Hydro-G

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26th May 2026

An Coimisiún Pleanála
64 Marlborough St, Rotunda, Dublin 1, D01 V902

Re: OBSERVATION ON BEHALF of Boher Leamonaghan Group Water Scheme (Company Limited By Guarantee)
An Coimisiún Pleanála - Case reference: PAX19.324161
Proposed 15 no. wind turbines, a permanent 220kV on-site substation, and associated infrastructure **at Lemanaghan and surrounding townlands, Co. Offaly.**

On behalf of the Boher Leamonaghan Group Water Scheme (GWS), and upon direct instruction of Mr. Frankie Fox (Secretary to the GWS), I have been asked to lodge an Observation, as a formal Objection, to the lack of consideration and risk posed to the security of supply from groundwater and the distribution mains network and two reservoirs of the GWS. The source boreholes of the Boher Leamonaghan GWS are in proximity to the proposed development.

I am a professional consultant hydrogeologist with expertise in Public Water Supply from Groundwater and Environmental Impact Assessment (EIA). My Statement of Expertise is presented at the end of this Observation presented on behalf of the Boher Leamonaghan GWS. I have evaluated the information presented in the Land Soils & Geology Chapter (Chapter 8) and the Water Chapter (Chapter 9) of the proposed Lemanaghan Wind Turbine proposal.

The Water Chapter of the proposed wind farm application does not address the risks posed to the GWS's groundwater source on a site-specific or 3-dimensional basis. In Section 9.3.15.1 of the Water Chapter it is stated that *"The closest mapped GWS is the Boher Lamonaghan GWS, located approximately 0.6km northeast of the Proposed Project site in the townland of Castlearmstrong. The mapped source protection area for this GWS does not fall within the Proposed Project site. At its closest point the southern boundary of the source protection area is 400m north of the Proposed Project site."* However, the risk posed to the hydrogeological regime by the proposed development is not related to proximity. Instead, the risk is that the proposed construction phase will result in puncturing peat land and introducing a risk that Organic Carbon can mobilise from the surface and foundations of the turbines and thereby introduce a Trihalomethane (THM) Formation Potential Risk to the population served by the GWS. The current Total Organic Carbon concentration in the GWS's groundwater abstracted from the 2 operational Boreholes, is 0.53 mg/l TOC (Refer to Appendix A). This result suggests that there is currently no potential for THM formation when the water is chlorinated and distributed to customers. The proposed construction of wind turbine bases and haul roads before An Coimisiún Pleanála will result in excavation into the subsurface through layers of peat and bedrock. This has the potential to change the Total Organic Carbon concentration of the source water to the GWS and there is a chronic health risk presented. The Risk posed to the GWS has not been assessed in the EIAR. The GWS object to this.

The Water Chapter of the proposed Lemanaghan Wind Farm refers to a Zone of Contribution that was published in 2013 (Meehan, R, November 2013). It is now 2026 and the number of connections to domestic residents and the agricultural community has increased. The resultant Zone of Contribution will have increased. This is an issue ignored in the information presented, thus far, on behalf of the applicant to An Coimisiún Pleanála. The

GWS and I would like to draw your attention to the text of the Zone of Contribution Report (Meehan, 2013) in the context of the 'Conceptual Model' for the site (page 7 of the Meehan 2013 Report):

> *"The Boher Leamonaghan source boreholes are supplied by a limestone bedrock aquifer (Ll aquifer) which occupies the subsurface of the area on and around the source. The limestone aquifer underlies a body of sands and gravels which are an aquifer in their own right. The soils and subsoils overlying both aquifers are very well drained and the proportion of rainfall that recharges through them into both the sand and gravel and the limestone aquifer is high. The rest water level in the aquifer is within the sands and gravels and indicating that the gravel aquifer is in hydraulic continuity (connection) with the bedrock aquifer, meaning that the gravels provide storage for the bedrock aquifer. The boreholes themselves abstract from the fractures in the bedrock, which draw down the overlying water table level." (Section 4, page 7, Meehan, 2013, for the NFGWS & GSI Boher Leamonaghan GWS Zone of Contribution Report).*

The fact that the authors of the EIAR have dismissed potential for impact on the GWS on the basis of a 1-dimensional plan distance on a map is a significant human health issue for the security of supply for over 1,000 people in local homes around the proposed Wind Farm at Lemanaghan, more than 80 farms, numerous businesses and multiple community centres in the area. The human health issue arises from the fact that the Zone of Contribution Report states that the subsoil aquifer (Sands & Gravels) that overly the bedrock are in connection. Therefore, to propose construction of roads, crane hard standing and excavation of turbine bases in the peats and subsoils is a risk to introducing Organic Carbon and THM formation potential.

