

Gwasanaeth Tân ac Achub
De Cymru



South Wales
Fire and Rescue Service

Merthyr Tydfil CBC
Planning Division
Unit 5
Triangle Business Park
Pentrebach
Merthyr Tydfil
CF48 4TQ
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Our Ref: DL/26D-061-637 (BR13)
Your Ref: P/26/0155
Date: 15 July 2026
Contact: Station Manager D. Lijertwood
Tel: 07350 394272
E-mail: firesafety@southwales-fire.gov.uk

Dear Sir/Madam,

TOWN AND COUNTRY PLANNING ACT 1990

PROPOSAL: CHANGE OF USE OF A BUILDING USED FOR THE STORAGE OF WASTE, PLANT AND EQUIPMENT TO A RENEWABLE ENERGY FACILITY, INCLUDING THE CONSTRUCTION OF FLUE AND ANCILLARY WORKS
LOCATION: PLOTS 5 PENGARNDDU INDUSTRIAL ESTATE DOWLAIS

I acknowledge receipt of the notification to the South Wales Fire and Rescue Authority ("The Authority") in relation to the above application.

The proposed site plan in relation to the above has been examined and The Authority wish the following comments to be brought to the attention of the committee/applicant. It is important that these matters are dealt with in the early stages of any proposed development.

Changes to our climate and weather patterns will have a significant impact on the well-being of both current and future generations. In line with the **Well-being of Future Generations (Wales) Act 2015** and the **Future Wales – the national plan 2040** framework document, the following areas should be considered early in the planning process:

The climate emergency is likely to increase the risk of flooding as a result of sea-level rises, more frequent severe weather systems and more intense rainfall. Planning authorities should adopt a precautionary approach of positive avoidance of building developments in areas of flooding from the sea or from rivers. Surface water flooding will affect the choice of location and the layout and design of schemes, and these factors should be considered at an early stage in formulating any development proposals.

Pencadlys Gwasanaeth Tân ac Achub De Cymru,
Parc Busnes Forest View, Llantrisant, Pont-y-clun, CF72 8LX.

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Rydym yn croesawu gohebiaeth yn y gymraeg a'r saesneg - byddwn yn ymateb yn gyfartal i'r ddau ac yn ateb yn eich dewis iaith heb oedi.

CODI YMWHYBYDDIAETH - LLEIHAU PERYG

South Wales Fire and Rescue Service Headquarters,
Forest View Business Park, Llantrisant, Pontyclun, CF72 8LX.

Telephone 01443 232000 • Fax 01443 232180
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We welcome correspondence in Welsh and English - we will respond equally to both and will reply in your language of choice without delay.

RAISING AWARENESS - REDUCING RISK

Wildfires are a significant potential threat particularly in populated areas adjoining green spaces such as mountains or forestry. Therefore, it is critical that new developments are designed with this in mind. Where a new development is proposed in an area which is at risk of a wildfire, consideration should be given on how to mitigate the spread of wildfires. For example, sustainable land management could assist with prevention measures.

Fire Safety Considerations for Wind Farms:

Wind farms present unique fire safety challenges due to their remote locations, tall structures, and electrical and mechanical components. While not classified under traditional industrial risk categories, wind turbines can pose significant fire risks, including electrical faults and fires in turbine nacelles.

Firefighting access and adequate water supply are critical considerations for wind farm developments. Developers should ensure that site access routes are suitable for fire appliances and that sufficient firefighting water resources are available on or near the site, in line with national guidance and local authority requirements.

Early engagement with the Fire and Rescue Authority is encouraged to assess site-specific risks and develop appropriate fire safety and emergency response plans tailored to the unique characteristics of wind farm sites.

Large Commercial Solar Arrays, Battery Energy storage Facilities, Electric Vehicle Parking/Charging Facilities:

Fires involving the installations detailed above can be very difficult to extinguish. Conditions can cause a thermal runaway within battery cells, which is a highly exothermic reaction creating toxic, flammable, and/or explosive chemical atmospheres.

The developer of such sites should ensure they have suitable safety measures to contain and restrict the spread of fire, using fire-resistant materials and adequate separation between locations where energy systems may be stored.

Active fire safety systems should be incorporated into the design if necessary and may include automatic fire detection systems, automatic fire suppression and smoke control systems.

The Authority recognises that the charging of electric vehicles and the use of batteries (including lithium-ion) as Energy Storage Systems (ESS) is a new and emerging practice in the global renewable energy sector. As with all new and emerging practices within UK industry, developers should consider the risks associated with such systems early in the design stage of the project.

Standing Advice.

Upon examination of the submitted site plan, the Authority provides the following standard advice to assist the planning authority and developer. It is important that these considerations are addressed early in the development:

- The Fire Authority has no objection to the proposal and refers the Local Planning Authority to current standing advice issued by the Authority.

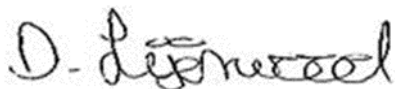
The developer should also consider the need for the provision of: -

- a. adequate water supplies on the site for firefighting purposes; and
- b. access for emergency firefighting appliances

Should the applicant require further information in relation to these matters they should contact the above-named fire safety officer.

