



UK Health
Security
Agency

Environmental Hazards and Emergencies Department
Seaton House, City Link
London Road
Nottingham, NG2 4LA

nsipconsultations@ukhsa.gov.uk
www.gov.uk/ukhsa

Your Ref: EN010158
Our Ref: 92738

Mr James Ledsham
Case Officer
The Planning Inspectorate
c/o QUADIENT
69 Buckingham Avenue
Slough SL1 4PN

16th April 2026

Dear Mr Ledsham

Nationally Significant Infrastructure Project
Rosefield Solar Farm
First Written Questions
[PINS reference: EN010158]

The applicant provided a copy of the Plume Assessment Addendum (doc ref: EN010158/APP/7.13.2) relating to the above development to UKHSA on 15 January 2026.

We have reviewed the Plume Assessment Addendum, whilst also considering our previous comments made throughout the consultation process. Please note our previous responses as listed below and this response should be read in conjunction with that earlier correspondence:

Non-statutory Consultation	01/11/2023
Request for Scoping Opinion	08/12/2023
Public Consultation Section 42	14/11/2024
Registration of Interest	09/12/2025

Below is a summary of our assessment of the detailed plume assessment addendum and whether the addendum addresses our previous comments made on the submitted plume assessment (doc ref: EN010158/APP/7.13) at the Registration of Interest consultation stage in December 2025:

- Recommendation 1: *“We acknowledge that a final detailed dispersion modelling plume assessment cannot be undertaken until the battery system to be used has been finalised. However, detailed dispersion modelling is the most useful output for*

assessing the potential risks to public health from a BESS incident. It would therefore be beneficial for a preliminary detailed dispersion modelling assessment to be undertaken, based on the current proposed BESS location and equipment, to inform the plume assessment chapter.”

- This comment has been addressed through the provision of the plume assessment addendum (EN010158/APP/7.13.2) for review and comment.
- Recommendation 2: *“... for future detailed dispersion modelling (once BESS components are selected) it is recommended that UK Air Quality Guidelines and AEGLs are also used to assess the potential public health impacts of emissions to air...”*
 - This comment has been addressed. The applicant details the assessment criteria used in Section 3 of the report. Table 3.1 includes relevant AQS and Table 3.2 contains relevant AEGLs (converted from ppm to µg/m³ at 10.7°C) that are required to assess model outputs in the context of public health risk.
- Recommendation 3: *“...It is therefore recommended that the applicant provides this information on meteorological site selection and meteorological data duration (for example, from June 2019 to July 2024) in the next iteration of the report/chapter.”*
 - This comment has been addressed. Sections 4.2.24 - 4.2.26 detail meteorological data range and source used for the assessment. The applicant has provided an appropriate justification for using these data.
- Recommendation 4: *“...It is therefore recommended that a table and map showing sensitive receptor locations and their distance from the proposed BESS location be included in the next iteration of the report.”*
 - This comment has been addressed. The applicant in section 4.2.35 provides both a table with x/y coordinates (Table 4.4) as well as a map (Figure 4.3) clearly identifying human receptor locations and their proximity to the site.
- Recommendation 5: *“...we note that the prevailing wind direction is towards the north-east which is away from the nearest receptor highlighted in the report. However, at the detailed dispersion modelling stage, it would be beneficial to include a sensitivity analysis to evaluate the potential health impacts on sensitive receptors who are not in the prevailing wind direction.”*
 - Although the applicant has not conducted a sensitivity analysis using the approach we suggested, they provided worst-case predicted concentrations at nearby receptor locations using five years of meteorological data. This approach captures the range of meteorological conditions likely to occur at the site and therefore provides a suitably conservative assessment of risk to nearby receptors. Consequently, we are satisfied with this approach.

- Recommendation 6: “...It is therefore recommended that details of the model and software used to undertake the plume assessment is noted in the next iteration of the report.”
 - This comment has been addressed. Details and justification of the model used (ADMS) are included in sections 4.2.7 - 4.2.9. Emission parameters are included in section 4.2.10 - 4.2.18, physical parameters are shown in section 4.2.19 - 4.2.23.

Overall, the addendum provides a logical approach and assesses a worst-case scenario of chemical emission concentrations during a BESS fire event at relevant receptor locations. The findings of the addendum report alongside the previous submitted plume assessment suggests that the risk to public health for nearby receptors from chemicals emitted during a BESS fire event is likely to be low.

Yours sincerely

On behalf of UK Health Security Agency
nsipconsultations@ukhsa.gov.uk

Please mark any correspondence for the attention of National Infrastructure Planning Administration