From:	[redacted]
To:	Hampshire Water Project
Subject:	Supporting data for Water Environment Hearing 12 November - Trade Effluent Permit Information
Date:	02 November 2026 22:20:17
Attachments:	QA Hospital_Information on waste disposal to public sewer_Oct2026.pdf BUDDS WWTW Catchment_Trade Effluent Permit_SW Public Register_September 2026.xlsx

HWTWRP - WA010002 – Examination Process – Water Environment Hearing – Trade Effluent Permit Information

Dear sir/ madam,
When speaking at the Water Environment Hearing on 12 November I will make reference to:

- The Southern Water register of Trade Effluent Permits. Note the version attached is filtered to display the relevant information for the Budds Farm WWTW sewage catchment.
- Information on the QA hospital permits and discharges to the public sewer, including information provided under an FOI request by the hospital.

I do not anticipate asking for this information to be displayed at the hearing, but as I will refer to it the community felt that it was important to provide it to substantiate what will be said at the hearing.

Yours sincerely,

[redacted]

On behalf of Water Matters and other community representatives
PINS registration identification number is: [redacted]

QA Hospital Information on Disposal to Public Sewer

The following information has been obtained by the community through Freedom of Information and Environmental Information Requests.

Page 4 - Annex A: QA Hospital FOI response on liquid waste disposal questions 10/09/26

Page 7 - Annex B: Southern Water Trade Effluent Discharge Permit for Boiler Blowdown water discharge to the public sewer

Page 11 - Annex C: Environment Agency Permit for disposal of radioactive waste, including radionuclides that can be discharged to the public sewer

The hospital waste will drain to the Budds Farm Waste Water Treatment Works (WWTW) which will be the source for the final effluent to be treated by the Water Recycling Plant.

Note: The community research has confirmed that there is no Southern Water permit for disposal of hospital waste to the sewer including bloods, mortuary waste, laboratory waste and pharmaceuticals. The FOI response from QA Hospital confirms that these liquid wastes are discharged to the public sewer with no prior treatment.

The FOI from QA hospital confirms.

The liquid waste from the hospital wards, laboratory, pharmacy and morgue sinks drain into the public sewer network. They confirmed that this included any waste blood and chemotherapy chemicals.

There is no monitoring of discharges from the hospital drains into the public sewer.

There is no additional treatment of waste before it is discharged into the sewer.

The hospital does discharge small quantities of waste into the public sewer network that has low levels of radiation, principally through the normal excretion of radiopharmaceuticals administered to patients, it holds an Environment Agency permit for that.

Comments from community experts speaking at examination hearings in November 2026

The hospital waste will include X-ray/ CT contrast chemicals. While these are relatively inert when used in patients, they can breakdown into other compounds of concern during treatment.

Recent research by Professor Alex Ford in local harbours and the Solent found Diatrizoic acid, iohexol, iomeprol and iopamidol in at least 90% of samples across the sites studied. The full reference documents for the research will be added to the Examination Library.

Chemotherapy metabolites, disinfectants and biocides, formaldehyde and other laboratory/mortuary chemicals can be a concern.

Southern Water have not provided their risk assessment to demonstrate what contaminants they considered, as a result it is not clear if Southern Water gave adequate consideration to all of the contaminants that may arise from the QA and other hospitals in the area which will discharge to Budds Farm WWTW before they determined what parameters to test for in the pilot effluent recycling plant.

Pharmaceuticals and antibiotics are of particular concern. Southern Water did test for some of these and their pilot plant data shows that some including trimethoprim, carbamazepine and venlafaxine were found in the output water from the trial effluent recycling plant. But how many hospital drugs were not tested for?

Note: The effluent recycling pilot plant data supplied by Southern Water will be added to the Examination Library along with the analysis from community experts to highlight what contaminants got through the treatment process.

