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Report 3532

**An Bord Pleanála Appeal regarding the attachment of Condition No. 6
by Sligo County Council to grant of Fire Safety Certificate
for change of use and material alterations of existing industrial premises
to create a whiskey distillery and associated warehousing facility
at Hazelwood House, Sligo.**

Client: An Bord Pleanála,
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BUILDING CONTROL ACT, 1990 – APPEAL

FIRE SAFETY CERTIFICATE APPLICATION FOR CHANGE OF USE AND MATERIAL ALTERATIONS OF EXISTING INDUSTRIAL PREMISES TO CREATE A WHISKEY DISTILLERY AND ASSOCIATED WAREHOUSING FACILITY AT HAZELWOOD HOUSE, SLIGO.

APPEAL AGAINST THE ATTACHMENT OF CONDITION NO. 6 TO FIRE SAFETY CERTIFICATE (REF. FSC 17/031) ON 27th SEPTEMBER 2018

AN BORD PLEANÁLA APPEAL REFERENCE 302836-18

Local Authority: Sligo County Council

Appellant: Hazelwood Demense Limited c/o Maurice Johnson & Partners

RECOMMENDATION

In my opinion, the Board may rely on Article 40(2) of the Building Control Regulations and consider the subject appeal on the basis of Conditions only. It is recommended that this appeal be upheld and the subject Condition No. 6 attached to the Fire Safety Certificate as granted by Sligo County Council (under Reference FSC 17/031) on 27th September 2018 should be modified as follows:-

Condition No. 6

An automatic sprinkler system shall be provided within Warehouse No. 1, Warehouse No. 2, Warehouse No. 5, Warehouse No. 6 and the Retail Space (including the store room). The automatic sprinkler system shall comply with IS EN 12845:2015 *Fixed fire-fighting systems – automatic sprinkler systems – Design, installation and maintenance* and shall take account of the proposed contents and stack height. The system shall include a stored water capacity sufficient to ensure sprinkler operation for not less than 60 minutes.

Reason:

To comply with Part B3 of the Second Schedule to the Building Regulations, 1997-2017.

The remaining 8 no. Conditions (Conditions No.'s 1, 2, 3, 4, 5, 7, 8 and 9) attached to the granted Fire Safety Certificate are not subject of this appeal and should also remain. The granted Fire Safety Certificate should therefore remain subject of 9 no. Conditions.

Dr. Raymond J Connolly

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CONTENTS

	Page No.
1. Relevant information	4
2. Background	5
3. Reprise of appeal as presented	6
4. Consideration	8
5. Conclusion	11

1. RELEVANT INFORMATION

- i. Application for Fire Safety Certificate by Hazelwood Demense Limited to Sligo County Council dated 28th July 2017.
- ii. Compliance Report 16299 FSC R01 (dated 28th July 2017) by Maurice Johnson & Partners with associated drawings.
- iii. Letter of additional information from Maurice Johnson & Partners to Sligo County Council dated 15th May 2018.
- iv. Letter of additional information from Maurice Johnson & Partners to Sligo County Council dated 22nd August 2018.
- v. Fire Safety Certificate (FSC 17/031) granted by Sligo County Council on 27th September 2018 (subject of 9 no. Conditions).
- vi. Letter of appeal from Maurice Johnson & Partners on behalf of Hazelwood Demense Limited to An Bord Pleanála dated 22nd October 2018.
- vii. Letter from Sligo County Council to An Bord Pleanála dated 8th November 2018 including observations of Fire Authority.

2. BACKGROUND

Maurice Johnson & Partners acting as agent for Hazelwood Demense Limited made an application to Sligo County Council for a Fire Safety Certificate for the change of use and material alterations of existing industrial premises to create a whiskey distillery and associated warehousing facility at Hazelwood House, Sligo.

The proposed development includes café and retail spaces, visitor accessed Brew House and Distillation Room, 17 no. individual warehouse cells and associated storage (2-storey) and goods handling spaces, with ancillary staff welfare, office (2-storey) and plant rooms. The Fire Safety Certificate was granted by Sligo County Council (under Reference FSC 17/031) on 27th September 2018 subject of 9 no. Conditions including *inter-alia*:-

Condition No. 6

An automatic sprinkler system (sic) shall be provided to the warehouses. The automatic sprinkler systems shall be designed, installed, commissioned and maintained in accordance with IS EN 12845:2015 Fixed fire-fighting systems – automatic sprinkler systems – Design, installation and maintenance, and provide a minimum supply of 1,800 litres/minute for 60 minutes.

Reason:

To show compliance with Part B of the Second Schedule to the Building Regulations, 1997-2017, Section B1 – Means of escape in case of fire, Section B3 – Internal fire spread, structure, Section B5 – Access and facilities for the Fire Service.

