

REFERENCE

2526320

RELEASE DATE

October 2025

SUBJECT

Various queries related to Water Quality and testing for radioactive substances.

RESPONSE

NI Water replies to each of your queries in turn as follows.

Detection and Monitoring

What radioactive substances (including radon, uranium, thorium, radium, and other radionuclides) are tested for in raw water and treated water at Moyola WTW and Lough Fea WTW?

NI Water undertakes radiological monitoring for the following parameters, as required under the drinking water regulations¹ at Moyola WTW and Lough Fea WTW.

- Indicative Dose (through screening for gross alpha and beta),
- Tritium, and
- Radon

How frequently are these tests carried out?

Please provide copies of the most recent monitoring results for the past five years.

These are carried out once per year; please find attached as Annex A the results since 2020.

Removal and Treatment

What processes are used at Moyola and Lough Fea WTW to remove or reduce radioactive substances, if present?

The results are all well below the regulatory limit for these parameters, showing low risk to the treated drinking water supply.

¹ The Water Supply (Water Quality) Regulations (NI) 2017

Water treatment processes are very effective for the removal of radiological substances. The treatment processes in place at both WTWs can remove up to 100% of radioactivity suspended in raw water. Aeration can remove radon gas.

- Moyola WTW processes – coagulation, flocculation, DAF, filtration and activated carbon
- Lough Fea WTW processes – coagulation, flocculation, clarification, filtration

Are specific technologies (e.g., activated carbon, ion exchange, reverse osmosis, lime softening) employed for radionuclide reduction?

No specific technologies are employed for radionuclide reduction. Refer to treatment processes above which are effective for the removal of radiological parameters.

If no specific radionuclide removal is undertaken, please provide details of the risk assessments and rationale for this.

Radiological hazards are assessed within our Regulation 30 Drinking Water Safety Plan for each works. We do not hold a separate stand-alone radiological risk assessment document; therefore Regulation 12(4)(a) EIR applies to that specific item.

<https://www.legislation.gov.uk/nisr/2017/212/regulation/30/made>

Compliance and Regulation

How does NI Water demonstrate compliance with UK and EU Drinking Water Standards on radioactivity in drinking water at these two plants?

Radioactivity monitoring is carried out in line with a Notice under Regulation 19(7) of the drinking water regulations. In line with the Notice, we take one operational assurance sample per year at each WTW. Annex A provides results (2020–2024).

Please provide any reports, audits, or correspondence with the Drinking Water Inspectorate (or equivalent) relating to radioactivity at Moyola or Lough Fea WTW since 2015.

We have not submitted any special reports to DWI (NI) relating specifically to radioactivity at either WTW; therefore 12(4)(a) of the EIR applies.

Incidents and Exceedances

Have there been any incidents, exceedances, or regulatory failures relating to AGAIN radioactive substances at Moyola WTW or Lough Fea WTW in the past 10 years? If yes, please provide details, dates, and actions taken.

No radioactivity exceedances or incidents at either WTW in the past ten years; therefore, Regulation 12(4)(a) of the EIR again applies.

Regulation 12(4)(a) of the EIR – information not held

Regulation 12(4)(a) (Information not held) provides that “*a public authority may refuse to disclose information to the extent that it does not hold that information when an applicant’s request is received*”.

All exceptions under the EIR are qualified and so, in deciding whether to disclose the requested information, NI Water must consider the public interest. However, this is not possible where the information is not held.