The issue of the applicant's agent's omission of the Risk Assessment obligations of the European Union Drinking Water Regulations 2023 (SI 99 of 2023) is no small matter. A Risk Based catchment assessment is required of the European Union Drinking Water Regulations 2023 (SI 99 of 2023). Without detail presented by the applicant to populate a catchment-based Drinking Water Regulation (2023) Risk Assessment for impact on groundwater as a source of public supply, a legally defensible decision by a Planning Authority cannot be executed. There is neither evidence of consultation with the GWS nor evidence of the Statutory Risk Assessment being completed. With respect to Boher Leamonaghan Group Water Scheme, whilst the Planning Authority MIGHT review the Geological Survey of Ireland's Groundwater Data and Maps portal and determine that the application area and its enabling works are not within the mapped Zone of Contribution (ZOC) (Meehan, 2013), as the applicant attempts to convey in their Chapter 9, the Planning Authority's determination would be founded in error. An Coimisiún Pleanála is advised that the mapped ZOC is over 13 years old and based on a smaller volume of groundwater than currently abstracted and the ZOC published was determined using the UNIFORM FLOW EQUATION. The proposal now to add potential new ingress locations, arising from the proposed construction, within peatland underlying the proposed Wind Turbine development areas, in addition to an increased volume of groundwater currently being abstracted, creates a risk for which no information has been presented for the benefit of An Coimisiún Pleanála's statutory obligation to complete the EIA process themselves on the basis of the information before them. The applicant has failed to consider current information that could have been obtained in the duration of their assessments.

On a wider scale understanding of the climate crisis, outside of the business of the rush to build turbines, the GWS would ask why the 'Consideration of Alternatives' obligation of the EIA Directive was not considered in tandem with the obligations of the Nature Restoration Law so that the Lemanaghan Bog could be returned to nature rather than continued degradation? It is now a legal requirement to make decisions on the basis of the European Union's Nature Restoration law. The applicant and their agents fail to acknowledge the changed legislative landscape and how their proposed development is situated on exactly the type of landscape to which

the Nature Restoration Law applies. The European Union (2024) REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on nature restoration and amending Regulation (EU) 2022/869 clearly sets out targets for the year 2030, i.e. less than 4 years' time. Readers are referred to the full test of the EU 92024) statements on what is now required of us all and in the current de novo determinations of the Board. https://data.consilium.europa.eu/doc/document/PE-74-2023-INIT/en/pdf.

Also, in relation to the local water environment, the Poor and Moderate Status of many of the surface water bodies in or connected to the proposed development area is of concern.

On behalf of the Boher Leamonaghan Group Water Scheme and specifically upon the instruction of the secretary of the GWS, Mr. F. Fox, the GWS formally advise An Coimisiún Pleanála that the information presented by the applicant fails to document the 3-dimensional risk, posed to the source water of the GWS, by the nature of the construction enabling phase and foundation installations of the proposed development. Neither have the risks posed to the water mains distribution system being adequately assessed in the documentation currently before An Coimisiún Pleanála. We look forward to the Inspector and the Commission's attendance to the health of the consumers of the GWS groundwater.

Yours Sincerely

Pamela Bartley

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Dr. Pamela Bartley B.Eng, M.Sc., Ph.D

References

Central Laboratory, Dublin: Certificate of Analysis Boher GWS November 2025.

European Union (Drinking Water) Regulations 2023 (S.I. No. 99 of 2023).

European Union (2024) REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on nature restoration and amending Regulation (EU) 2022/869. THE EUROPEAN PARLIAMENT THE COUNCIL Brussels, 15 March 2024 (OR. en) 2022/0195(COD) PE-CONS 74/23 ENV 1402. CLIMA 605, FORETS 193, AGRI 758, POLMAR 60, CODEC 2314. LEGISLATIVE ACTS AND OTHER INSTRUMENTS. Subject: https://data.consilium.europa.eu/doc/document/PE-74-2023-INIT/en/pdf

Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (EIA Directive).

