

Annex EF48 of Dr E J Fordham Interested Party – Unique Reference: 20030698
EN010106 – Sunnica Energy Farm

Letter from Health and Safety Executive for Northern Ireland

From: Notification Team, HSE(NI)
To: Armagh City, Banbridge and Craigavon Borough Council
Re: Planning Application LA08/2022/1260/F
Date: 31 January 2023

Armagh City, Banbridge and Craigavon Borough Council
Planning Office
Bridgewater House
23A Castlewellan Road
Banbridge
BT32 4AX

31 January 2023

Dear Sir/Madam

Planning Application Ref No: LA08/2022/1260/F

HSENI Ref No: CN202210-0013

Lands at Portadown Road Tandragee (immediately adjacent to NIE sub-station and approx. 100m South East of No. 87 Portadown Road Tandragee BT62 2JX)

The Health and Safety Executive for Northern Ireland (HSENI) reviewed the documents associated with planning application LA08/2022/1260/F. In response, HSENI provides the following advice to the Council.

Safety concerns regarding fire and explosions

HSENI commissioned a hazard assessment regarding the risk of a fire or explosion from a single BESS container.

In summary, this work demonstrated that:

An explosion from a single BESS container can cause an overpressure resulting in the partial demolition of a house up to 45 meters away.

A hydrogen fluoride plume generated by a fire can cause serious injury up to 45 meters away.

The nearest dwellings are approximately 80 meters and 100 meters from the compound.

Hazardous Substance Consent (HSC) and COMAH

Concerning the applicability of Hazardous Substances Consent (HSC) and COMAH, the Council and COMAH CA must consider dangerous substances stored or produced during normal operation and from loss-of-control scenarios.

The CLP Regulation classifies batteries as articles. It is the opinion of HSENI that an article alone does not bring an establishment under COMAH.

A facility that does not come under COMAH for regular operations must still consider the loss of control scenarios.

It must be determined if it is reasonable to foresee a loss of control scenario that could generate dangerous substances above their threshold.

► **Health & Safety Executive**
Northern Ireland

The Applicant states in section 3 of the Technical Specification that an assessment was performed regarding HSC and determined that any dangerous materials were below their thresholds.

HSENI advises the Applicant should produce the details of this assessment.

A BESS with the capability of 21.3 MWH, using the work by Larsson et al. (2017), a fire involving all batteries would produce 4.26 tonnes of hydrofluoric acid and 469 tonnes of POF3. If a fire generates other hazardous substances, the threshold for COMAH and HSC could be exceeded using the aggregation rule.

The Applicant can demonstrate that it is unreasonable to foresee such a loss of control scenario could occur as a fire involving enough BESS containers would be prevented by the layers of protection from:

- Battery control systems
- Fire detection and suppression systems
- Enclosure design
- Separation distances between BESS systems

Yours faithfully

Notifications Team
HSENI