On 22nd October 2018, Maurice Johnson & Partners appealed to An Bord Pleanála against the attachment of this Condition (Condition No. 6) to the Fire Safety Certificate. The residual Conditions (Conditions No.'s 1, 2, 3, 4, 5 and 7,8,9) are not subject of the current appeal.

3. REPRISE OF APPEAL (AS PRESENTED)

The subject of the appeal relates to the proposed imposition of a requirement to install automatic sprinkler protection within each of the 17 no. whiskey maturation warehouse compartments within the proposed development.

The appellant contends that the proposed design meets the requirements of Section B1 of Technical Guidance Document B including:-

- (i) Escape travel distances within recommended limits
- (ii) Provision of at least two exits from each warehouse including one directly to fresh air.
- (iii) No inner rooms within warehouses.
- (iv) All warehouses are single storey.
- (v) The building is in single occupancy.
- (vi) Mechanical and electrical equipment within warehouses to be ATEX rated.
- (vii) Warehouse compartments are within the 1000 m² floor area limit for high hazard storage buildings.
- (viii) The elements of structure achieve the minimum 60 minutes fire resistance (to BS 476:Parts 21 and 22) appropriate to unsprinklered single storey as outlined in Table A2 of Technical Guidance Document B.
- (ix) The site is to be provided with 20 no. hydrants delivering a flow capacity of not less than 50 litres/second for a duration of not less than 60 minutes.

The appellant reports a telephone conversation with the Fire Authority which raised potential reasons for necessitating installation of automatic sprinkler protection to the warehouses including:-

- (i) Similar premises within Ireland are sprinkler protected. The appellant dismisses this comparison on the basis that the subject warehouses are less than 1000 m² in area.

- (ii) Due to the burning of alcohol, the potential fire severity within a warehouse may be more intense than the BS 476:Part 20:1987 conditions underpinning guidance in Technical Guidance Document B and in such a context the 60 minutes fire-resisting walls may be inadequate to prevent fire spread beyond the warehouse of fire origin.
- (iii) Provision of sprinklers is considered likely to be a requirement of the building insurer, which the appellant contends is not a matter for the statutory authorities.

The Fire Authority confirms its views in its letter to the Board of 8th November 2018 as follows:-

- (i) The burning of alcohol(ethanol) may result in fires of increased intensity compared to “normal” fires resulting in a risk of structural collapse and escalation without the early intervention of an automatic suppression system.
- (ii) The inclusion of sprinklers will negate the requirement for the appellant to retain 3,750 litres of fire-fighting foam (presumably foam concentrate).
- (iii) A significant fire may give rise to fire water run-off and pollution of the adjacent Lough Gill.
- (iv) The sizing of fire water retention tanks accounts only for the 2982 m³ of alcohol stored in the single largest warehouse. This does not account for fire-fighting water.
- (v) The total volume of alcohol in storage will eventually reach a potential 15.6 million litres and attract the requirements of the Seveso/COMAH Regulations. The purpose of the requirement to install a sprinkler system is therefore to prevent a major incident occurring on the site.
- (vi) The provision of sprinklers would reduce the potential for a major fire, the potential for rapid fire escalation and a total loss of product stored on the premises.

The Fire Authority has canvassed advice from experienced Fire Officers familiar with whiskey maturation warehouses in reaching their decision. Should the appeal be successful, the Fire Authority has offered a replacement condition relating to fire-fighting foam.

The appellant offers no further response to these observations by the Fire Authority.

4. CONSIDERATION

The appeal may be considered as presented and no new issues arise as might demands *de novo* consideration.

Largely, this appeal may be reduced to the question as to the scope of the Building Regulations and more specifically the adequacy of the guidance contained in Technical Guidance Document B to address the specific fire safety risks presented by the proposed development, which is unambiguously at the higher end of the fire risk spectrum.

Technical Guidance Document B is published by the Minister for the Environment, Heritage and Local Government under Article 7 of the Building Regulations, 1997, i.e. under Statutory Instrument of the Oireachtas. The document confirms on its opening page that “*where works are carried out in accordance with the guidance in this document, this will, prima facie, indicate compliance with Part B of the Second Schedule to the Building Regulations*”. The appellant is entitled to rely on this basis for his design in terms of meeting the **minimum** requirements of the Building Regulations. In this context the word minimum is emphasised to distinguish between a designer’s statutory obligations under the Building Control Regulations and his wider range of professional responsibilities.