Meehan, R. (2013) Establishment of Groundwater Zones of Contribution Boher Leamonaghan Group Water Scheme Castlearmstrong Boreholes. Prepared by Eur Geol Dr. Robert Meehan PGeo. Consultant Geologist and Geological Survey of Ireland, Groundwater Programme (Monica Lee, Caoimhe Hickey and Taly Hunter Williams) and with assistance from Boher Leamonaghan GWS and The National Federation of Group Water Schemes.

Statement of Expertise Pamela Bartley B.Eng., MSc., Ph.D

This report has been prepared by Dr. Pamela Bartley. She is a water focussed civil engineer and is considered an Expert Service Provider (ESP) in the matter of groundwater sources and legislation relating to Public Water Supply and Group Water Schemes, EIA and construction impacts on hydrology and hydrogeology. Pamela is a team member in Environmental Impact Assessments and the preparation of Environmental Impact Assessment Reports (EIARs) for the extractive industry in Ireland.

Pamela is engaged as an independent consultant to Uisce Eireann, Group Water Schemes supplying potable water to the public, regionally important quarries. She has over 25 years of field-based practice in borehole drilling, groundwater monitoring and abstraction point management and the assessment of rivers for the purposes of Section 4 Discharge and Water Pollution Act evaluations. Her Ph.D was a field-based Impact Assessment tying actions at the land surface to responses in water by application of the Source Pathway Receptor (SPR) Risk Assessment model. Pamela is qualified and IOSH certified to act as PSDP (Project Supervisor Design Phase) & PSCS (Project Supervisor Construction Stage) as defined by the Construction Regulations. She has a wealth of experience in working at large scale construction sites involving earth movement and placement of rock, such as would occur in the construction of pads for Turbine erection. She is co-owner of Hydro-G and this Ltd. company is a registered Irish Water Supplier (no. 1855). Pamela Bartley is HSQE approved within Irish Water and is one of their Hydrogeologist Framework service providers. Upon completion of a Diploma in Water and Wastewater Technology at Sligo RTC, she completed a degree in Civil Engineering at Queens University, Belfast and then completed a Master of Science in Environmental Engineering followed by a hydrogeological focussed Ph.D. on Karst Groundwater Impact: both postgraduate degrees were completed within the school of Civil Engineering at Trinity College, Dublin.

Her key work areas are groundwater impact and groundwater use. Pamela has successfully completed post doctorate formal course training in the areas of:

- PSDP & PSCS (IOSH certified, 2016)
- Karst Hydrogeology (GSI, 2013)
- Planning & Development Act (IE, 2010) & Expert Witness (IE, 2011)
- On Site Wastewater & Water Services Amendment Act 2012 (IE, 2012 & Dublin 2012)
- Zero Discharge Willow Wastewater Systems Design Courses (Denmark 2008 & 2011 & Ireland 2012)
- Surface Water Regulations 2009 & Assessment of Licensing (DoE, 2010 & 2011)
- Sustainable Drainage (Wallingford/CIRIA, 2005 & 2008)
- Source Protection Zone Delineation (IGI/GSI, 2007)
- Groundwater & Contaminant Microbiology (IGI/GSI, 2006)
- Site Suitability Assessment (FETAC, 2002) & Applied Groundwater Modelling (ESI, UK, 2000)

As a result of work in evaluating planning appeals, Pamela has become specialist in planning evaluations in the context of enacted Irish Regulation and EU Directives concerning the water environment such as the Groundwater Regulations (S.I. No. 9 of 2010 & Amendment Regulations S.I. No. 366/2016), Surface Water Regulations (S.I. No. 272 of 2009 & Amendment Regulations S.I. No. 386 of 2015), Water Framework and Habitats' Directives. She has been an invited guest speaker at An Bord Pleanála, The Irish Concrete Federation, The Health Service Executive, Environmental Health Officers National Conference, The Irish Planning Institute's National Conference, The International Association of Hydrogeologist's National Conference (Irish Branch) and has delivered hydrogeological lectures to the public during Science Week. In the past, she has held full time lecturing positions in third level institutions (WIT & CIT, 1996 – 1999), delivered practical laboratory instruction in the assessment of subsoils for the FETAC Site Assessor programme and also demonstrated hydraulics laboratory and practical field survey tutorial modules at Trinity College Dublin (1996). Pamela is a qualified and certified 'Site Assessor' and has been an interviewer of examination candidates in respect of eligibility for the Site Suitability FETAC Qualification.

Pamela Bartley's company is Bartley Hydrogeology ltd., registered to trade as Hydro-G. The company holds industry requisite professional indemnity insurance and employers, public and products liability insurances.

