Athenry Community Playgroup; Objection to Proposed Cashla Peaker Power Plant Development. ACP. 324113 – Annmarie Hyland, Chairperson

Re: Proximity to Schools and Health Implications for Children-Proposed Peaker Plant Development, Athenry, Co. Galway

To: An Coimisiún Pleanála 64 Marlborough Street Dublin 1 D01 V902

Date; 19/04/2026

Written By; Annmarie Hyland, Chairperson, Castlelambert, Athenry. Galway H65X738

Dear Sir/Madam,

I (Playgroup Chair) wish to formally object to the proposed peaker plant development in Athenry on the grounds of its proximity to local schools and the associated health risks for children.

1. Proximity to Schools and Childcare Facilities

The proposed development is located inclose proximity to primary and secondary schools, as well as early years childcare settings. Children are a uniquely vulnerable population due to:

- Developing lungs and immune systems
- Higher respiratory rates than adults
- Increased time spent outdoors during school hours
- Greater cumulative lifetime exposure to pollutants

The placing of a fossil fuel-powered peaker plant near educational settings raises serious concerns regarding long-term exposure during critical developmental years. There are 8 schools located within 5km of the proposed plant. Over 3000 children in total.

- Coldwood National School
- Lisheenkyle National School
- Carnaun National School
- Athenry National School
- Athenry Gaoilscoil
- Presentation College Athenry Secondary School
- Clarin College Secondary school
- Coláiste an Eachréidh Athenry Secondary School

2. Air Quality and Respiratory Health Risks

Open Cycle Gas Turbine Peaker plants typically operate during periods of high electricity demand and emit:

- Nitrogen oxides (NOx)
- Particulate matter (PM2.5 and PM10)
- Carbon monoxide
- Volatile organic compounds

Exposure to these pollutants has been linked to:

- Increased incidence of asthma
- Worsening of existing respiratory conditions
- Reduced lung development in children
- Increased school absenteeism due to respiratory illness

Even short-term spikes in emissions can have measurable impacts on children's respiratory function, particularly during outdoor play, sports, and physical education. A paper published in 2022 (Reference 2 below) concluded

"Having natural gas peaker plants poses an extreme risk to the health of the population who live within the surrounding areas."

"Based on the relevant literature surrounding the subject, it can be concluded that the proximity of peaker plants to residences is extremely harmful to those living in the area, specifically as it pertains to respiratory health. Peaker plants release large amounts of pollutants, such as carbon dioxide, nitrous oxides, and fine particulate matter that negatively impact respiratory health. This is best illustrated in the Port Morris neighbourhood of the Bronx, where the childhood asthma rate is well above the citywide average."

"It is recommended that these plants should be transitioned into less pollutant-heavy forms of generation. Additionally, these plants should be located farther away from residences to reduce the risk of respiratory illness."

Given Ireland's existing childhood asthma rates, introducing an additional point source of emissions near schools is deeply concerning.

3. Outdoor Exposure during School Hours

Children spend significant time outdoors during:

- Morning arrival and collection
- Breaks and lunch periods
- Physical education classes
- School sports and extracurricular activities

These activities increase respiratory rate, leading to deeper inhalation of pollutants during peak emission periods. This risk is amplified if plant operations coincide with cold winter days, when schools may still require outdoor yard time.

4. Cumulative and Long-Term Health Implications

The long-term cumulative exposure to low-level pollutants during childhood is associated with:

- Reduced lifelong lung capacity
- Increased risk of chronic respiratory disease
- Cardiovascular implications later in life

Michael O'Hora's, From Pollution to Solutions 2024 published paper (reference 3 below) discusses the extensive health impacts that gas peaker plants pose to residents;"Ambient air pollution exposure can cause myriad health problems, such as reduced lung function, respiratory infections, and an increased risk for stroke, heart disease, chronic obstructive pulmonary disease, and cancer. These adverse health effects from power-plant-related pollution do not only exist in the abstract, as studies have shown that preventable premature deaths can be attributed to air pollution (in the form of particulate matter) can be attributed to power plants."

Planning decisions must consider not only immediate compliance with emission limits, but also precautionary principles when vulnerable populations are involved.

5. Environmental Justice and Precautionary Principle

Planning policy should prioritise the protection of children and vulnerable populations. The precautionary principle must apply where:

- Scientific evidence is clear that this type of plant is extremely dangerous to humans with cumulative exposure
- Vulnerable populations (children) are directly impacted
- Alternative location options and alternative technology exist
- Locating industrial energy infrastructure in close proximity to schools is inconsistent with public health protection.

Request for Refusal or Further Assessment

In light of the above, I respectfully request that An Coimisiún Pleanála:

- Refuse permission for this development at the proposed location
- At minimum, require an independent child-focused Health Impact Assessment;
- Conduct a detailed cumulative air quality modelling assessment specifically examining school-hour exposure scenarios;
- Apply enhanced setback distances from educational settings.

The health and wellbeing of children must be prioritised in planning decisions. The potential risks posed by this development, particularly given its proximity to schools, warrant serious reconsideration.

Yours faithfully,
Annmarie Hyland OT BSc
Chairperson
Athenry Playgroup Committee

References

1. Elena M. Krieger, Joan A. Casey, Seth B.C. Shonkoff, A framework for siting and dispatch of emerging energy resources to realize environmental and health benefits: Case study on peaker power plant displacement,Energy Policy,Volume 96,2016,Pages 302-313,ISSN 0301-4215,
https://doi.org/10.1016/j.enpol.2016.05.049.
(https://www.sciencedirect.com/science/article/pii/S0301421516302798)

2. Jourdain, J. The Impact of Peaker Plants on New York City Residents City College of New York ENGL 2100 Writing for the Sciences April 24, 2022

3. Michael O'Hora, From Pollution to Solutions: Exploring Equitable Remedies for Communities Impacted by Peaker Plants in NYC, 2024, Environmental Justice Seminar Elisabeth Haub School of Law at Pace University

4. Fitch, Eric. *The Ability of Hydrogen Energy Storage to Replace Natural Gas Peaker Plants In the 2030 Time Frame.* 2019. https://doi.org/10.17615/x185-fk28

5. Rosewater, David, and Amanda West. *Energy Storage Gas Peaker Replacement: Optimal Sizing and Environmental Benefits*. No. SAND2022-8275C. Sandia National Laboratories (SNL-NM), Albuquerque, NM (United States), 2022.