

[REDACTED]

From: [REDACTED]
Sent: 20 October 2025 12:51
To: Springwell Solar Farm
Subject: EN010149 Springwell Solar - Additional Submission- IP reference 20054475
Attachments: Additional Submission.docx

[REDACTED]

Good afternoon,
Please would you consider accepting my additional submission which is attached. This relates to a letter dated 9 October 2025 from UKHSA, a statutory consultee for the Springwell DCO application. The letter is dated just after the DL5 submission date.
Many thanks

Anne Heard

Springwell Solar- Additional Submission
by Anne Heard (Interested Party Reference [REDACTED])

1. I request that the ExA consider as an additional submission the letter dated 9 October 2025 from the UK Health Security Agency (UKHSA) and my comments thereon. The letter was submitted to North Kesteven District Council in relation to the planning application for a BESS to the south of Green Man Road, Navenby (25/0491/FUL) which is available to view on NKDC planning online and which is appended to this representation for ease of reference. The letter was in response to a request from NKDC for comments on the public health concerns raised by the local community during the consultation period on the planning application. The matters addressed in that letter are relevant to the consideration of the Springwell application for DCO.

UKHSA as consultee on Springwell

2. UKHSA was a statutory consultee for the Springwell DCO application and a summary of their representations in relation to that application is set out below:-

RR-429 - Letter dated 17 February 2025 setting out concerns about the suitability of the BESS Plume Assessment (APP-0152) carried out by the Applicant and recommending that a further plume assessment is carried out using methodology such as atmospheric dispersion modelling. The letter was from the Environmental Hazards and Emergencies Department of the UKHSA at their Nottingham office, the letter was not signed nor was there any named author of the letter.

EV4-014 – Action points from ISH1 8 May 2025 -Applicant to provide a note or revise application documents to explain or make clear how a revised plume assessment (once the battery technology is known) is secured in the dDCO.

PD-007- ExAQ1.3.1 Written Questions 13 May 2025 – “the Applicant set out at ISH 1 [EV4-006 and EV4-007] that further information had been provided to the UKHSA. UKHSA to confirm whether the additional information has fully addressed your concerns”

REP1-106 – Letter dated 16 May 2025 in response to ExAQ1.3.1 confirming that “the additional information provided around air quality has addressed our concerns”. The letter was from the Environmental Hazards and Emergencies Department of the UKHSA at their Nottingham office, the letter was not signed nor was there any named author of the letter.

REP1-052- Revised BESS Plume Assessment by the Applicant dated June 2025 including a new provision that at the detailed design stage a plume assessment would be commissioned based on atmospheric dispersion modelling.

REP1-081 – Statement of Common Ground UKHSA -all matters around modelling of BESS Plume Assessment post DCO at detailed design stage are noted as agreed. The document is not signed.

REP3-075- Springwell’s summary of oral submissions at ISH3 on 16 July 2025 relating to the requirement for a further BESS Plume assessment within examination period to include air dispersion modelling.

EV6-010- Action points from ISH3 16 July 2025 - Applicant to undertake a further plume assessment to include air dispersion modelling and particulate matter to overcome all concerns raised by UKHSA.

REP3-066 - Statement of Common Ground UKHSA dated July 2025 -all matters around a BESS Plume Assessment based on atmospheric dispersion modelling as part of the detailed design stage (post DCO process) are noted as agreed. The document is signed by the Applicant and refers to an attached letter from UKHSA dated 8 May 2025. The letter was from the Environmental Hazards and Emergencies Department of the UKHSA at their Nottingham office, the letter was not signed nor was there any named author of the letter. The letter states “Thank you for providing a final statement of common ground and additional information...” and “we can confirm our agreement with all

elements of the Statement of Common ground (1 May 2025) and have no further comments at this stage". This letter pre-dates the Plume Assessment Addendum of August 2025.

REP3-077- Plume Assessment Addendum: Air Quality Assessment August 2025

PD-010 – ExA Q2.3.1 dated 2 September 2025 to NKDC and LCC referring to the Plume Assessment Addendum (REP3-077) and noting that UKHSA has set out (**AS-028**) that "it has overcome its concerns" and requesting confirmation that NKDC and LCC are content with the methodology and assessment. **As at the time of writing this representation there is no AS-028 in the Examination Library.**

REP4-051 – LCC response to ExA Q2.3.1 No comments

REP4-053- NKDC response to ExA Q2.3.1 Defers to UKHSA

Comments on the UKHSA's representations on Springwell DCO

3. It is to be noted that:-

- the correspondence from the UKHSA on both the Navenby BESS planning application and the Springwell DCO application are all from the same team at the same office in Nottingham.
- none of the correspondence from UKHSA on the Springwell DCO application is signed nor is there any named author.
- as the purported confirmation from UKHSA (AS-028) around the revised Plume Assessment is not in the Examination Library, it is not possible to comment further other than to say that it would be surprising if the revised Plume Assessment has allayed the concerns of the UKHSA given the issues around modelling (spacing of battery containers, assumption that the fire would not spread beyond one container and length of exposure to residents of toxic gases) raised by the same UKHSA team in the letter of 9 October.
- the letter dated 9 October 2025 from UKHSA submitted in relation to the Navenby BESS is signed, the author is named and their position as Environmental Public Health Scientist is given.
- the representations from UKHSA in relation to the Springwell DCO application are based solely on the BESS plume assessment modelling, whilst the letter from UKHSA in relation to the Navenby BESS raises far more wide-ranging public health issues.