Key information is missing from the DCO application. For example, how Southern Water have derived post Granular Activated Carbon (GAC) data, when the pilot plant did not include a GAC treatment process? The extent to which GAC can remove contaminants varies between determinants. For example,

Pesticides	72 to 100% removal
Pharmaceuticals	62 to 92% removal

Source reference: Removal of trace organic pollutants (pharmaceuticals and pesticides) and reduction of biological effects from secondary effluent by typical granular activated carbon, L. Tang et al (Science of the Total Environment, December 2020)

Research suggests that contaminants that got through the pilot plant treatment are unlikely to all be completely removed by carbon. For example,

- Ketorolac (Pharmaceutical) has a high ecotoxicity, resists breakdown, genotoxic, oxidative stress, reproductive effects. Only moderate removal by carbon.

Have Southern Water considered antibiotic-resistant bacteria and resistance genes as well as just traces of antibiotics themselves? To what extent have they considered viruses and prions?

Examples of contaminants that can occur in hospital waste which have not been tested for in the Southern Water effluent recycling pilot plant samples include formaldehyde and the PFAS forever chemical trifluoroacetic acid (TFA), the latter is water soluble and highly mobile. In 2026 the European Chemicals Agency (ECHA) classified trifluoroacetic acid (TFA) as toxic to reproduction.

QA Hospital Permit Information Summary

Southern Water Trade Effluent Discharge Permit (see Annex B attached)

For Boiler Blowdown water discharge to sewer (Consent ID: 16535)

Conditions only apply to temperature, pH, Suspended Solids and Chemical Oxygen Demand

Prohibited from discharging; Petroleum Spirit or other flammable solvents, organic solvents, substances likely to injure the sewer or be dangerous to the health of persons working in the sewer, substances that could give rise to obnoxious, poisonous or inflammable gases.

Environment Agency Permit (Number: EPR/LB3935DJ) – (see Annex C attached)

Sets out the radioactive materials that QA Hospital is permitted to discharge to the public sewer as an aqueous waste in Table S3.2, listing the radionuclides and monthly limits.

Table S3.2: Specified disposals to sewer or water

Specified waste type	Disposal outlet ref	Radionuclide or group of radionuclides	Monthly limits
Aqueous waste	the drainage system of the premises authorised for disposal	Technetium 99m	90 Gigabecquerels
		Iodine 131	60 Gigabecquerels
		Indium 111	2.5 Gigabecquerels
		Iodine 123	2.5 Gigabecquerels
		Gallium 67	1 Gigabecquerel
		Thallium 201	1 Gigabecquerel
		Yttrium 90	500 Megabecquerels
		Selenium 75	50 Megabecquerels
		Total beta-gamma emitting radioanuclides	500 Megabecquerels (in total)
		Total alpha emitting radionuclides	50Megabecquerels (in total)

Note: QA Hospital confirm in their FOI response (10/09/26) that;

a) technetium-99m (Tc-99m), iodine-131 (I-131), iodine-125 (I-125), yttrium-90 (Y-90) and selenium-75 (Se-75). These radionuclides emit beta and/or gamma radiation depending upon the radionuclide concerned.
b) The Trust does not routinely measure radioactivity within the public sewer network. Compliance with the permitted limits is instead assessed from the quantities of radioactive material used/administered and the proportion expected to be discharged to sewer. The latter is estimated using nationally recognised excretion factors published by the Institute of Physics and Engineering in Medicine (IPEM).

Freedom of Information Team
Health Records Department
Units 2/3 Mitchell Way
Airport Service Road
Portsmouth
Hampshire
PO3 5PR

Ref FOI PHU 26-27 251

Date 10 September 2026

Dear Sir/Madam

Request for information under the Freedom of Information Act 2000

Please find below/attached Portsmouth Hospitals University NHS Trust's response to your request.

1. **Does waste from sinks, showers, drains and toilets in the QA hospital buildings flow directly into the public sewer network? Or does it go through any additional treatment processes before being discharged into the public sewer?**

Response - Utilises public sewer system.

