

From:

Sent: 11 January 2019 13:38

To: PSC Land <PSC@environment-agency.gov.uk>

Subject: RE: We need more information about your application - EPR-BP3731VJ-V006

Dear Sir / Madam,

With reference to the further information requested relating to our substantial permit variation application.

Please see responses below:

- 1.1 Please confirm at what concentration level SO₂ has been assessed at within the Air Quality Dispersion Modelling Report (September 2017).

As per table 2.1 the SO₂ emission rate has been assumed to be 304.4 g/s for the maximum daily scenario and 95.5 g/s in the annual average scenario. Assuming a Referenced Volumetric flow rate of 113 Nm³/s (actual 289m³/s) taken from bi-annual monitoring, the concentration of SO₂ has been assessed at 2699 mg/Nm³ for the maximum daily assessment and 843 mg/Nm³ for the annual average assessment. Both these are therefore above the application proposed SO₂ daily average of 695 mg/Nm³.

Table 2.1 – Model Input Parameters

Parameter	Cement Kilns	
Stack Location (XY) ^a	416490, 382450	
Stack Height (m) ^a	132.588	
Stack Diameter (m) ^a	4.394	
Efflux Velocity (m/s) ^b	19	
Efflux Temperature (°C) ^c	192	
Emission Rates (g/s unless stated)	Daily Maximum	Average
NO _x ^d	170.8	90.0
PM ^d	3.5	0.2
HCl ^d	4.4	1.6
SO ₂ ^d	304.4	95.2

- 1.2 Please confirm that the model input parameters stated within the Air Quality Dispersion Modelling Report (September 2017) reflect that maximum permitted flow rates (according to max permitted production) in order to demonstrate that worst case impacts have been assessed within this report.

The model inputs were supplied in the form of CEMS data and bi-annual monitoring data. It is understood that these represent clinker production of 1.45 million tonnes per annum. The CEMs data covered the period from 01/01/15 to 31/12/15. The modelling assessed the CEMs data from both the annual average and maximum daily perspective. Assuming this CEMS data still reflects maximum production at the site of 1.45 tonnes per annum the results in the report should reflect maximum emissions.

- 1.3 Please supply a copy of the model input files used for this Air Quality Dispersion Modelling Report so that this can be audited by our Air Quality Modelling and Assessment Unit.

Model files supplied in attached zip file.

2.1 Please amend the ecological appraisal to include this site. Note, Castleton SSSI has been identified and assessed as a relevant receptor within the Air Quality Dispersion Modelling Report and therefore relevant receptors should correspond between application documents.

Castleton SSSI now included in amended ecology report attached.

2.2 Please provide a justification for why relevant SAC and SPA sites have not been assessed / included within the ecological appraisal, or amend this appraisal to include these sites. These sites fall within the screening distance and have been included within the Air Quality Dispersion Modelling Report.

Relevant SAC and SPA sites now included in amended ecology report attached.

I trust this is acceptable. However, if you do require any further information, please contact me directly.

Best regards