4. It is of great concern that these additional public health issues were not raised by the same team at UKHSA in relation to the Springwell BESS, the same type of development as the Navenby BESS and within about a kilometre of each other.

5. The issues raised by the UKHSA in relation to the Navenby BESS are applicable to the Springwell DCO application as follows (the words in bold are taken from the 9 October 2025 letter):-

Fire Safety and Air Quality Assessment

"The proposed 3.5-meter container separation is materially non-compliant with the current National Fire Chiefs Council (NFCC) guidance, which suggests a minimum 6-meter separation to prevent the spread of fire via thermal radiation and to allow safe access for emergency services."

Paragraph 4.5.2 of the Outline Battery Safety Management Plan (REP1-048) provides an illustrative design with a minimum separation distance of 3 m between containers, which is therefore "materially non-compliant with the current NFCC guidance".

"The applicant's low-risk air quality conclusion is based on dispersion modelling for a "worst case scenario" of only 12 battery modules on fire. The non-compliant 3.5m spacing significantly increases the probability of a domino effect (thermal runaway) that spreads well beyond 12 units. This design failure renders the air quality modelling and its conclusion of "no noticeable discomfort" unreliable and insufficient to safeguard the community."

Paragraph 3.4.4 of the BESS Plume Assessment (REP1-052) assumes a worst case scenario of the effects of the most common chemicals released from cells within a single container when venting. Paragraph 3.8.7 concludes that the likely impact on the general public, particularly nearby residents would be very low. The factors that led to the conclusion by the UKHSA in the case of the Navenby BESS that the modelling was unreliable and insufficient to safeguard the community are equally relevant to the Springwell application given the non-compliant spacing of the containers and the assumption that the event would not spread beyond one container. The BESS Plume Assessment Addendum (REP3-077) is still based on the assumption that only one container could experience a thermal runaway event (paragraph 4.2.3) and therefore the modelling will be equally unreliable.

“The assessment fails to address the high probability that a lithium-ion fire will be left to burn out for days or weeks due to Fire and Rescue Service (FRS) potential protocol. This prolongs the potential exposure of nearby residents to toxic gases (Hydrogen Fluoride, Carbon Monoxide) and carcinogenic particulates (PM2.5), representing a severe health risk not considered in the Acute Exposure Guideline Level 1 (AEG-1) analysis.”

Paragraph 3.6.15 of the BESS Plume Assessment (REP1-052) models the release rate over only 4 hours. The BESS Plume Assessment Addendum (REP3-077) is still based on that short term release rates of 4,6, and 8 hour periods and equally does not consider the prolonged exposure of nearby residents to toxic gases.

Contamination risk to land and groundwater

“The site is underlain by the Lincolnshire Limestone Aquifer, which is highly vulnerable to contamination due to its permeable nature.

We would ask the planning regulator is satisfied whether the proposed 300m³ firewater lagoon capacity is sufficient to contain the combined volume of fire suppression water and a severe rainfall event. The failure to contain this water would lead to the release of highly toxic firewater runoff (containing heavy metals and corrosive acids) into the aquifer, posing potential contamination risk to land and groundwater, the public water supply and environmental health.”

The proposed Springwell BESS is also underlain by the Lincolnshire Limestone Aquifer. Paragraph 5.5.1 of the outline Battery Safety Management Plan (REP1-049) proposes firefighting water storage tanks that contain 452m³. Paragraph 3.11.13 of the outline Drainage Strategy (Appendix A to the Flood Risk Assessment REP1-050) refers to the containment of the contaminated firewater runoff “within an underground attenuation tank or bunded holding lagoon”. No capacity is given and no indication of whether the proposed lagoon or attenuation tank would be of sufficient capacity to hold storm water runoff in addition to the firewater. The lack of detail in these plans has been previously raised as a concern by IPs. The risk to public health from contaminated water now raised in the UKHSA letter adds weight to the argument that Springwell should provide sufficient details at this stage to evidence that there will be no risk to the public water supply and public health.

Absence of an assessment on EMF

“The application completely omits any assessment of Extremely Low Frequency (ELF) Electric and Magnetic Fields (EMFs). Given the presence of high-voltage transformers and high-current power conversion systems close to residential receptors, a formal assessment demonstrating compliance with ICNIRP guidelines is a non-negotiable requirement for public health reassurance.”

The Springwell applicant has provided a high-level Electromagnetic Field Assessment (APP-079).