2. **Does waste from the laboratory, pharmacy or morgue sinks and drains flow into the public sewer network? Or is there some form of additional treatment prior to the discharge into the public sewer network?**

Response - Utilises public sewer system.

3. **Where would any waste blood, chemotherapy chemicals or other non-standard unusual liquid wastes generated within the hospital get disposed of?**

- **Is it tipped down a sink/ drain? (discharging to the public sewer network?)**

Response - Yes

- **If not, what happens to that waste and how is it treated?**

Response – Not applicable.

4. **Is there any monitoring of discharges from the hospital drains into the public sewer?**

Response – No

5. **Radiation is used within the hospital for treatments;**

- **Is it possible that hospital waste discharged into the public sewer network might have low levels of radiation?**

Response – Yes, some small quantities, principally through the normal excretion of radiopharmaceuticals administered to patients.

- **If so, what types of radiation could be present? (from what type of source?)**

Response – technetium-99m (Tc-99m), iodine-131 (I-131), iodine-125 (I-125), yttrium-90 (Y-90) and selenium-75 (Se-75). These radionuclides emit beta and/or gamma radiation depending upon the radionuclide concerned.

- **Are the levels of radiation discharged into the public sewer monitored? How often, and what have you found?**

Response – The Trust does not routinely measure radioactivity within the public sewer network. Compliance with the permitted limits is instead assessed from the quantities of radioactive material used/administered and the proportion expected to be discharged to sewer. The latter is estimated using nationally recognised excretion factors published by the Institute of Physics and Engineering in Medicine (IPEM).

6. **Does the hospital have a trade effluent licence to permit any discharge into the public sewer network?**

Response – Yes, The Trust holds an Environmental Permit issued by the Environment Agency under the Environmental Permitting (England and Wales) Regulations 2016. This permit authorises the disposal of specified radioactive waste, including disposal to sewer, subject to defined limits and conditions.

- **If so, does the licence have any restrictions or conditions on it?**

Response – Records of radioactive material administered and calculated disposals are maintained by the Trust to demonstrate compliance with the conditions and limits of its Environmental Permit.

- **What requirements does it prescribe for controls or monitoring?**

Response – The Trust does not routinely measure radioactivity within the public sewer network. Compliance with the permitted limits is instead assessed from the quantities of radioactive material used/administered and the proportion expected to be discharged to sewer. The latter is estimated using nationally recognised excretion factors published by the Institute of Physics and Engineering in Medicine (IPEM).

- **Can you provide a copy of the permit?**

Response – Portsmouth Hospitals University NHS Trust do not have a copy of the permit, and therefore are unable to provide you a copy.

A log of this request will be held on a database by the Trust. All hard copy correspondence relating to this request will be held for one year from the date of this letter, before being confidentially destroyed. A copy of this response will be published on the Trust website.

If you are unhappy about the response you have received, you should write and request the Trust to undertake an internal review of your application. A senior member of staff, not previously involved with your request for information, will undertake this review. If you remain dissatisfied with the response received, you may complain to the Information Commissioner at the following address:

Information Commissioner

Wycliffe House

Water Lane

Wilmslow

Cheshire

SK9 5AF

Please do not hesitate to contact this office if you have any further questions.

Yours faithfully

Freedom of Information Team

If you would like this letter or information in an alternative format, for example large print, or easy read, or if you need help with communicating with us, for example because you use British Sign Language, please let us know. You can call us on 01983 534420 or email to Pho-tr.patientexperienceteam@nhs.net

Do you want to know more about how the Trust uses your personal information? To view our full Privacy Notice visit our website Privacy Policy :: Portsmouth Hospitals University NHS Trust

If you require a full printed copy of our Privacy Notice, please ask a member of staff. If you would like to submit any comments or feedback regarding our Privacy Notice, please email these to iownt.informationgovernance@nhs.net

Southern Water

Consent ID :16535

WATER INDUSTRY ACT 1991

CONSENT TO THE DISCHARGE OF TRADE EFFLUENT

(1) Carillion Health, 84 Salop Street, Wolverhampton, WV3 0SR is/are the occupier(s)/owner(s) of trade premises situated at Portsmouth Hospitals NHS Trust, Queen Alexandra Hospital, Southwick Hill Road, Portsmouth, Hampshire, PO6 3LY (`The Trade Premises') and by a Trade Effluent Notice dated the 19th day of May Two Thousand and Fifteen have requested that Southern Water Services Ltd., (`The Company') consent to the discharge of trade effluent from the trade premises into the sewers of The Company.

