

VARIATION TO CONDITION 14: STACK CLADDING

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14.0 CONDITION 14: STACK CLADDING

14.1 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 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), planning application(s) have been prepared and submitted to Essex County Council.

The existing planning permission established the principle of the IWMF and the stack (85m Above Ordnance Datum (AOD), 35m above existing ground levels) within the landscape at this location, and the revised stack height of 58 m above surrounding ground level (108 mAOD "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 planning and environmental impact terms, the proposed modification in stack height is a single and subjective issue principally assessed in terms of landscape and visual impacts. Whilst no other changes are proposed to the design, layout or general arrangement of the IWMF, the change in stack height will also require a modification to approved details previously submitted under Planning Condition 14 which indicate the height of the stack and details of its general arrangement.

This document presents the updated drawings and details that have been submitted to support the variation to Planning Condition 14.

14.2 Condition 14 of ESS/34/15/BTE

Planning Condition 14 states:

The development hereby permitted shall be implemented in accordance with the details submitted with respect to the design and maintenance of the stack. The approved details include: the application for approval of details reserved by condition dated 4 August 2015 and the following drawings and specifications:

Drawing Ref.	Title	Dated
LA01A	Chimney stack top cladding details plan & elevations	23/07/15
LA02A	Chimney stack top cladding details fixing details	23/07/15
	Alucobond reflect- technical data sheet	
	Alucobond – cleaning & maintenance of stove-lacquered surfaces	
	Genie – Self-propelled telescopic booms - features	

The stack shall be constructed and maintained in accordance with the approved details throughout the life of the IWMF

14.3 Variation to Condition 14 of ESS/34/15/BTE

The drawings previously submitted and approved against Condition 14 have been modified to reflect the proposed variation in the height of the IWMF stack. In addition, given the modification in stack height the typical details associated with the self-propelled telescopic booms which would be used to maintain the exterior of the stack have been updated.

Notwithstanding the above, it should be noted that the previously submitted and approved cleaning and maintenance proposals and type of reflective cladding (ALUCOBOND reflect) will remain unchanged.

The updated details presented against Condition 14 are intended to modify the previously approved details submitted with respect to the design and maintenance of the IWMF stack. The modified drawings and details simply relate to the proposed variation in height of the IWMF stack.

Condition 14 originally required details of the design of the IWMF stack to be submitted and approved, by the Waste Planning Authority. This information included:

- a. elevations, sections and plan views to appropriate scales and construction details;
- b. samples of the finish of the stack to provide a mirrored reflective surface; and
- c. information on the effect of weathering on the proposed stack material or how the effect of weathering is to be assessed by, for example the location on the site of examples of proposed materials which will be exposed to the elements and details of how the stack would be maintained to retain the quality of the surface of these materials.

The modification in stack height simply increases the height and use of the approved materials. The diameter of the stack remains unchanged at 7m in diameter, however the height of the stack has been increased by 23 m. The IWMF stack will be 55m above surrounding ground level at an elevation of 108 mAOD.

The stack will be designed and constructed in accordance with relevant British and European standards. Design elevations, sections, plan views and general construction details have been

VARIATION TO CONDITION 14: STACK CLADDING EXTENSION TO THE IWMF STACK HEIGHT

prepared to support the proposed variation in stack height. The IWMF stack will be structurally stable.

The reflective cladding will be weather resistant and maintained (or cleaned) on an annual basis.

The following information is submitted to vary Condition 14 of ESS/34/15/BTE.

SOD Ref.	Drawing Ref.	Title	Dated	Author
C14.1 [A]	LA01B	Chimney stack top cladding details plan & elevations Scale 1:250 @A1 and 1:500 @A3	15/02/17	Arctica
C14.2 [A]	LA02B	Chimney stack top cladding details fixing details 1:250 @A1 and 1:500 @A3	15/02/17	Arctica
C14.3 [A]		ALUCOBOND Reflect Data Sheet		Alucobond
C14.4 [A]		ALUCOBOND Cleaning and Maintenance		Alucobond
C14.5 [A]		High Safe Solutions WT 1000 Mobile Crane Specification		High Safe Solutions
C14.6 [A]		Rivenhall IWMF - proposed increase in stack height		Fichtner
		Samples:		
		ALCOBOND naturAL REFLECT 405 x 1		Alucobond