Appendix A

Central Laboratory, Dublin: Certificate of Analysis Boher GWS November 2025.

Dublin City Council
Comhairle Cathrach Bhaile Átha Cliath

Saotharlann Lárnach
Teach Eblana
68-70 Lána Mhuire Mhaith
Baile Átha Cliath 8

Central Laboratory
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68-70 Marrowbone Lane
Dublin 8

Tel. 353-1-2224383
Fax 353-1-4544797
email: waterlab@dublincity.ie
http://www.dublincity.ie

Certificate of Analysis

Sample Number 2411213

Sampling Point 33528 Offaly Co.Co. Zone Boher GWS Private Group Water Scheme
Kitchen Sink Damien Casey
25314299

Sampling Method Grab

Customer Laois County Council
Áras an Chontae
Portlaoise
Co.Laois

Date & Time Sampled 24/11/2025 09:30

Date & Time Received 24/11/2025 15:37

Arrival Condition Satisfactory

Description of Item Potable Water

Sampled By Laois Co. Co.

Method		Analysis Description	Result	Units	Date of Testing
001P		Apparent Colour	<1	°Hazen	24-Nov-2025
002T		Turbidity	<0.10	NTU	24-Nov-2025
005A	[#*]	Temperature	9	°C	29-Nov-2025
006M		pH	7.2	pH	24-Nov-2025
007M		Conductivity (20°C)	630	µS/cm	24-Nov-2025
015C		T.O.C.	0.53	mg/l	27-Nov-2025
018A	[#*]	Total Residual Chlorine	0.30	mg/l	29-Nov-2025
019A	[#*]	Free Residual Chlorine	0.22	mg/l	29-Nov-2025
020G		Nitrate as NO3	14.97	mg/l as NO3	24-Nov-2025
021G		Nitrite	<0.016	mg/l as NO2	24-Nov-2025
022G		Ammonium	0.025	mg/l as NH4	24-Nov-2025
033G		TON	3.38	mg/l as N	24-Nov-2025
043s		Cyanide	<5	µg/l	05-Dec-2025
285A		Clostridium perfringens	<1	CFU/100ml	24-Nov-2025
290D		Total Coliforms	<1	MPN/100ml	24-Nov-2025
291D		E. coli	<1	MPN/100ml	24-Nov-2025

field analysis * non-accredited analysis $ and/or SUB subcontracted test

The 'Date of Testing' associated with the field test results and the subcontracted test results is the 'Date of Result Entry'. The field tests are determined at the time of sampling.

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Method	Analysis Description	Result	Units	Date of Testing
292	Enterococci	<1	CFU/100ml	24-Nov-2025
m997	Nickel	< 0.5	µg/l	02-Dec-2025
m997	Copper	0.003	mg/l	02-Dec-2025
m997	Lead	< 0.1	µg/l	02-Dec-2025
m997	Magnesium	0.07	mg/l	02-Dec-2025
m997	Aluminium	< 1	µg/l	02-Dec-2025
m997	Potassium	0.17	mg/l	02-Dec-2025
m997	Calcium	0.21	mg/l	02-Dec-2025
m997	Chromium	0.22	µg/l	02-Dec-2025
m997	Manganese	< 0.1	µg/l	02-Dec-2025
m997	Iron	< 1	µg/l	02-Dec-2025
m997	Arsenic	< 0.1	µg/l	02-Dec-2025
m997	Selenium	< 0.5	µg/l	02-Dec-2025
m997	Cadmium	< 0.1	µg/l	02-Dec-2025
m997	Antimony	< 0.5	µg/l	02-Dec-2025
m997	Sodium	176	mg/l	08-Dec-2025