(2) The nature and composition of the trade effluent (`The Trade Effluent') to be discharged under this consent is specified in the said Notice.

In exercise of the powers conferred upon it by the Water Industry Act 1991, the Company hereby consent to the discharge of The Trade Effluent from The Trade Premises into their sewers subject to the following conditions:-

1. Trade Effluent

1.1 The Trade Effluent shall consist only of waste water from Process Waters: Boiler Blowdown process.

No change shall be made in the nature and composition of The Trade Effluent without the written permission of the Company. This Consent supersedes any previous Consents or Directions which become void from the date of this document save as otherwise specified herein.

2. Sewer Affected

The Trade Effluent shall discharge into the FOUL sewer (`the sewer') situated in Southwick Hill Road. No change shall be made in the location of the discharge point without the written permission of the Company.

3. Maximum Quantity to be discharged in Any One Day

The maximum quantity of The Trade Effluent discharged at any period of twenty four hours shall not exceed 1.00 m^3.

4. Maximum Rate of Discharge

The maximum rate at which The Trade Effluent may be discharged shall not exceed 1.00 litres/sec.

5. Time of Discharge

At any time

6. Condensing Water

No uncontaminated condensing or cooling water shall be discharged into the sewer.

7. Changes in Process or Materials leading to Alteration of the Nature and Composition of the Trade Effluent or the Cessation of Discharge

The Licensee shall immediately notify the Company of any changes in the process of manufacture, raw materials used, pre-treatment of The Trade Effluent or other circumstances likely to alter the nature and composition of The Trade Effluent and of any circumstances resulting or likely to result in a cessation of discharge.

8.1 Matters to be Eliminated Prior to Discharge to the Sewer

The following substances are strictly prohibited from entry to the Company's sewer(s) and shall not be contained in The Trade Effluent that is to say:

(i) Any petroleum spirit or other inflammable solvents.
(ii) Any Organic Solvents (unless specifically mentioned below in Clause 12).
(iii) Any other substances, either alone or in combination with any other matter lawfully present in the Company's sewers, likely to injure the said sewers or to interfere with the free flow of their contents or to affect prejudicially the treatment and disposal of their contents or to be dangerous to the health of the persons working in the sewers or at the Wastewater Treatment Works or to make specially difficult or expensive any process of purification or to pollute in any way the watercourse, estuary or coastal water into which the effluent will eventually discharge.
(iv) Any substance or substances, which either alone or in combination with any matter in any sewers or receiving Wastewater Treatment Works vested in and/or under the control of Southern Water, would give rise to obnoxious poisonous or inflammable gases, or otherwise a statutory nuisance as defined by the Environmental Protection Act 1990, in such sewers or works, or would be deleterious to such sewers or to the processes in use at such works, or to the disposal of sludges produced by such works.

8.2 Any substance or substances which is/are not special category effluent but which is/are within List I designated from time to time under provisions of EC Directive 76/464/EEC and in particular Articles 6 and 12 thereof, in so far as they are in a concentration greater than in water supplied to the Trade Premises for domestic uses (This means the concentration of a substance present in the water supplied to, or abstracted for use, in the premises and which is present in rainfall onto the premises. If the trade process adds to that background concentration then the substance should be regarded as being present at a concentration greater than the background concentration) unless they are specifically authorised by an EA Authorisation or Environmental Permit.

9. Temperature of Trade Effluent

No Trade Effluent shall be discharged which has a temperature in excess of 110°F (43.3°C) at the point of discharge to the sewer.

