

SLOUGH MULTIFUEL EXTENSION PROJECT

23 March 2023

EN010129

Environment Agency's answers to Examining Authority's (ExA's) written questions and requests for information.

Questions:

1.1.1 - Please provide information on any instances of non-compliance and/or difficulties with compliance with the existing Environmental Permit (EP).

We have not recorded any non-compliances with the conditions in the existing Environmental Permit (EPR/KP3702MY). As the plant is currently in the construction phase, most of the Environmental Permit conditions are not yet applicable. The applicant has made submissions to us for two pre-operational conditions, and these are currently being assessed. We do not anticipate any compliance difficulties with these submissions.

1.1.2 - The Applicant's 'Other Consents' document [APP-020] states that there is no need to vary the existing EP for the facility as a result of the Proposed Development. Does the EA have any comments on this matter?

From the information supplied by the applicant, we agree that the Proposed Development does not require a variation to the existing Environmental Permit. As the Proposed Development is not changing the waste throughput or calorific value of the waste (not any of the emission parameters) that were used during the modelling for the current Environmental Permit, the original impact assessment remains valid as there will be no changes to the maximum impact from emissions to air from the Proposed Development. Amending entries for the maximum electrical output of the steam turbine generator (from 50 MW electrical to circa 60 MW electrical) are purely administrative and do not require a permit variation.

1.3.2 - The ES advises that the emission limit values in EPs for waste incineration are expected to be revised nationally in late 2022/early 2023 [APP-033, paragraphs 8.1.4 ad 8.3.3].

- a) Has this occurred yet? If not, please advise on when it is likely to happen.**
- b) Please comment on the capacity of the consented scheme and the Proposed Development to comply with the reduced limit values.**
- c) If the limit values are reduced, what effect would this have on the absolute emission levels of the Proposed Development (with reference to EN-3, paragraph 5.2.7)?**

1.3.2 a) - The Environmental Permit for the Slough multi-fuel facility is currently part of the Environment Agency's statutory review of permits in the industry sector for incineration. Through this review the emission limit values included in the latest Best Available Techniques (BAT) Conclusions for Waste Incineration (published in December 2019) will be incorporated into the permit. It is currently estimated that we will issue the varied

Environmental Permit (including the revised emission limit values) for the Slough multi-fuel facility in the next 3-4 months.

The table below sets out the main reductions in emission limit values that are likely to be included in the revised Environmental Permit:

Parameter	Current Emission Limit Value	Revised Emission Limit Value
Particulate matter	10 mg/m ³ (daily average)	5 mg/m ³ (daily average)
Hydrogen chloride	10 mg/m ³ (daily average)	8 mg/m ³ (daily average)
Hydrogen fluoride	2 mg/m ³ (periodic)	1 mg/m ³ (periodic)
Sulphur dioxide	50 mg/m ³ (daily average)	40 mg/m ³ (daily average)
Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	200 mg/m ³ (daily average)	180 mg/m ³ (daily average)*
Cadmium & thallium and their compounds (total)	0.05 mg/m ³ (periodic)	0.02 mg/m ³ (periodic)
Mercury and its compounds	0.05 mg/m ³ (periodic)	0.02 / 0.01 mg/m ³ (periodic) [depending on type of sampling]
Antimony, Arsenic, Lead, Chromium, Cobalt, Copper, Manganese, Nickel and Vanadium and their compounds (total)	0.5 mg/m ³ (periodic)	0.3 mg/m ³ (periodic)
Dioxins/furans (I-TEQ)	0.1 ng/m ³ (periodic)	0.06 / 0.08 ng/m ³ (periodic) [depending on type of sampling]

*see related comments in our answer to question b) below

1.3.2 b) - We are not aware of any reason why the consented scheme and Proposed Development would not be able to comply with the revised emission limit values. From the information supplied by the applicant, we understand that the Proposed Development involves no change to the throughput or calorific value of the waste used during the modelling and assessment of potential environmental impacts of the plant's emissions as part of the Environmental Permit application. The applicant has not raised any concerns with us about being unable to comply with the revised limits.

The permit requires the plant to use Best Available Techniques. Once constructed, the operator must commission the plant in line with a commissioning plan which they will need to agree with us, and then complete a number of improvement conditions which include reporting to us on how the operational plant is performing against the modelling and assumptions submitted with the Environmental Permit application. Our statutory review of the Permit will also add further improvement conditions which will require the Operator to:

- investigate whether the plant can further reduce NO_x emissions below the revised emission limit value without significantly increasing emissions of other pollutants or having a significant negative effect on plant operation, reliability, or bottom ash quality.
- submit a report on whether waste feed to the plant can be proven to have a low and stable mercury content (and therefore not require continuous mercury monitoring to be installed).
- submit a report on whether dioxins emissions to air are stable (and therefore not require continuous dioxin sampling to be installed).

1.3.2 c) - We have unfortunately been unable to locate the document reference **EN-3 (paragraph 5.2.7)** that is referred to in this question. The lowering of some daily average emission limit values will have the effect of reducing the concentrations and therefore total amount of these pollutants emitted every year. However, for some pollutants such as total

particulate matter, it is likely that the plant would have already been capable of operating significantly below the current emission limit values, and therefore the change will have no immediate impact on the total emissions of that pollutant.

Thames Sustainable Places

Planning_THM@environment-agency.gov.uk