



DRINKING WATER INSPECTORATE

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DWI Information Letter 05/2021

1 October 2021

To: Board Level and Day to Day Contacts of Water and Sewerage Companies and Water Companies in England and Wales

Dear Sir/Madam

Requirements for Poly and Perfluorinated Alkyl Substances (PFAS) monitoring by water companies in England and Wales

Background

1. PFAS compounds are a group of man-made chemicals that include PFOA, PFOS and other related substances. They have been used widely for a range of purposes from industrial to household products, that have had or continue to have widespread use in England and Wales.
2. Certain PFAS compounds are known to have the potential to persist in the environment; including in water and some have shown the capability to bioaccumulate. This has raised a keen interest in better understanding their potential impact on the environment and toxicity.

Purpose

3. This Information Letter is to inform you of the introduction of additional requirements for sampling, testing and monitoring PFAS compounds in raw water sources from which abstractions are ultimately used for supplying drinking water.
4. By implementing the approach outlined, the sector will deliver improved information on the presence of PFAS compounds in raw water and support a more informed understanding of where further prioritised action may be necessary.
5. This letter and the associated Annex A set out the information requested, how it will be submitted and the timescales for responding to the Inspectorate.

PFAS compounds to be monitored

6. Annex A lists the PFAS compounds to be monitored. These compounds have been selected due to their known prevalence of use in England and Wales and is identical to the current Environment Agency (EA) monitoring programme list.
7. It is expected that the monitoring list will develop periodically in line with more information emerging about the attributes of PFAS compounds, as well as further developments in analytical techniques for detecting and quantifying.

Analytical methods and accreditation

8. There are currently various analytical methods available to measure PFAS. However only a few of these are accredited as quantified techniques and there is as yet no Standing Committee of Analysts (SCA) Blue Book method. It is expected that the situation will improve with more analytical methods achieving accreditation over the next 12-24 months.
9. Where possible companies should seek to use a laboratory that can provide an accredited analytical method. However, if this is not feasible in terms of accessibility and/or laboratory capacity constraints companies may agree with laboratory providers to use the best available techniques.
10. Where appropriate companies should work together to align in-house analytical methods with those that are already accredited. Companies should consider the opportunities for mutual aid with other accredited laboratory services to support sample assessments.
11. Where an initially non-accredited method is used that is subsequently accredited the initial results will not have to be retested. If a non-accredited method is not subsequently accredited in the 12 months following the original analysis results companies will be expected to resample and redo the analyses with an accredited method.

Prioritisation and risk-based approach

12. In January 2021 the DWI published guidance¹ for PFOS and PFOA compounds in drinking water. The recommended trigger values for the 4-tiered approach in this guidance should now be applied in parallel to raw water source (abstracted for the purpose of drinking water) assessments. This approach recognises that in most cases specific PFAS removal/reduction measures are not explicitly included in the drinking water treatment cycle; whilst also acknowledging that some existing treatment practices can already reduce their concentration in treated water.

13. Companies are required to take a risk-based and prioritised approach to ranking all raw water abstraction sites for a first round of sampling and analysis in respect of this information letter. Companies must submit to the Inspectorate summary details of what information is used in their PFAS risk assessments, and how this information was used to form the basis of a risk-based approach. This submission must contain more PFAS specific detail than the existing DWSP methodologies submitted, but may make reference to these methodologies in terms of approach. The submission should be made to DWI_Risk_Assessments@defra.gov.uk by 31 December 2021.
14. Companies must use the PFAS risk assessment, plus any other relevant information, to identify which sites should be defined as high priority. A high priority site is defined as either currently in Tier 2 or above; or with an imminent risk of entering Tier 2 or above.
15. If the latest existing sample results indicate that a site is in Tier 2 or above, then this should automatically be designated as a high priority site.
16. High priority sites should be selected for sampling and analysis ahead of other sites as part of a first round of monitoring.

First round sampling results

17. Companies are required to submit as a minimum the first round of monitoring results for all high priority sites to the Inspectorate by 31 December 2021. If additional sample analysis results are available these should also be submitted.