10. pH

No Trade Effluent shall be discharged which has a pH value of less than 6 or greater than 10.

11. Roof Water, Surface Water and Domestic Sewage

No roof water, surface water or domestic sewage shall be passed through any equipment installed in connection with the treatment sampling or measurement of The Trade Effluent discharge without the written permission of the Company.

12. Limits on Effluent Composition

The following Trade Effluent Constituents shall not exceed the stated concentration.

	Constituent	**Maximum Concentration**
12.1	Chemical Oxygen Demand Shaken as 0	800mg/l
12.2	Solids Suspended 105 Degrees C	400mg/l

13. Payment

The Licensee shall pay to the Company such charges for the reception and disposal of The Trade Effluent as the Company shall determine from time to time and all such charges shall become due and payable on demand.

14. Inspection Chamber

An inspection chamber or manhole shall be provided by and maintained by the licensee in a suitable position in connection with the pipe(s) through which The Trade Effluent is discharged and such inspection chamber or manhole shall be so constructed and maintained as to enable a person authorised by the Company to obtain samples of The Trade Effluent so discharged at any reasonable time. The inspection chamber or manhole shall be unobstructed and accessible at all times.

15. Expiry

15.1 Unless otherwise agreed in writing by the company where no trade effluent is discharged by the Trader from the Trade Premises for a period of six months the maximum amount of the trade effluent discharged during any one period of 24 hours shall be zero. i.e. this Consent will automatically expire. For the six months period of non discharge the Trader will be charged the minimum amount on the trade effluent scale as provided by the Company's Charge Scheme in force time to time.

15.2 If the trader later wishes to resume the discharge after such six month period of non-discharge , a new application for a Consent must be served on the Company.

16. Interpretation

Words and expression to which meanings are assigned by the Water Industry Act 1991 (or any legislation amending the same) shall have the same meanings assigned to them when used in this Consent.

Dated this 27th day of August Two Thousand and Fifteen.

Signed

[redacted]

(Trade Effluent Inspector)

NOTE Your attention is drawn to the right of appeal to the Director General of Water Services conferred by Section 122 of the Water Industry Act 1991 on any person who is aggrieved by a condition attached to consent.

Southern Water Southern House
Southern Water Services Ltd Registered Office: Southern House Yeoman Road Worthing BN13 3NX
Registered in England No. 2366670

Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2016

Portsmouth Hospitals University NHS Trust

Queen Alexandra Hospital
Southwick Hill Road
Portsmouth
Hampshire
PO6 3LY

Variation notice number

EPR/LB3935DJ/V003

Permit number

EPR/LB3935DJ

Portsmouth Hospitals University NHS Trust, Queen Alexandra Hospital,

Southwick Hill Road, Portsmouth, Hampshire, PO6 3LY

Permit Number EPR/LB3935DJ

Introductory note

This introductory note does not form a part of the notice.

The following notice gives notice of the variation of an environmental permit.

Operator has applied for a variation to amend limits.

The Schedules specify the changes made to the original permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status Log of the permit		
Detail	**Date**	**Comments**
Application EPR/LB3935DJ/V001	Duly made 05/12/2012	Application for open source permit variation.
Variation determined EPR/LB3935DJ (varied and consolidated permit issued, replacing permits AA3719/CD5911 and AD0988/CD6152)	29/01/2013	Permit issued to operator.
Variation EP/LB3935DJ/V002 admin variation to change permit band no documents issued	17/05/2018	Variation to change permit band.
Change of fact issued for operators name change pages i,ii and 16 re-issued.	20/01/2021	Change of fact to update operator name.
Variation application EPR/LB3935DJ/V003	Duly made 14/04/2021	Operator applied for variation.
Variation determined EPR/LB3935DJ/V003	07/07/2022	Variation Notice issued.

