

VARIATION TO CONDITION 17: CHP MANAGEMENT PLAN

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17.0 CONDITION 17: CHP MANAGEMENT PLAN

17.1 Application to Vary Planning Condition 14 of ESS/34/15/BTE

Planning Permission ESS/34/15/BTE relates to an Integrated Waste Management Facility (IWMF) on land at the former Rivenhall Airfield near Braintree in Essex. Following the first application for the IWMF's Environmental Permit, the Environment Agency (EA) issued a refusal notice on 21 December 2016, for the following reason:

"Based on the information that has been provided to us, we are not satisfied that you [Gent Fairhead & Co Limited (the Applicant)] have demonstrated that the proposals reduce emissions and their impact on the environment through the use of Best Available Techniques (BAT) and in particular that the proposed stack height is BAT"

In its report, the EA agreed with the Applicant's analysis that the IWMF, as currently permitted under planning, is unlikely to contribute to exceedances of any Environmental Standard for human health. However, whilst the implementation of planning permission ESS/34/15/BTE allows the IWMF to be constructed; the IWMF will require an approved Environmental Permit prior to commencement of operations.

Having considered the EA's detailed decision report, and its consultation responses to local Councillors and members of the public who had expressed concern about the height of the stack, a second Environmental Permit application was submitted by Gent Fairhead & Co Limited (GFC) including details for a higher stack.

On the 3 March 2017, a second (revised) Environmental Permit application was submitted to the Environment Agency. This application addressed the original consultation responses raised by local Councillors and members of the public who had expressed concern about the height of the stack.

On the 20 June 2017, the Environment Agency confirmed that it was "minded to" permit GFC's (second) application for an Environmental Permit, and issued for public consultation a Draft Environmental Permit combining all waste management operations within the IWMF (Draft Environmental Permit Number is EPR/FP3335YU/A001)

To correspond with the revised stack height within the Draft Environmental Permit, namely at a height of 58 metres above surrounding ground level (or 108 m AOD), a planning application(s) has been prepared and submitted to Essex County Council. The existing planning permission established the principle of the IWMF and the stack (85 m Above Ordnance Datum (AOD), 35 m above existing ground levels) within the landscape at this location, and the revised stack height of 58 m above surrounding ground level (108 m AOD "Above Ordnance Datum") represents a change in stack height of 23 m. The revised stack height is of a comparable height to that of the existing landmarks within the local landscape such as the nearby Sheepcotes Hangar mast and the network of high voltage overhead electricity pylons which are around 50 m above surrounding ground level.

In assessing the change in the IWMF's stack height a change has been to the proposed flue gas treatment materials and techniques used within the plant, namely, a change from bicarbonate to lime based treatment technologies. The change has had a beneficial affect both in terms of emission and plume abatement.

The updated details presented against Condition 17 present the management plan for the CHP plant to ensure there is no visible plume from the stack.

This document presents the updated details that have been submitted to support the variation to Planning Condition 17.

17.2 Condition 17 of ESS/34/15/BTE

Planning Condition 17 states:

The development hereby permitted shall be implemented in accordance with the details submitted with respect to the management plan for the CHP plant to ensure there is no visible plume from the stack. The approved details include: the application for approval of details reserved by condition dated 4 August 2015 and documents referenced:

- *S1552-0700-0008RSF entitled "CHP Management Plan for Plume Abatement" Issue no. 5 dated 16/02/16 by Fichtner ;*
- *S1552-0700-0013RSF entitled "Plume Visibility Analysis" both by Fichtner.*

The development shall be implemented in accordance with the approved details.

17.3 Variation to Condition 17 of ESS/34/15/BTE

Under the existing planning permission ESS/34/15/BTE, the submission of details against Condition 17 approved a management plan for the CHP plant to ensure there is no visible plume from the stack.

In assessing the variation in the IWMF's stack height a change has been to the proposed flue gas treatment materials and techniques used within the plant, namely, a change from bicarbonate to lime based treatment technologies.

The updated operational proposals associated with the CHP Management Plan and Plume Visibility Analysis have been updated to reflect the change to lime within the flue gas abatement system and are submitted to vary Condition 17 to ensure there is no visible plume from the stack.

The following information is submitted to vary Condition 17 of ESS/34/15/BTE.

SOD Ref.	Title	Author
C17.1 [A]	S1552-0700-0008RSF CHP Management Plan for Plume Abatement_v10	Fichtner
C17.2 [A]	S1552-0700-0013RSF Plume Visibility Analysis_v8	Fichtner