Yours faithfully,

Duly signed and authorised by

A handwritten signature in black ink, appearing to read 'D. Lymn', written in a cursive style.

for Assistant Chief Fire Officer

Enc: BR13 Appendix

BR13 Appendix

1.0 Access for Fire Appliances

Typical vehicle access route requirements:

<u>Appliance Type</u>	<u>Min Width Road</u>	<u>Min Width Gate</u>	<u>Min Turning Circle between Kerbs</u>
Pump	3.7m	3.1m	16.8m
Aerial Appliance	3.7m	3.1m	26.0m

<u>Appliance Type</u>	<u>Min Turning between Wall</u>	<u>Min Height Clearance</u>	<u>Min Capacity Tonnes</u>
Pump	19.2	3.7m	18
Aerial Appliance	29.0	4.0m	24

Pedestrian Priority

Pedestrian schemes must consider the need for permanent and unobstructed access for firefighting appliances. The siting of ornamental structures such as flower beds, must take account, not only of the access requirements of the fire appliances but the need to be able to site them in strategic positions; in particular, account must be taken of the working space requirements for aerial appliances. Consultation must take place with the Fire and Rescue Authority during the earliest planning stages of any development to ensure adequate access for fire appliances, their siting and use.

2.0 Water Supplies for Firefighting

The existing output of the statutory water supply network may need to be upgraded in certain parts of the local plan area to cater for firefighting needs of new developments. It is recommended that this provision be a condition of planning consent.

Access to Open Water Supplies

Where development of waterfront sites takes place, the need for permanent and unobstructed access for firefighting appliances to the water should be made a condition of any planning consent.

Consultation must take place with the Fire and Rescue Authority during the earliest planning stages of any development to ensure access for fire pumping appliances is satisfactory.

2.1 **Guidelines on flow requirements for firefighting.**

The following flows represent the ideal requirements for new developments, infrastructure changes, and when the use of a building changes. In some locations the existing distribution system will not allow the delivery of such flows.

In these cases, developers and should engage with the local FRS to come to an agreement that meets the need for firefighting including the use of fire suppression systems etc.

The flow rate data below (Table 1) aligns to firefighting flow-rate data identified within BS Application of fire safety engineering principles to the design of buildings – FRS intervention (PD 7974:2014+A1:2020 which in turn, relates to research undertaken at 5,400 working fires (2012-2015) by Glasgow Caledonian University (GCU) and associated NFCC operational guidance for firefighters.

Table 1

Specification	Minimum required flow
Residential (Dwellings) to three storey town house (ADB Group 1)	10 Litres/sec
Residential flats below 18m to highest occupied floor (ADB Group 1)	10 Litres/sec
Residential flats below 18m to highest occupied floor but with Dry Riser required due to access provision (ADB Group 1)	25 Litres/sec
Residential flats above 18m to highest occupied floor (ADB Group 1)	25 Litres/sec
Residential Institutional and other (ADB Group 2)	14 Litres/sec
Office (ADB Group 3)	14 Litres/sec
Shop and Commercial (ADB Group 4)	14 Litres/sec
Assembly and Recreation (ADB Group 5)	14 Litres/sec

Industrial Buildings, Factories (ADB Group 6)	25 Litres/sec per 900m ²
Industrial Estates Based on Fig.A3 BS PD 7974:2014+A1:2020 (p41)	To 1 Hectare – 67 Litres/sec 1-2 Hectare – 77 Litres/sec 2-3 Hectare – 85 Litres/sec 3-4 Hectare – 87 Litres/sec >4 Hectares -100 Litres/sec Or according to <i>fig. A3 BS PD 7974:2014+A1:2020 (p41)</i>
Storage Buildings and Car Parks (ADB Group 7)	25 Litres/sec per 900m ²
Firefighting Stair in any purpose group	25 Litres/sec per 900m ²
Mixed usage Buildings	25 Litres/sec
Transportation Hub (Bus/Train stations)	14 Litres/sec

Table 1: Adequate firefighting water - Note: *Minimum flow in this case represents the requirements of flow to fight a fire and not the expected flow from a hydrant.* The above flow-rate guidance may be reduced in fully sprinkler protected buildings, but only with documented justification and approval by the relevant building regulator, Local FRS and Authority Having Jurisdiction (AHJ).

2.2 Distances Between Fire Hydrants

The distance between fire hydrants should not exceed the following:

Residential areas	200 metres
Industrial Estates (Subject to operational needs)	150 metres
Town centre areas	90 metres
Commercial (Offices & Shops)	100 metres
Residential Hotels/Hotels	Adjacent to access
Institutional (Hospitals & Old Persons Homes)	Adjacent to access
Old Persons Homes	Adjacent to access
Educational (Schools & Colleges)	Adjacent to access

2.3 **Conclusion**

Developers should engage in early, collaborative discussions with Dŵr Cymru Welsh Water, **Natural Resources Wales (NRW)**, and the Fire and Rescue Authority to ensure that adequate water supplies are available for firefighting purposes.

The Fire and Rescue Authority reserves the right to require the provision of static water supplies on-site as a condition of planning consent where existing water supply infrastructure is insufficient to address the assessed fire risk. This approach aligns with current national guidance and legislation, including the:

- **Well-being of Future Generations (Wales) Act. 2015,**
- **Building Regulations Approved Document B (Fire Safety 2019)**
- **British Standard BS 9990:2016 non-automatic firefighting water supplies.**
- **National Guidance Document on the Provision of Water for Firefighting (4th Edition) June 2025**