormwater network. Because of the urgent nature of the non-compliance this report assesses the leachate breakout only. A separate compliance report will be issued in due course which will report on the remainder of the conditions. Of relevance to the leachate breakout are conditions 10 and 11 of resource consent 102259 and conditions 2, 3, 4 and 5 of resource consent 6012. This report assessed compliance against these conditions.

10. Where it is practicable and economical to do so, the Permit Holder shall ensure that within the operational landfill cell the minimum amount of stormwater shall be allowed to come into contact with refuse. This shall be effected by constructing impermeable barriers, diversion drains or bunds on the side slopes and within the base of the landfill.

At the time of the routine site inspection the operational landfill cell was located on the southern fill batter of Stage 3 with the gully area located between Stage 1 and Stage 3 being filled. The remainder of Stage 2 and Stage 3 (excluding the eastern batter slope of Stage 2) was covered with sand. The inspection identified that no attempts to prevent stormwater entering these areas had been carried out. Please provide HRC with an explanation, no later than **26 August 2016** as to why no barriers, diversion drains or bunds have been installed.

11. There shall be no contamination of stormwater with leachate. Leachate includes any stormwater within an operational cell that is not separated from refuse by a barrier as defined in condition 10.

During the routine site inspection a leachate breakout was observed on the eastern fill batter of Stage 2. The leachate breakout is located within an area of landfill with sand cover and near the clay cap.

The clay capping has been keyed into the refuse layer of Stage 2 without an adequate impermeable barrier, diversion drain or bund being installed between the sand and the clay cap. There is a wheel rut located on the top of the clay cap that was acting as a small diversion bund at the time of the inspection. The wheel rut is not a planned or designed diversion bund. The wheel rut is not an adequate barrier or bund because it is not compacted or high enough to perform a barrier or diversion function. The wheel rut was diverting the leachate breakout to the stormwater drain located on the southern fill batter slope. I did not detect any leachate contaminated stormwater discharging from the stormwater drain into the drain located outside of the litter fence at the time of the inspection.

By contaminating the stormwater drain with landfill leachate HDC has non-complied with the requirements of condition 11. Therefore this condition will be graded as **Non-Comply**.

The leachate breakout points are annotated on pictures 1 and 2 in Appendix A.

- 2. Stormwater run-off contaminated by leachate to an extent that it may cause adverse environmental effects shall be regarded as leachate.*

Please be advised that the leachate runoff into the stormwater drain identified during the routine site inspection on Stage 2 is to be considered as leachate in accordance with this condition. Please advise HRC no later than **19 August 2016** as to what plans or procedures HDC will implement to treat the contaminated stormwater as leachate.

- 3. Stormwater falling on any operational cell shall be regarded as leachate.*

Please be advised that all stormwater falling on the landfill that currently has a sand cover is to be treated as leachate in accordance with this condition requirement.

- 4. The Permit Holder shall carry out such stormwater or sediment control measures as are necessary to ensure that sediment is not carried and deposited beyond the boundaries of the site.*

Not Assessed

5. *The Permit Holder shall ensure that:*

- A. *stormwater drains within the site are maintained to ensure that the flow of stormwater around the landfill is unrestricted and the potential for stormwater contamination is reduced; and*

As observed during the routine site inspection the stormwater drain located on the southern fill batter of Stage 2 has been constructed, after the clay cap has been layered, in a manner that does not ensure the unrestricted flow of stormwater from the site clay cap. This is because there is an earth barrier preventing stormwater discharging from the Stage 2 clay cap to the stormwater drain located on the outside of the litter fence plus ponded stormwater was observed in the stormwater drain on the southern corner of Stage 2. In addition, there is not an adequate barrier on the landfill to minimise the potential for stormwater becoming contaminated by landfill leachate. Therefore this condition will be graded as **Non-Comply**.

These points have been annotated on picture 3 in Appendix A

COMPLIANCE REPORT CONCLUSION

The overall compliance grading of this report is **Non-Comply**. This is because there has been an unauthorised discharge of landfill leachate into a stormwater drain which, according to observations during the site inspection, has been on-going and the leachate has the potential to enter groundwater and there is potential for stormwater to be contaminated by leachate. As a result of these non-compliances HDC are required to carry out the following actions:

- Cease the discharge of the leachate breakout to the stormwater drain by no later than **19 August 2016** to avoid further non-compliance with condition 11;
- Install adequate barriers, diversion drains or bunds to prevent leachate or contaminated stormwater entering the stormwater drain;
- Provide HRC with an explanation no later than **26 August 2016** as to why no barriers, drains or bunds have been constructed minimise the amount of stormwater entering the operational cell;
- Advise HRC no later than **19 August 2016** as to what plans or procedures HDC will implement to treat the contaminated stormwater as leachate;
- Advise HRC no later than **19 August 2016** confirming if the leachate breakout has been identified in the monthly landfill inspections required by condition 28 of resource consent

6010. If yes, HDC are to confirm when the leachate breakout was identified and when remedial action was intended to be carried out; and

- The 2016 monthly inspection sheets are to be provided to HRC in accordance with condition 29 of resource consent 6010.

