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Telephone: 01925 237000

unitedutilities.com

Our ref: EIR/ID664
Date: 10/10/2026
Email: EIRRequests@uuplc.co.uk

Dear [redacted],

Thank you for your request for environmental information. We appreciate your interest, and we want to let you know that your request has been carefully considered in accordance with the Environmental Information Regulations (EIR).

Your request(s):

Please provide the following environmental information:

1. *The average annual tonnage of sewage sludge (biosolids) supplied for agricultural use for each of the last three years (please specify whether figures relate to calendar or financial years).*
2. *The current price, pricing mechanism, or charging structure per tonne for sewage sludge supplied for agricultural use (summary, indicative, or banded figures are acceptable).*
3. *The parameters for which sewage sludge is tested prior to being supplied for agricultural use, including chemical, biological, and physical parameters.*
4. *The frequency at which the above-mentioned testing is undertaken.*
5. *A summary of any measures implemented, policies adopted, or changes made following the Environment Agency's 2017 report on sewage sludge and land application, particularly in relation to contaminants such as PFAS ("forever chemicals") and microplastics.*

Our response

1. **The average annual tonnage of sewage sludge (Biosolids) supplied for agricultural use for each of the last three years (please specify whether figures relate to calendar or financial years).**

This information is provided on a financial year basis as part of our Annual Performance Report, which is published each year on or before 15 July. This report can be found at the following link, United Utilities - Annual Performance Reports. For ease of reference, I have copied the performance figures for the last three years in the table below.

Financial years	2022/23	2023/24	2024/25
Tonnes (dry solids) recycled to Agriculture	97,000	104,000	112,000

2. **The current price, pricing mechanism, or charging structure per tonne for sewage sludge (Biosolids) supplied for agricultural use (summary, indicative, or banded figures are acceptable).**

Please be aware that the information you have requested is deemed to be commercially sensitive, as this sets out our charging strategy for bioresources, and as such cannot be disclosed under the EIR. This approach is in line with Regulation 12(5)(e) which states that a public authority may refuse to disclose information to the extent that its disclosure would adversely affect the confidentiality of commercial or industrial information where such confidentiality is provided by law to protect a legitimate economic interest.

3. **The parameters for which sewage sludge is tested prior to being supplied for agricultural use, including chemical, biological, and physical parameters.**

Biosolids are tested in accordance with all current statutory requirements under both UK and EU legislation for the recycling of Biosolids to land these requirements form part of the Sludge (Use in Agriculture) Regulations 1989, schedule 1, and the Sewage Sludge in agriculture: code of practice for England, Wales and Northern Ireland.

Biosolids from each point of export to land are tested individually for.

- The percentage content of dry matter, organic matter, nitrogen and phosphorus and pH
- The concentration in milligrams per kilogram of dry matter for the following determinands referred to in the code of practice as PTEs (potentially toxic elements):
    - Arsenic
    - Cadmium
    - Chromium
    - Copper
    - Fluoride
    - Lead
    - Mercury
    - Molybdenum
    - Nickel
    - Selenium
    - Zinc

In addition to sampling the Biosolids, soil from the fields which are intended for use is sampled. Under the Code of Practice, the frequency for sampling is 20 years following the first application of Biosolids, with the first sample taken prior to the proposed first application of Biosolids. There are two types of soil testing, statutory and operational. Statutory testing provides analysis for all the PTEs listed above and phosphorus and pH. Operational field samples are also taken to monitor soil nutrient status, with a standard analysis measuring soil phosphorus, potassium, magnesium, organic matter and pH levels.

Applications of Biosolids to land must not cause an exceedance for any listed PTE in the soil, there are also limits set out in the code of practice for the maximum permissible average annual rate of PTE addition over ten years (kg/ha) for each individual PTE. There are also restrictions on Biosolids usage in terms of soil pH as it influences how PTEs are taken up by plants.

In addition to the regulatory requirements of current legislation, United Utilities Water recycle

Biosolids in accordance with the industries voluntary Safe Sludge Matrix and the Biosolids Assurance Scheme (BAS) which requires monitoring of E.coli and Salmonella.

The Agricultural Development and Advisory Service (ADAS) Safe Sludge Matrix sets out the safe application of Biosolids to specific crops in relation to pathogen levels as defined in section 2 of the BAS standard.

We monitor compliance for all the activities set out above and take corrective actions when required.

Links to the referenced codes and standards can be found below.

Sewage sludge in agriculture: code of practice for England, Wales and Northern Ireland - GOV.UK
Protecting our water, soil and air: A code of Good Agricultural Practice for farmers, growers and land managers
BAS-Standard-Issue-5-10th-July-2020-web-version.pdf
P2357 A/W
Biosolids-Agric-Good-Practice-Guidance-January-2019.pdf

4. The frequency at which the above-mentioned testing is undertaken.

The minimum frequency for the testing of Biosolids as set out in the Sludge (Use in Agriculture) Regulations 1989 is six months for regulatory determinands, United Utilities Water carries out scheduled monthly testing.

For microbiological testing (E.coli, Salmonella) although not a regulatory requirement as part of a voluntary commitment BAS stipulates a minimum of three months as part of a Hazard Analysis and Critical Control Point plan (HACCP) procedure. United Utilities Water carries out scheduled bi-monthly testing.