Long-term Public Health Risk-Decommissioning

“The applicant's commitment to deal with the battery waste (anticipated circa 2074) is unacceptably vague, relying on "legislation in place at the time." The disposal of thousands of tonnes of hazardous lithium-ion

battery waste (toxic and highly reactive) is a vast and extremely expensive undertaking. The council may want to consider whether a more detailed decommissioning framework is required.”

The Statement of Common Ground with Lincolnshire County Council (REP5-021) highlights that the issue of the cumulative effects on waste remains “not agreed” with the Springwell applicant. The concerns of LCC (set out in the post-hearing submissions at REP3-079) are that there will not be recycling capacity for the waste from the proposed development. This includes the “toxic and highly reactive” waste from the battery replacements every 17.5 years.

Noise and Cumulative Effects

“The applicant has undertaken a noise assessment that although compliant with the National Planning Policy Framework (NPPF) and the Noise Policy Statement for England (NPSE) still concludes nighttime noise will not to be below the LOAEL. However, noise impacts have not addressed future infrastructure and cumulative effects. The council may wish to consider the cumulative impacts.”

The Springwell applicant has carried out a noise assessment which includes cumulative effects. I am not clear what “future infrastructure” is being referred to.

APPENDIX



**UK Health
Security
Agency**

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

Environmental.Hazards@ukhsa.gov.uk

www.gov.uk/ukhsa

Our Ref: CIRIS 92951

Your Ref: 25/0491/FUL

9th October 2025

Dear North Kesteven District Council,

Planning Application for: Battery Energy Storage System (BESS) and associated infrastructure on land to the south Of Green Man Road Navenby LN5 0AY - 25/0491/FUL

Thank you for forwarding a copy of this Planning Application consultation to the UK Health Security Agency (UKHSA) on 28th August 2025.

We previously replied to you on 20th June 2025 stating we do not normally respond to these types of planning application consultations unless the council have specific health concerns. Following local

community objections based on health concerns you have requested comments from us. It is understood that the planning application is for a Battery Energy Storage System (BESS) and associated infrastructure on land to the south of Green Man Road Navenby LN5 0AY.

UKHSA has the following comments in regard to the proposed development.

1. Fire Safety and Air Quality Assessment

The proposed 3.5-meter container separation is materially non-compliant with the current National Fire Chiefs Council (NFCC) guidance, which suggests a minimum 6-meter separation to prevent the spread of fire via thermal radiation and to allow safe access for emergency services.

The applicant's low-risk air quality conclusion is based on dispersion modelling for a "worstcase scenario" of only 12 battery modules on fire. The non-compliant 3.5m spacing significantly increases the probability of a domino effect (thermal runaway) that spreads well beyond 12 units. This design failure renders the air quality modelling and its conclusion of "no noticeable discomfort" unreliable and insufficient to safeguard the community.

The assessment fails to address the high probability that a lithium-ion fire will be left to burn out for days or weeks due to Fire and Rescue Service (FRS) potential protocol. This prolongs the potential exposure of nearby residents to toxic gases (Hydrogen Fluoride, Carbon

1

Monoxide) and carcinogenic particulates (PM2.5), representing a severe chronic health risk not considered in the Acute Exposure Guideline Level 1 (AEG1-1) analysis.

2. Contamination Risk to land and groundwater

The site is underlain by the Lincolnshire Limestone Aquifer, which is highly vulnerable to contamination due to its permeable nature.

We would ask the planning regulator is satisfied whether the proposed 300m³ firewater lagoon capacity is sufficient to contain the combined volume of fire suppression water and a severe rainfall event. The failure to contain this water would lead to the release of highly toxic firewater runoff (containing heavy metals and corrosive acids) into the aquifer, posing potential contamination risk to land and groundwater, the public water supply and environmental health.

3. Absence of an assessment on electromagnetic fields (EMF)

The application completely omits any assessment of Extremely Low Frequency (ELF) Electric and Magnetic Fields (EMFs). Given the presence of high-voltage transformers and high-current power conversion systems close to residential receptors, a formal assessment demonstrating compliance with ICNIRP guidelines is a non-negotiable requirement for public health reassurance.

4. Long-Term Public Health Risk (Decommissioning)

The applicant's commitment to deal with the battery waste (anticipated circa 2074) is unacceptably vague, relying on "legislation in place at the time." The disposal of thousands of tonnes of hazardous lithium-ion battery waste (toxic and highly reactive) is a vast and extremely expensive undertaking. The council may want to consider whether a more detailed decommissioning framework is required.

5. Noise and cumulative effects

The applicant has undertaken a noise assessment that although compliant with the National Planning Policy Framework (NPPF) and the Noise Policy Statement for England (NPSE) still concludes nighttime noise will not to be below the LOAEL. However, noise impacts have not addressed future infrastructure and cumulative effects. The council may wish to consider the cumulative impacts.

The planning authority may wish to contact the local authority public health team for matters relating to wider determinants of health associated with this development/proposal.

Yours sincerely