There is no dispute between the parties that the guidance in Technical Guidance Document B has been followed as appropriate and this appeal relates to an additional new fire safety measure, i.e. the installation of sprinklers, that Sligo County Fire Service believe to be necessary in the specific instance of whiskey maturation warehouses – effectively regardless of their size being less than the 1000 m² floor area determined in Technical Guidance Document B as being the threshold for requiring sprinklers in high hazard storage buildings. A critique of their concerns is as follows:-

- (i) The burning of alcohol(ethanol) may well result in fires of increased intensity compared to “normal” cellulosic fires resulting in an increased risk of structural collapse. This concern would be particularly relevant to the safety of Fire Service personnel and also to the potential for secondary effects such as collapse of a roof dragging down adjacent compartment walls. However, the subject building is within the scope of Technical Guidance Document B and same advises that compliance with Building Regulation B3 can be achieved by demonstration of structural fire resistance with reference to BS 476:Parts 20-22:1987. Whilst alcohol storage facilities are atypical, the potential for hydrocarbon fires (i.e. the burning of flammable liquids) routinely arises within enclosed car parks,

service yards etc. There is no case history to suggest that the BS 476 design approach underpinning Technical Guidance Document B is flawed.

- (ii) The proposed trade-off between the provision of sprinklers and the storage of 3,750 litres of fire-fighting foam (presumably foam concentrate) on site is unfounded. The capacity of a sprinkler system to either control or extinguish a stack of wooden casks/barrels that is 8 casks high is most uncertain. The external intervention of the Fire Service should be anticipated as being necessary at the very least to protect the integrity of the compartment walls (due to those concerns outlined in point (i) above).
- (iii) A significant fire may well give rise to fire water run-off and pollution of the adjacent Lough Gill, but this is not a concern of Building Regulations.
- (iv) The sizing of fire water retention tanks accounts only for the 2,982 m³ of alcohol stored in the single largest warehouse. This does not account for fire-fighting water/foam. The improper sizing of fire water retention tanks as identified by the Fire Service is not a matter for the Building Regulations.
- (v) The eventual application of the Seveso/COMAH Regulations to the subject site is not a matter for the Building Regulations.
- (vi) It is accepted that the provision of sprinklers would reduce the potential for a major fire, the potential for rapid fire escalation and a total loss of product stored on the premises. Again, these concerns are in excess of the minimum requirements of Part B to the Building Regulations.

Sligo Fire Service has a range of statutory powers that would permit them to pursue their concerns about the potential omission of sprinklers and the consequences of a major fire to the local environment, e.g. they could determine that the development is a “potentially dangerous building” under the Fire Services Act. However, such a decision does not relate to compliance with Building Regulations, which are largely complied with in this instance by reference to Technical Guidance Document B without requiring installation of sprinklers within the subject warehouses, due to their limited size.

However, there is an exception to this conclusion. The treatment of Part B4 (external fire spread) compliance in the original Fire Safety Certificate application is deficient. The applicant gives no undertakings regarding the fire resistance of the external walls of warehouses and his drawings generally do not allocate any fire-resisting properties to the walls. Despite this, the applicant

forms his “enclosing rectangles” local to doors and shutters in the external walls. The inference is that the remainder of the external walls are fire-resisting, although this is not stated anywhere in the application. Given the remoteness of the building from the site’s legal boundaries, the design deficiency relates to a failure to demonstrate compliance as opposed to actually delivering compliance with Part 4 to the Building Regulations. As such the issue of Part B4 compliance is not deemed to require *de novo* consideration within this appeal.

However, in the specific case of the internal opposing elevations of Warehouses No. 4 and No. 5 there is an unambiguous risk of fire spread between these separate compartments given the absence of fire-resisting external walls. The opposing external walls of Warehouses No. 4 and No. 5 are not identified by the applicant as being fire-resisting and Clause 3.2.5.9 and Clause 4.2.3 of Technical Guidance Document B both demand that in such circumstances both warehouses be considered as single fire compartment, which would have a combined floor area of 1,287 m². This increased size exceeds the 1,000 m² threshold and therefore both these warehouses would require sprinkler protection to comply with guidance in Table 3.1 of Technical Guidance Document B.

A similar set of circumstances pertains to the adjacent perpendicular elevations and their associated external fire spread potential between Warehouse No. 1 and the adjacent retail compartment (Note: the 30 minutes fire-resisting enclosure to the store does not meet the requirements for a compartment wall), between the perpendicular but adjacent elevations of Warehouse No. 5 and Warehouse No. 6 and finally between the insufficiently offset parallel elevations of Warehouse No. 2 and Warehouse No. 5. The failure to provide adequate protection against external fire spread between these different high hazard fire compartments results in a need to consider these spaces as being combined with their new cumulative area exceeding the 1,000 m² threshold requiring sprinklers.

5. CONCLUSION

In my opinion, the Board may rely on Article 40(2) of the Building Control Regulations and consider the subject appeal on the basis of Conditions only. It is recommended that this appeal be upheld and the subject Condition No. 6 attached to the Fire Safety Certificate as granted by Sligo County Council (under Reference FSC 17/031) on 27th September 2018 should be modified as follows:-

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Reason:

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The remaining 8 no. Conditions (Conditions No.'s 1, 2, 3, 4, 5, 7, 8 and 9) attached to the granted Fire Safety Certificate are not subject of this appeal and should also remain. The granted Fire Safety Certificate should therefore remain subject of 9 no. Conditions.

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