The analysis of soils is carried out in accordance with the codes of practice and BAS standard with a voluntary minimum interval of ten years for statutory analysis and five years for operational analysis.

5. A summary of any measures implemented, policies adopted, or changes made following the Environment Agency's 2017 report on sewage sludge and land application, particularly in relation to contaminants such as PFAS ("forever chemicals") and microplastics.

The AECOM M2L report in 2017 focussed primarily on third party lime treatment of raw sludges. Whilst this is still an approved form of treatment for the control of pathogens (PTE's levels are managed prior to sludge being dewatered and then limed), it is the least favoured approach in terms of sludge treatment due to.

- The inability of this process to capture natural gasses released from the sludge, in modern treatment processes this is captured and converted into energy as part of a circular economy.
- The lack of volume reduction. Modern advanced treatment processes can reduce the volume of dewatered sludge by up to forty percent, lowering the carbon footprint and recycling cost of sludge in relation to transportation and handling.
- Limed cake can be more odorous which may potentially impact on sensitive receptors.

Third party lime treatment is increasingly being phased out and tends to only be used as an

alternative, temporary outlet for excess sludge when water companies are upgrading treatment processes in line with technological advances and regulatory change.

Third party operators of liming plants are required to be BAS accredited or carry out the treatment, storage and applications in accordance with the BAS standard if they are recycling sludge on behalf of a BAS accredited water company.
As such the report is to a degree 'outdated' as the current level of voluntary self-regulation provides a much higher standard of sludge recycling through the independent auditing of BAS accredited liming activities.

Our current position statement on PFAS related contaminants can be accessed using the link below.

PFAS - Bioresources | United Utilities - Corporate

There are currently no regulatory limits for persistent organic pollutants or microplastics in Biosolids. The technical report created by AECOM for the Environment Agency in 2017, provided several recommendations which primarily applied to permitting conditions, product codes and qualified FACTS (Fertiliser Advisor Certification and Training Scheme) advice in relation to the nutrient management of wastes applied to land.

United Utilities Water have a dedicated agricultural team which includes, as a core objective, for all its advisors to be FACTs qualified (50% currently) and achieve the BASIS Soil and Water Management Certificate (75% currently) as part of an ongoing development plan.

The recommendations in the report have shaped some of the aims and objectives of the Environment Agency strategy for Safe and Sustainable Sludge Use (revised January 2026) and has led, in conjunction with the Cunliffe report, to a consultation on regulatory framework reform for sludge applied to agricultural land as part of the water reform white paper 'A new vision for water'. This consultation paper refers directly to the 2017 M2L report.

On 27 January 2026 Defra launched a consultation which follows on from the Environment Agency 2023 paper. This consultation is seeking to explore views on updates to regulations and requirements considering emerging and currently unregulated issues. The referenced strategy, paper and consultation can be found in links below.

Environment Agency strategy for safe and sustainable sludge use - GOV.UK
A new vision for water: white paper - GOV.UK
Regulatory framework reform for sludge applied to agricultural land - GOV.UK

In relation to contaminants such as PFAS and Microplastics the AECOM report recommended that further assessment of the full range of toxic elements and organic pollutants in both wastes and soils should be carried out. It should provide the basis for deciding if these chemicals pose a long-term threat to productivity in the land bank and whether changes should be considered to manage and control land spreading as a result.

United Utilities Water is actively involved in the Chemical Investigations Programme (CIP) which is referred to in the AECOM report. This research was commissioned and established by UK Water Industry Research (UKWIR) on behalf of the UK water companies. It is an industry-wide research initiative including representation from Water UK, ten regional water companies from England, Wales, Scotland and the regulatory bodies of the Environment Agency, Natural Resource Wales and the Department for the Environment, Food and Rural Affairs.

The purpose of CIP is to identify and quantify the risks posed by known and emerging pollutants present in wastewater, sewage sludge, and the wider aquatic environment. The primary objective is to provide an extensive database enabling the water company regulators, and policymakers to shape future regulation.

PFAS is most recently addressed by Defra's PFAS Action Plan, published 3 February 2026. In relation to Biosolids it advocates.

- a continuation of the CIP to gain further understanding on the level of, and fate of contaminants from Biosolids in the wider environment.
- the Defra consultation for sludge use in agriculture in terms of future regulation and a move to EPR.
- collaboration on industry research and innovation projects that explore current and emerging treatment options that tackle PFAS and other pollutants.

PFAS Plan: building a safer future together - GOV.UK
A greener and more prosperous future with new Environmental Improvement Plan - GOV.UK

United Utilities Water welcomes any regulatory change that protects the consumer and supports funding mechanisms to invest in and implement beneficial change within the water industry to protectthe environment, and associated public health.

We hope that this response answers your request. However, if you're not satisfied with how we've handled it, you can request an internal review. To do this, please write to us at Environmental Information Office, Haweswater House, Lingley Mere, Warrington, WA5 3LP or email us at EIRRequests@uuplc.co.uk, addressing your request to [redacted], and explaining why you're unhappy with our response. We'll be very happy to review your request and ensure we've done everything we can to assist you.

Any request for an internal review should be made within 40 working days of receipt of this response, and we will reply within 40 working days from receipt of the request for internal review.

Kind regards