If you have any queries about the attached report, please contact me via email stuart.standen@horizons.govt.nz or on 0508 800 800.

Kind regards,



Stuart Standen
CONSENTS MONITORING OFFICER

Table 1. Compliance Assessment Guideline for Individual Consents

Site Compliance Grade	Examples
Comply - Exceeds	<ul style="list-style-type: none"> • Consent holder has implemented practices, procedures, systems that are over and above that required by the resource consent or consents for the site which are having a tangible environmental benefit.
Comply - Full	<ul style="list-style-type: none"> • Complying with all conditions of consent; and/or • A non-compliance has occurred beyond the control of the consent holder; and/or
Comply	<ul style="list-style-type: none"> • One Minor Non-Compliance with a condition of the resource consent.
Comply – At Risk	<ul style="list-style-type: none"> • At Risk grading identified against key condition(s) of one or more of consents for the site.
Comply – On Track	<ul style="list-style-type: none"> • At risk grading identified AND site has entered into a Compliance Pathway Agreement (CPA) to reduce system risks and achieve best practice.
Non-Compliance	<ul style="list-style-type: none"> • There have been two ‘first time’ Non -Compliances with the conditions of consent; and/or • There has been one repeat Minor Non-Compliance with the same or similar condition.
Significant Non-Compliance	<ul style="list-style-type: none"> • There has been at least one Significant Non-Compliance Rating with a condition; and/or • There has been at least two repeat Non- Compliance Ratings associated with the same or similar condition; and/or • There have been three or more ‘first time’ Non Compliance Ratings.
Not assessed	<ul style="list-style-type: none"> • Monitoring has not been undertaken of this consent during the reporting period.

Table 2. Compliance Assessment Guideline for Individual Conditions

Condition Compliance Grade	Adverse Effects Scale	Examples (not exhaustive)
Comply – Excellent	Nil.	Consent holder has implemented practices, systems, and procedures that are over and above that required by the resource consent and are having tangible environmental benefit.
Comply - Full	Nil.	Conditions of consent are fully complied with. Sampling out of sequence or late due to circumstances outside of consent holders control (e.g. flow related sampling).
Comply – At Risk	Nil – de-minimus. (<i>dictionary</i> : de-minimus - need not be considered. In terms of the RMA the term means an effect which is less than minor, of no consequence, so trifling that it should be disregarded).	Compliant at time of inspection but management / system deficiencies indicate there is a real risk of a non-compliance occurring (e.g. insufficient effluent storage, poor irrigator performance).
Comply – On Track	Nil – de-minimus.	System has been identified as At Risk, but the consent holder has agreed to enter into a Compliance Pathway Agreement (CPA) to ensure compliance is consistently achieved. Consent holder is currently complying with conditions of consent.
Minor Non-Compliance	De-minimus to less than minor.	One-off failure to comply with a condition of consent (e.g. One off minor exceedance in key parameter in 6-months worth of sampling (allows for two minor exceedances in a 12-month period). Intent of condition met however data and / or report provided late (no later than 6 weeks). First up failure to install a water meter for a small take (stockwater), provide management plan or environmental information (e.g. water quality information) within required timeframes.
Non Compliance -	More than minor and / or ongoing (<i>dictionary</i> : defines 'minor' as lesser or comparatively small in size or importance). Ongoing (<i>dictionary</i> : continuing to exist).	Four minor exceedances of key parameters for one year's worth of sampling / data. Repeat failure to provide a report or monitoring data. Repeat Failure to undertaken sampling. Failure to install water meter for a more than minor take (e.g. irrigation).
Significant Non-Compliance	More than minor to significant, serious and / or ongoing. Significant (<i>dictionary</i> : important, noteworthy, consequential). Serious (<i>dictionary</i> : important, demanding consideration, not slight). Ongoing: (<i>dictionary</i> : continuing to exist).	Water quality results indicate there is a potential for or an actual effect which is more than minor that is not authorised by the resource consent. Unauthorised discharge of wastewater / effluent into water or onto land where it may enter water, excessive ponding of effluent on the land surface. Repeated failure to provide a report/monitoring data/ management plans/install water metering equipment etc. Repeated failure to undertake sampling. Repeated failure to comply with authorised discharge or water take volumes.
Not Applicable		Applies to conditions that are no longer applicable. Generally relates to historic conditions that may require provision of a management plan, which has been provided and consent requires no further action.
Not Assessed		Monitoring not undertaken of consent condition.