

Date: 26th May 2016

Permit Receipt Centre (Cardiff)
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

Application reference: **PAN-000243** (EPR/DP3832EF)

Dear Victoria Seller,

Further to your request for more information dated May 12th, 2016 please find attached additional documentation in support of our application for a permit variation. The documents attached are a copy of this e-mail (**NMJ-PAV004**), completed application forms Part C2, a site plan showing the site boundaries, emission points to air (A1 – A4) and emission points to sewer (SDP#1 – SDP#3) (PDF document **Biotage Site 2016**) and supportive information **NMJ-PAV005**, **NMJ-PAV006**, and **Biotage GB Limited Discharge Consent Reissue (Draft)**.

We applied for a Bespoke Installation permit in December 2013, and were granted a permit in May 2014, but it has come to light that discharges to sewers had not been declared in the original application and emissions to air exceeded the limits of the original permit.

We have since applied for, and have been granted a DCWW Trade Effluent Consent and we are now applying for a variation to our bespoke installation permit on the grounds of high measured emissions. We believe that these emissions are still low enough to be considered “insignificant” having completed a revised OPRA spreadsheet (included on CD) and H1 assessment. We feel that a mass balance approach for estimating emissions is a better indicator of emissions over reaction batch times compared to single extractive results as each of these processes is carried out on a limited number of batches per year and not running continuously.

With reference to the variation in the input parameters for the H1 assessment, I have been unable to find any justification for the different efflux velocities for emission point A2 or for the volumetric flow rates for A4. The values used in the H1 assessment were calculated from data recorded during LEV testing, and are based on face velocities for the fume cupboards involved and were measured before the external monitoring took place. The data from Environmental Compliance Ltd was recorded downstream of the extractor fan. Given the complexity of the extraction systems (variable

duct diameters, bends etc.) to fit with the fabric of the buildings involved I am not surprised that the values are different, but can give no explanation for the size of the difference. I will continue to look into this.

We have had some discussions with Andi Kemp at Natural Resources Wales, and he advised that this would count as a Minor Technical Variation.

Should you require additional information, please contact me on 01443 864456 or nick.jenkins@biotage.com

Yours faithfully,

A handwritten signature in dark ink, appearing to read 'N Jenkins'.

Nick Jenkins
Chemistry Production Manager