Memorandum

To:	Martin Brass	**At:**	Biffa
From:	Benedict Sarton	**At:**	SLR Consulting Ltd.
Date:	11th September 2020	**Ref:**	403.00034.00594
Subject:	Washington WRF – Noise Assessment		

Dear Martin,

Further to recent correspondence with you and your colleagues, I have updated the noise assessment for the Washington Site, as shown below.

Noise Model

With to the noise levels for the plant previously provided by Martyn Robinson, I have built a noise model for the site.

The model has also assumed that;

- All the items of plant would be operating simultaneously during the daytime and the night-time;
- I have imputed the higher noise levels quoted below for all the items of plant apart from item 4 where I have utilised a level of 105dB;
- The daytime and the night-time noise maps include the roof fans (noise level based on the Seaham site), the air compressor on the eastern façade and the substation on western façade;
- The daytime model includes HGV movements, as a worst-case I have assumed 4 HGV's in an hour;
- The daytime model also includes the telehandler and forklift operating in the yard area on the eastern façade of the building;
- The roller shutter doors would have a sound reduction of 22dB and remain shut apart from when granting vehicle access;
- The model includes the attention provided by the barrier on the southern and western boundaries and takes into account the local topography.

I have attached screen shots from both the daytime and night-time noise models for your information.

Results

Noise levels have been predicted at the nearest noise sensitive receptors to the site; namely,

- Residential properties on Greenwood Close to the south-west of the site; and
- Residential properties on Barmston Court to the north-west of the site.

Daytime noise levels have been predicted to a height of 1.5m above ground level and night-time noise levels have been predicted to a height of 4m above ground level.

The predicted noise levels have then been compared to the background noise levels measured before the existing facility was operational and the requirements of the relevant planning condition, as shown in the table below. It should be noted that there are no daytime background levels available at Greenwood Close; however it is considered that if the predicted nose levels are below the specified limits during the night-time then they would also be below the limits during the daytime as the baseline levels would likely to be higher.

Receptor	Period	Measured Background Noise Level L_{A90}	Specified Limit, $L_{Aeq,T}$	Predicted Noise level, $L_{Aeq,T}$	Difference
Greenwood Close	Daytime	N/A	N/A	34.7	N/A
	Night-time	38.8	43.8	36.0	-7.8
Barmston Court	Daytime	49.8	54.8	31.9	-22.9
	Night-time	29.9	34.9	32.3	-2.6

As you can see from the table the predicted noise levels are below the specified limits at both receptor locations considered during the daytime and the night-time.

Yours sincerely

SLR Consulting Limited

Benedict Sarton BSc MIOA

Technical Director – Acoustics and Vibration

Closure

This document has been prepared by SLR Consulting Limited with reasonable skill, care and diligence, and taking account of the manpower, timescales and resources devoted to it by agreement with Biffa Waste Services Limited (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

SLR shall not be liable for the use of or reliance on any information, advice, recommendations and opinions in this document for any purpose by any person other than the Client. Reliance may be granted to a third party only in the event that SLR and the third party have executed a reliance agreement or collateral warranty.

Information reported herein may be based on the interpretation of public domain data collected by SLR, and/or information supplied by the Client and/or its other advisors and associates. These data have been accepted in good faith as being accurate and valid.

The copyright and intellectual property in all drawings, reports, specifications, bills of quantities, calculations and other information set out in this report remain vested in SLR unless the terms of appointment state otherwise.

This document may contain information of a specialised and/or highly technical nature and the Client is advised to seek clarification on any elements which may be unclear to it.

Information, advice, recommendations and opinions in this document should only be relied upon in the context of the whole document and any documents referenced explicitly herein and should then only be used within the context of the appointment.