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Method		Analysis Description	Result	Units	Date of Testing
m998		Boron	0.015	mg/l	03-Dec-2025
SUB	[*$]	Total Pesticides	<0.500	µg/l	19-Dec-2025
SUB	[$]	Benzofluoranthene (b)	<0.0065	µg/l	19-Dec-2025
SUB	[$]	Benzofluoranthene (k)	<0.0049	µg/l	19-Dec-2025
SUB	[$]	Benzoperylene (ghi)	<0.0068	µg/l	19-Dec-2025
SUB	[$]	Benzopyrene (a)	<0.0027	µg/l	19-Dec-2025
SUB	[$]	Indeno(1,2,3 - cd)pyrene	<0.0059	µg/l	19-Dec-2025
SUB	[$]	Total PAHs	<0.1000	µg/l	19-Dec-2025
011M		Total Hardness	<5	mgCaCO3/l	26-Nov-2025
m960		Mercury	< 0.05	µg/l	27-Nov-2025
SUB		Acrylamide	<0.004	µg/l	19-Dec-2025
SUB		Epichlorohydrin	<0.02	µg/l	19-Dec-2025
SUB		Vinyl Chloride	<0.118	µg/l	19-Dec-2025
SUB		Trichloroethene & Tetrachloroethen	<1.9	µg/l	19-Dec-2025
SUB		Total THM's	1.1	µg/l	19-Dec-2025
SUB		Chloroform	<4.7	µg/l	19-Dec-2025

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Method	Analysis Description	Result	Units	Date of Testing
SUB	Bromodichloromethane	<0.5	µg/l	19-Dec-2025
SUB	Dibromochloromethane	1.1	µg/l	19-Dec-2025
SUB	Bromoform	<2	µg/l	19-Dec-2025
SUB	1,2 Dichloroethane	<0.45	µg/l	19-Dec-2025
SUB	Benzene	<0.15	µg/l	19-Dec-2025
SUB	DiBromoacetic Acid	0.5	µg/l	19-Dec-2025
SUB	DiChloroAcetic Acid	<0.4	µg/l	19-Dec-2025
SUB	MonoBromoAcetic Acid	<0.6	µg/l	19-Dec-2025
SUB	MonoChloroAcetic Acid	<0.6	µg/l	19-Dec-2025
SUB	TriChloroAcetic Acid	<0.4	µg/l	19-Dec-2025
SUB	Total Haloacetic Acids	0.5	µg/l	19-Dec-2025
SUB	PFBA (375-22-4)	<0.0015	µg/l	19-Dec-2025
SUB	PFBS (375-73-5)	<0.0011	µg/l	19-Dec-2025
SUB	PFDA (335-76-2)	<0.00135	µg/l	19-Dec-2025
SUB	PFDoA (307-55-1)	<0.0012	µg/l	19-Dec-2025
SUB	PFDoS (79780-39-5)	<0.0015	µg/l	19-Dec-2025

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Method	Analysis Description	Result	Units	Date of Testing
SUB	PFDS (335-77-3)	<0.00150	µg/l	19-Dec-2025
SUB	PFHpA (375-85-9)	<0.00098	µg/l	19-Dec-2025
SUB	PFHpS (375-92-8)	<0.0012	µg/l	19-Dec-2025
SUB	PFHxA (307-24-4)	<0.0008	µg/l	19-Dec-2025
SUB	PFHxS (355-46-4)	<0.00147	µg/l	19-Dec-2025
SUB	PFNA (375-95-1)	<0.00086	µg/l	19-Dec-2025
SUB	PFNS (68259-12-1)	<0.00151	µg/l	19-Dec-2025
SUB	PFOA (335-67-1)	<0.00139	µg/l	19-Dec-2025
SUB	PFOS (1763-23-1)	<0.00135	µg/l	19-Dec-2025
SUB	PFPA (2706-90-3)	<0.00119	µg/l	19-Dec-2025
SUB	PFPeS (2706-91-4)	<0.0015	µg/l	19-Dec-2025
SUB	PFTrDA (72629-94-8)	<0.0014	µg/l	19-Dec-2025
SUB	PFTrDS (791563-89-8)	<0.0015	µg/l	19-Dec-2025
SUB	PFUnA (2058-94-8)	<0.00135	µg/l	19-Dec-2025
SUB	PFUnDS (749786-16-1)	<0.0015	µg/l	19-Dec-2025
SUB	PFAS (Sum of 20)	<0.0261	µg/l	19-Dec-2025

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SUB	Uranium	3	µg/l	19-Dec-2025
SUB	Bisphenol A	<0.01	µg/l	19-Dec-2025
775M	Chloride	17	mg/l as CL	25-Nov-2025
775M	Fluoride	<0.1	mg/l as F	25-Nov-2025
775M	Sulphate	16	mg/l as SO4	25-Nov-2025
775M	Bromate	<2.5	ug/l as BrO3	25-Nov-2025
775M	Chlorate	<0.1	mg/l	25-Nov-2025
775M	Chlorite	<0.1	mg/l	25-Nov-2025
SUB	2,3,6-Trichlorobenzoic Acid	<0.019	µg/l	19-Dec-2025
SUB	2,4-D	<0.0249	µg/l	19-Dec-2025
SUB	2,4-DB	<0.019	µg/l	19-Dec-2025
SUB	Atrazine	<0.0166	µg/l	19-Dec-2025
SUB	Bentazone	<0.0178	µg/l	19-Dec-2025
SUB	Boscalid	<0.013	µg/l	19-Dec-2025
SUB	Chlorfenvinphos	<0.0148	µg/l	19-Dec-2025
SUB	Chlorpropham	<0.007	µg/l	19-Dec-2025