End of Introductory note

Notice of variation

Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number
EPR/LB3935DJ/V003

Issued to
Portsmouth Hospitals University NHS Trust ("the operator")

whose principal office is

Queen Alexandra Hospital
Southwick Hill Road
Portsmouth
Hampshire
PO6 3LY

to carry on a radioactive substances activities at

Queen Alexandra Hospital
Southwick Hill Road
Portsmouth
Hampshire
PO6 3LY

to the extent set out in the Schedules.

The notice shall take effect from the date of issue below.

Name	Date
[redacted]	***07/07/2022***

Authorised on behalf of the Environment Agency

Schedule 1: variations to the permit

Tables S1.2, S2.1, S3.2 and S3.3 in Schedules 1, 2 and 3 of permit EPR/LB3935DJ were varied on the application of the operator to the tables below:

Table S1.2: Radioactive material – open sources	
Radionuclide	**Maximum Activity**
Technetium 99m	90 Gigabecquerels
Iodine 131	30 Gigabecquerels
Rubidium 81 (Krypton 81m generator)	6 Gigabecquerels
Indium 111	6 Gigabecquerels
Thallium 201	5 Gigabecquerels
Iodine 123	3 Gigabecquerels
Yttrium 90	2.5 Gigabecquerels
Gallium 67	1.5 Gigabecquerels
Selenium 75	50 Megabecquerels
Total radionuclides except alpha emitters	1 Gigabecquerel (in total)

Table S2.1: Accumulation of radioactive waste				
Specified waste type	**Radionuclide or group of radionuclides**	**Activity limit**	**Volume limit**	**Period limit**
Aqueous waste	Any radionuclide except alpha emitters	2 GBq	0.10 m^3	4 months
VLLW	Any radionuclide	VLLW	3 m^3	14 days
Solid waste	Technetium 99m	500 GBq	6 m^3 (in total for solid waste)	12 months (in total for solid waste)
	Iodine 131	25 GBq		
	Indium 111	6 GBq		
	Thallium 201	5 GBq		
	Iodine 123	3 GBq		
	Yttrium 90	2.5 GBq		
	Gallium 67	1.5 GBq		
	Selenium 75	50 MBq		
	Total beta-gamma emitting radionuclides	1 GBq (in total)		
	Total alpha emitting radionuclides	50 MBq (in total)		
Radioactive waste which is collected as a result of the operator's participation in the National Arrangements for Incidents involving Radioactivity or in the Radsafe scheme.	Any radionuclide	None specified	None specified	None specified

Table S3.2: Specified disposals to sewer or water			
Specified waste type	**Disposal outlet ref**	**Radionuclide or group of radionuclides**	**Monthly limits**
Aqueous waste	the drainage system of the premises authorised for disposal	Technetium 99m	90 Gigabecquerels
		Iodine 131	60 Gigabecquerels
		Indium 111	2.5 Gigabecquerels
		Iodine 123	2.5 Gigabecquerels
		Gallium 67	1 Gigabecquerel
		Thallium 201	1 Gigabecquerel
		Yttrium 90	500 Megabecquerels
		Selenium 75	50 Megabecquerels
		Total beta-gamma emitting radioanuclides	500 Megabecquerels (in total)
		Total alpha emitting radionuclides	50Megabecquerels (in total)

Table S3.3: Specified transfers to other premises				
Specified waste type	**Person to whom waste may be transferred**	**Purpose of transfer**	**Radionuclide or group of radionuclides**	**Annual limits**
VLLW	Any person who holds an environmental permit for the recovery or disposal of non-radioactive waste of the same type (excluding its radioactive properties) as the VLLW .	For treatment or disposal	VLLW	No limit
Combustible solid waste	The holder of a permit under the Environmental Permitting Regulations to receive and dispose of radioactive waste by incineration	incineration	Iodine 123/Iodine 125/Iodine 131	120 MBq (in total)
			Any other radionuclide except alpha emitters	500 MBq (in total)
Radioactive waste which is received as a result of the operator's participation in the National Arrangements for Incidents involving Radioactivity or in the Radsafe scheme	A person whom the Environment Agency has agreed in writing may receive that radioactive waste.			