Long term monitoring programme and time frame

18. To obtain improved information on PFAS in raw water, companies are required to provide a plan of their proposed monitoring programme to sample all abstraction sites at least once and the proposed frequency thereafter. The monitoring programme should include all relevant milestone dates and be submitted to the Inspectorate by 31 March 2022.
19. The monitoring programmes should include the following content:
 - Location of the abstraction sites (site name only)
 - Risk assessment summary, based on best available information, for each abstraction site
 - Description of sampling point
 - Type of abstraction (groundwater, surface water)
 - Indicative risk assessment expected Tier (1, 2, 3, 4)
 - Dates to collect and analyse at least one sample from all abstraction sites
 - Proposed frequency of ongoing sampling at each abstraction site after first sampling and analysis

Should you have any queries regarding this letter, please contact Nicholas Adjei, Deputy Chief Inspector, by email at nicholas.adjei@defra.gov.uk.

This letter is being sent electronically to Board Level and day to day contacts. Please acknowledge receipt by email to dwi.enquiries@defra.gov.uk. Hard copies are not being sent but the letter may be freely copied.

Copies of this letter are being sent to Christine McGourty, Chief Executive, Water UK; Davide Minotti, Deputy Director Water Services, Department for Environment, Food and Rural Affairs; Eifiona Williams, Water Management Team, Welsh Government; Sue Petch, Drinking Water Quality Regulator for Scotland; Catriona Davis, Drinking Water Inspectorate for Northern Ireland; Alice Laycock and Emma Clancy, CCW; Alison Cullen, Ofwat; Anne Dacey, Environment Agency; Benedict Duncan, Food Standards Agency; and Stephen Robjohns, UK Health Security Agency.

Yours sincerely



Marcus Rink
Chief Inspector of Water

References:

1. [Guidance on the Water Supply \(Water Quality\) Regulations 2016 specific to PFOS \(perfluorooctane sulphonate\) and PFOA \(perfluorooctanoic acid\) concentrations in drinking water, January 2021, Drinking Water Inspectorate.](#)

Annex A - List of 47 PFAS substances required for monitoring

No	Abbreviation	CAS Reg No	PFAS Category
1	PFBA	375-22-4	PFCA
2	PFPeA	2706-90-3	PFCA
3	PFHxA	307-24-4	PFCA
4	PFHpA	375-85-9	PFCA
5	PFOA	335-67-1	PFCA
6	PFNA	375-95-1	PFCA
7	PFDA	335-76-2	PFCA
8	PFUnA; PFUdA	2058-94-8	PFCA
9	PFDoA	307-55-1	PFCA
10	PFTTrDA; PFTTriA	72629-94-8	PFCA
11	PFTeA	376-06-7	PFCA
12	PFHxDA	67905-19-5	PFCA
13	PFODA	16517-11-6	PFCA
14	PFBS	375-73-5	PFSA
15	PFPeS	2706-91-4	PFSA
16	PFHxS	355-46-4	PFSA
17	PFHpS	375-92-8	PFSA
18	PFOS	1763-23-1	PFSA
19	PFNS	68259-12-1	PFSA
20	PFDS	335-77-3	PFSA
21	PFUnDS	749786-16-1	
22	PFDoS	79780-39-5	PFSA
23	HFPO-DA (Gen X)	13252-13-6	PFECA
24	HFPO-TA	13252-14-7	PFECA
25	DONA; ADONA	919005-14-4	PFECA
26	PFMOPrA	377-73-1	PFECA
27	NFDHA	151772-58-6	PFECA
28	PFMOBA	863090-89-5	PFECA
29	PFecHS *CAS No needs checking	133201-07-7	
30	3:3 FTCA	356-02-5	n:3 FTCA
31	5:3 FTCA	914637-49-3	n:3 FTCA
32	7:3 FTCA	812-70-4	n:3 FTCA
33	PFEESA	113507-82-7	PFESA
34	6:2 Cl-PFESA; 9Cl-PF3ONS	756426-58-1	Cl-PFESA
35	8:2 Cl-PFESA; 11Cl-PF3OUdS	763051-92-9	Cl-PFESA
36	4:2 FTSA; 4:2 FTS	757124-72-4	FTSA
37	6:2 FTSA; 6:2 FTS	27619-97-2	FTSA
38	8:2 FTSA; 8:2 FTS	39108-34-4	FTSA
39	FBSA	30334-69-1	FASA
40	FHxSA	41997-13-1	FASA
41	FOSA	754-91-6	FASA

No	Abbreviation	CAS Reg No	PFAS Category
42	MeFOSA; N-MeFOSA	31506-32-8	FASA
43	EtFOSA; N-EtFOSA	4151-50-2	FASA
44	MeFOSE	24448-09-7	FASE
45	EtFOSE	1691-99-2	FASE
46	NMeFOSAA; MeFOSAA	2355-31-9	FASAA
47	NEtFOSAA; EtFOSAA	2991-50-6	FASAA