



**Client:** Red Industries Limited

**Site:** Walleys Landfill, Newcastle-under-Lyme, Staffordshire

**Report Ref:** R19.10249/2/AP

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## **Noise Impact Review – Walleys Landfill**

### **Introduction**

This document considers the potential noise impact of the proposals (outlined below) and should be read in conjunction with Vibrock Report ref: R12.7460/1/GS dated 31 October 2012.

### **Proposals**

Walleys Quarry Landfill Site currently operates under Environmental Permit ref. EPR/DP3734DC. It is understood that the operator of the site intends to submit a permit variation application to increase the annual waste inputs at this site from 250,000 tonnes to 400,000 tonnes.

It is expected that the increased waste input will not require longer operating hours or any additional mobile plant to be operated at the site, however, the proposals will increase the number of HGVs delivering waste to the site. It should be noted that the site will continue to operate in accordance with its current planning permission (Condition 12) which restricts the number of HGVs visiting the site to 440 per week. For the purposes of this assessment it is assumed that, during the 400,000 tpa scenario, the site will operate up to this restricted limit on HGV numbers. This would result in approximately 80 vehicles per day, an increase of approximately 20 vehicles per day when compared to the current situation.

### **Existing Noise Controls**

Noise emissions from the site are currently monitored on a regular basis and assessed for compliance against the noise limits outlined in Planning Condition 27 (Application ref. N.12/09/216 MW) as shown below.

27. Site attributable noise from the Site (excluding the temporary operations referred to below) when measured at the nearest noise sensitive properties at the following locations shall not exceed the limits as detailed below:

Location	Proposed Noise Limits dB(LAeq) (1 hour) (free-field)	
	Early Morning (0700 – 0800)	Daytime (0800 – 1900)
Halfway Place/ Silverdale Road	55	55
Caravan Site	55	55
Galingale View	48	55
Garden Centre	N/A	55
Offices on Cemetery Road	N/A	55
Gadwall Croft	48	55

Site attributable noise arising from the temporary operations including the construction and removal of soil screening bunds on the Site shall not exceed 70 dB(LAeq) (1 hour) (free-field) when measured at the nearest noise sensitive properties / noise sensitive properties referred to above. Such temporary operations shall take place for no more than 8 weeks in any 12 month period.

The above noise limits were set following a detailed assessment of the noise impacts associated with the operation of the landfill site (Vibrolock Report ref: R12.7460/1/GS dated 31 October 2012). Tables 9.5 and 9.6 of this report show calculated site noise emissions and compares them against proposed noise limits which were defined with reference to relevant guidance and ultimately formalised under Condition 27.

### Proposed Noise Emissions

The analysis presented within this noise impact review seeks to quantify the additional noise levels associated with the proposed permit variation in order that the site noise levels presented in Tables 9.5 and 9.6 (Report ref. R12.7460/1/GS) can be updated accordingly.

Potential noise levels from the increased activity associated with the proposed permit variation have been predicted at the locations detailed in Condition 27 (identified in Figure 1 of this document) with reference to the calculation methodology outlined within BS 5228-1:2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites. Part 1: Noise'. This guidance, which was also utilised in Report ref: R12.7460/1/GS, details methods to estimate noise from 'open sites' such as quarries and waste disposal sites.

The calculated noise levels presented in the table below for the 400,000 tpa scenario take into account the existing operations at the site (Tables 9.5 – 9.6 ref: R12.7460/1/GS); the proposed additional HGV movements; the more intensive use of the weighbridge; and increased tipping events. Although no additional mobile plant items will be required on site, these calculations also assume a small increase in mobile plant activity from 80% on-time (assumed within Report ref: R12.7460/1/GS) to 100% on-time to ensure that a worst-case scenario is considered.

Location	Calculated Site Noise Level L <sub>Aeq,1h</sub> (free-field) dB		Noise Limits (Condition 27)	
	250,000 tpa scenario (report ref.R12.7460/1/GS)	400,000 tpa scenario	Early Morning	Daytime
Halfway Place / Silverdale Road	47	48	55	55
Caravan Site	47	48	55	55
Galingale View	46	47	48	55
Garden Centre	54	54	n/a	55
Offices on Cemetery Road	52	53	n/a	55
Gadwall Croft	46	47	48	55

### Summary

The assessment results demonstrate that potential noise emissions from the site are expected to remain within the relevant noise control limits. Furthermore, the potential increase in noise associated with the proposed permit variation application is anticipated to be up to 1 dB (worst-case). Noise changes of this magnitude are considered to be negligible.

## FIGURE 1

### Location Plan

