

Open Hearing Submission Summary – Please note, we were unaware our statements and questions could not be delivered by a nominated other person at the open hearing.

Introduction

We wish to register a strong objection to the proposed development on the grounds of environmental risk, lack of proper fire-safety assurance, and potential pollution within a Drinking Water Protected Area. Of particular concern are: the siting of 76 inverter structures in Flood Zone 3 and 16 in Flood Zone 2, all within this important Area supposedly protected by law; the absence of full and transparent mitigation for contamination risk from inverter or large BESS fires; the lack of direct acknowledgment or engagement from the fire and rescue services; and the misleading presentation of firefighting capacity.

These issues are especially serious given that the water supply for two large reservoirs — serving approximately 600,000 people — is or will soon be drawn from sources that run through or very near the development area. We contend that the Environment Agency (EA) has not applied the precautionary principle as required for such high-risk, sensitive locations.

1. Contamination Risk from Inverter and BESS Fire Incidents

No adequate explanation has been provided as to how discharge contaminants — including PFAS compounds, electronic residues, and burnt plastic waste from inverter fires — would be prevented from entering the Drinking Water Protected Area, which contains watercourses that ultimately flow into the River Trent.

Recent research shows that fires in large-scale energy storage systems can release toxic and corrosive gases such as hydrogen fluoride (HF), hydrogen chloride (HCl), hydrogen cyanide (HCN), and carbon monoxide during thermal runaway events in lithium-ion batteries (Ecology WA 2024)

One study measured PFAS levels up to 6 µg/L in firefighting water from lithium-ion battery incidents, with over 3,600 litres used in just 30 minutes to control a single fire — all potentially capable of leaching into groundwater (UK Gov Report on Energy Storage 2024)

Runoff from firefighting water — often contaminated by foams, burnt plastics, and heavy metals — poses a major threat to soil and water quality. Guidance from environmental authorities warns that spraying water onto a burning or post-fire battery can intensify the release of toxic gases and generate large volumes of contaminated runoff (Ecology WA 2024, Part 9)

2. Fire Service Engagement and Firefighting Capacity Concerns

We are deeply concerned by the complete lack of direct acknowledgment or input from the local fire and rescue services — specifically, Lincolnshire Fire and Rescue Service and Nottinghamshire Fire and Rescue Service — in respect of emergency response planning for this development.

We have written to both Lincs and Notts Fire Chiefs and submitted Freedom of Information (FOI) requests seeking clarity. However, responses have been delayed; we are told the requests may take a further 20 days beyond the statutory period. If the fire services are central to ensuring safe planning and preventing contamination, it is unclear why they have not provided written representation for this proposal. We also respectfully request that allowance be made for us to present any findings or official responses once they are received.

The referenced “two-hour firefighting capacity” is also misleading. This figure assumes a discharge rate of 1,900 litres per minute, yet modern fire appliances are capable of delivering approximately double that rate. Under realistic conditions, this means that the available water supply could be exhausted in less than one hour, calling into question the adequacy of the fire-response plan and its ability to protect sensitive environmental areas.

We have also been informed — though not by the fire services directly — that in the event of a BESS fire, the current operational approach may be to allow the affected unit to burn out while neighbouring units are cooled with water spray. Such an approach would result in uncontrolled burning, with the release of toxic gases and PFAS particles, posing a serious risk of contamination within the Drinking Water Protected Area. Our communities believe this response surely cannot be considered adequate or safe.

3. Visual Impact and Landscape Integration

In addition to environmental and safety risks, there remain significant concerns about the visual and landscape impact of the proposed inverter structures. These are mounted on supports up to six metres in height, approximately two metres higher than the four-metre solar panel arrays. No convincing or detailed mitigation measures have been presented to demonstrate how these structures will be effectively screened or integrated into the surrounding landscape. Without robust visual mitigation, the inverters will appear intrusive and incongruous within the local skyline, rendering the proposal visually and environmentally unacceptable.

4. Drinking Water Supply and the Precautionary Principle

This application sits within a Drinking Water Protected Area that supplies, or directly connects to, water sources feeding two major reservoirs serving approximately 600,000 people. The potential contamination of this water system through runoff, airborne pollutants, or groundwater leaching represents a major public health risk.

Given this sensitivity, the precautionary principle — a core tenet of environmental and public health protection — should be rigorously applied. Yet, there is no evidence that the Environment Agency or planning authority has ensured adequate containment measures, independent verification of fire-response procedures, or full assurance that the development will not endanger the water supply. Approval in the absence of such evidence would be both premature and irresponsible.

Conclusion and Request

In summary, we respectfully request that the examination authority recommend to the Secretary of State for Energy this application should not be approved in its current form for the following reasons:

- There is no credible or demonstrated strategy to prevent contamination within the Drinking Water Protected Area in the event of inverter or battery fire incidents.
- The fire safety and emergency response planning is inadequate, with no written engagement from the relevant fire and rescue services.
- The claimed “two-hour firefighting capacity” is misrepresentative and insufficient.
- The visual and landscape impacts of the six-metre-high inverter installations have not been mitigated.
- The proximity of this site to critical drinking water reservoirs demands application of the precautionary principle, which appears not to have been enforced.

We therefore request that this application be refused or deferred until comprehensive environmental, fire safety, and contamination assessments have been completed and verified by the relevant authorities. We also request the opportunity to present our findings and any responses received from the fire services at the appropriate stage of the planning process. We trust that the planning authority will give full and careful consideration to these significant concerns, prioritising public safety, water quality, and environmental protection.

Yours sincerely,
Tania Russell