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Teach Eblana
68-70 Lána Mhuire Mhaith
Baile Átha Cliath 8

Central Laboratory
Eblana House
68-70 Marrowbone Lane
Dublin 8

Tel. 353-1-2224383
Fax 353-1-4544797
email: waterlab@dublincity.ie
http://www.dublincity.ie

Certificate of Analysis

, cont.

Sample Number 2411213

Sampling Point 33528 Offaly Co.Co. Zone Boher GWS Private Group Water Scheme
Kitchen Sink Damien Casey
25314299

Sampling Method Grab

Customer Laois County Council
Áras an Chontae
Portlaoise
Co.Laois

Date & Time Sampled 24/11/2025 09:30

Date & Time Received 24/11/2025 15:37

Arrival Condition Satisfactory

Description of Item Potable Water

Sampled By Laois Co. Co.

Method	Analysis Description	Result	Units	Date of Testing
SUB	Chlortoluron	<0.0148	µg/l	19-Dec-2025
SUB	Clopyralid	<0.018	µg/l	19-Dec-2025
SUB	Cypermethrin	<0.006	µg/l	19-Dec-2025
SUB	Diazinon	<0.0131	µg/l	19-Dec-2025
SUB	Dicamba	<0.0215	µg/l	19-Dec-2025
SUB	Dichlobenil	<0.009	µg/l	19-Dec-2025
SUB	2,4-DP (Dichloroprop)	<0.0141	µg/l	19-Dec-2025
SUB	Dieldrin	<0.0046	µg/l	19-Dec-2025
SUB	Diflufenican	<0.020	µg/l	19-Dec-2025
SUB	Diuron	<0.0109	µg/l	19-Dec-2025
SUB	Epoxiconazole	<0.0180	µg/l	19-Dec-2025
SUB	Fluroxypry	<0.023	µg/l	19-Dec-2025
SUB	Glyphosate	<0.010	µg/l	19-Dec-2025
SUB	Isoproturon	<0.0084	µg/l	19-Dec-2025
SUB	Linuron	<0.0047	µg/l	19-Dec-2025
SUB	MCPA	<0.021	µg/l	19-Dec-2025

field analysis * non-accredited analysis $ and/or SUB subcontracted test

The 'Date of Testing' associated with the field test results and the subcontracted test results is the 'Date of Result Entry'. The field tests are determined at the time of sampling.

Dublin City Council
Comhairle Cathrach Bhaile Átha Cliath

Saotharlann Lárnach
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68-70 Lána Mhuire Mhaith
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Áras an Chontae
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Co.Laois

Date & Time Sampled 24/11/2025 09:30

Description of Item Potable Water

Date & Time Received 24/11/2025 15:37

Sampled By Laois Co. Co.

Arrival Condition Satisfactory

Method	Analysis Description	Result	Units	Date of Testing
SUB	MCPP (Mecoprop)	<0.025	µg/l	19-Dec-2025
SUB	Metaldehyde	<0.020	µg/l	19-Dec-2025
SUB	Metazachlor	<0.0060	µg/l	19-Dec-2025
SUB	Pendimethalin	<0.0155	µg/l	19-Dec-2025
SUB	Pentachlorophenol	<0.0157	µg/l	19-Dec-2025
SUB	Picloram	<0.0222	µg/l	19-Dec-2025
SUB	Propyzamide	<0.0145	µg/l	19-Dec-2025
SUB	Simazine	<0.0170	µg/l	19-Dec-2025
SUB	Triclopyr	<0.025	µg/l	19-Dec-2025

Authorised by: _____ (Seán Walsh / Quality Manager)

Authorised on: 22/12/2025

field analysis * non-accredited analysis $ and/or SUB subcontracted test

The 'Date of Testing' associated with the field test results and the subcontracted test results is the 'Date of Result Entry'. The field tests are determined at the time of sampling.