

The supporting environmental data for the Dalradian project, being approximately five years old, does not reflect the current state of the local ecosystems or the legislative changes affecting environmental governance in Northern Ireland. Updated and comprehensive environmental data are critical for an accurate assessment under the Environment Act 2021 and the Climate Change Act (Northern Ireland) 2022.

The document's reliance on historical data and models, such as the LowFlows2 software and historical rainfall data from Lough Fea, introduces significant uncertainty. These methods, while industry-standard, have acknowledged limitations and uncertainties, particularly for small catchments (<25 km²) due to the very limited number of gauging stations. This would lead to inaccurate flow predictions for the Pollanroe Burn and Owenreagh River.

This inaccuracy will be magnified due to the topography of the local area within the Sperrin Mountains and the known effects of microclimates that are experienced in this area due to its topography, which have not been included in the reports.

2. Non-Compliance with Legislative Requirements:

The Water (Northern Ireland) Order 1999 mandates the establishment of the Northern Ireland Water Council, which no longer exists without any formal legislative amendment or abolition.

This non-compliance has critical implications for regulatory oversight, consumer advocacy, and the legal integrity of water and sewerage services management in Northern Ireland.

The absence of the Northern Ireland Water Council undermines the statutory framework meant to ensure comprehensive review and public consultation for significant projects like the Curraghinalt Mine.

3. Impact on Local Water Bodies:

The proposed abstraction and discharge of water would lead to reductions in water quantity and quality in nearby streams and rivers, affecting aquatic life. The abstraction would change the natural flow regimes of the local water bodies, especially the Pollanroe Burn & Owenreagh River, affecting aquatic habitats and species that depend on specific flow conditions, particularly the freshwater pearl mussels, which are Ireland's only globally endangered species.

There is unacceptable vagueness in SRK report where it says water will be directed to – how & by what means is water “directed”? There is a lack of clarity regarding the extent and impact of water abstraction, especially in terms of the area affected. Also, how is “contact & non-contact water” to be managed “to maintain separation”?

The importance of peatlands for carbon storage and natural flood management cannot be ignored especially in these times of Climate Change.

Disruption of peatland by abstracting almost half a million gallons of water per day every day of the year for maybe 20 years would lead to drying out of the bog, carbon loss, alter the waterways, increase flood risks and ecological damage.

4. Application of the Precautionary Principle:

Given the potential significant impacts on local ecosystems and the broader environment, and in the absence of comprehensive, up-to-date environmental data, the precautionary principle must be rigorously applied.

This principle is essential to prevent irreversible environmental damage from activities whose impacts are not fully understood.

The water balance model's assumption that mine water ponds will maintain sufficient freeboard to accommodate a 1 in 1000-year storm event depends heavily on the operational efficiency of the water treatment plant.

Any operational failure or reduced efficiency could compromise the flood storage capacity, leading to potential overtopping and significant environmental impacts and possibly the loss of life due to the proximity of local homes downhill from this proposal and a local road, which is used by a significant number of motorists every day, as well as the proposal of a new road for the public directly beside and downhill of the impoundment locations.

5. Operational Assumptions:

The assumption that the water treatment plant will always function at peak efficiency during extreme weather events is optimistic.

Real-world operational challenges, maintenance issues, or unexpected failures could significantly impact the system's ability to manage floodwaters, leading to environmental risks.

The water balance model's scenarios are based on stochastic inputs and Monte Carlo simulations, which provide probabilistic outcomes. While this approach is robust, it is essential to recognize that the predictions are still based on assumptions and modeled scenarios that may not fully capture the complexities of real-world conditions. It should also be noted that there is no evidence of the number of data points and the actual data which was fed into the model, which would have immense bearings on the outcome of the model.

Given these concerns, I urge the Department to reconsider the current processing timeline and allow for a more extensive review period that accommodates detailed public and expert consultations. It is crucial that all evaluations are conducted transparently, with due consideration of the latest environmental data and legal standards.

I trust that the Commission and in turn the Department will take these objections seriously and ensure that the evaluation process for these applications is both rigorous and reflective of the best practices in environmental stewardship.

Yours faithfully,

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