

DRINKING WATER INSPECTORATE

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Hilary Bar	nerman
By email:	

Our ref: EIR2025/11957 23 June 2025

Dear Hilary Bannerman,

REQUEST FOR INFORMATION: Water Contamination event January 2024

Thank you for your request for information of 3 June 2025 about at water contamination event Jan 2024 relating to Marleigh Housing Development. We have handled your request under the Environmental Information Regulations 2004 (EIRs).

The EIRs apply to requests for environmental information, which is a broad category of information defined in regulation 2 of the EIRs. Public authorities are required to handle requests for environmental information under the EIRs. They give similar access rights to the Freedom of Information Act 2000 (FOIA).

Your information request and our response are set out below.

I am writing to formally request the event assessment letter for Marleigh and any and all appendices.

We enclose a copy of the information you requested:

Annex C: EAL IWN 2024-9486 Newmarket DNU

Please note that the water company have taken steps to address the issues identified in response to the attached EAL. The Inspectorate has made no assessment as to the parties responsible for the diesel spillage as part of this investigation. Explanatory terms have been added to the end of the EAL to help with its understanding.

We have decided to redact and withhold the names and contact details of the staff of the Drinking Water Inspectorate (DWI) in the attached document under regulations 12(3) and 13(1) and (2A) of the EIRs as the information constitutes personal data relating to persons other than you. These regulations exempt personal information from disclosure if that information relates to someone other than the applicant, and if disclosure of that information would breach any of the data protection principles in Article 5(1) of the General Data Protection Regulation (GDPR). We consider that disclosure of this information is likely to breach the first data protection principle, which provides that personal data must

be processed lawfully, fairly, and in a transparent manner. Disclosure would not constitute 'fair' processing of the personal data because those individuals would not reasonably have expected their names to be made public.

Information disclosed in response to this EIRs request is releasable to the public. In keeping with the spirit and effect of the EIRs and the government's Transparency Agenda, this letter and the information disclosed to you may be placed on GOV.UK, together with any related information that will provide a key to its wider context. No information identifying you will be placed on the GOV.UK website.

We attach Annex A, explaining the copyright that applies to the information being released to you, and Annex B giving contact details should you be unhappy with the service you have received.

If you have any queries about this letter, please contact us.

Yours sincerely

DWI FOIA and EIR team dwi.enquiries@defra.gov.uk



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DWI Ref: 2024/9486

[Redacted 24 March 2025, added definitions]

16 January 2025

[Redacted]
[Redacted]
Independent Water Networks Limited
Energy House
Woolpit Business Park
Woolpit
Bury-St-Edmunds
IP30 9UP

Dear [Redacted]

WATER QUALITY EVENT

Location: Marleigh development, Newmarket Road, Cambridge
Nature: Do not use advice following multiple consumer contacts

Date of event: 18 – 24 January 2024

1. Introduction

- 1.1. The purpose of this letter is to inform you of the conclusions and recommendations arising from the Inspectorate's assessment of the event involving the issuing of restriction of use advice to the Marleigh development near Cambridge. This has been classified using a risk-based approach as a significant event.
- 1.2. When notified of an event, the Inspectorate gathers information considered to be relevant and assesses this in conjunction with information provided by the company about the circumstances of the event and any actions taken. The Inspectorate then considers the way in which the event was handled, whether any breaches of the Water Supply (Water Quality) Regulations 2016 (as

Department for Environment, Food and Rural Affairs

Home Page: <u>www.dwi.gov.uk</u> Email: <u>dwi.enquiries@defra.gov.uk</u> Llywodraeth Cymru Welsh Government amended) ('the Regulations') occurred, and whether potential offences under either the Regulations or the Water Industry Act 1991 (as amended), may have been committed.

1.3. The company notified the Inspectorate of this event on 18 January 2024. My conclusions and recommendations are set out below.

2. Overview of the event

- 2.1. On 18 January 2024, following a connection made the previous day of a main within an ongoing development site to the bulk supplier network, multiple consumers contacted the company reporting fuel-like taste and odours.
- 2.2. The company provided restriction of use advice to consumers, provided bottled water, and sampled the affected area. The company initially isolated the newly connected main by closure of valves, and subsequently physically disconnected the main. The main was later abandoned and replaced with a new 'barrier pipe' main.
- 2.3. The investigation found evidence of organic compounds indicative of diesel fuel in soil samples collected in proximity to the main. The samples with elevated petroleum hydrocarbons were generally located close to where two mobile fuel tanks had been located. Other samples with elevated petroleum hydrocarbons were associated with material being moved within the construction site.
- 2.4. The event affected the Marleigh (Newmarket Road) development in the company Cambridge zone (ref: ZCW0101). The development included 840 resident consumers and 80 staff and pupils at a school and nursery.

3. Actions taken by the company

- 3.1. The company received eight consumer contacts between 08:57 and 11:00 on 18 January 2024, with consumers reporting smoky / rusty / fuel / chemical taste and odour descriptions. To protect consumers, the company initially issued 'do not use' (DNU) restrictions on a contact-by-contact basis.
- 3.2. The company received further consumer contacts about taste and odour during the afternoon. By 17:00 the company decided to issue a site-wide DNU restriction. The company started to issue the site-wide DNU advice, via email, at 19:15 on 18 January 2024. Delivery of printed DNU notices started on 19 January 2024.

- 3.3. Following the issuing of DNU restriction of use, the company provided alternative water (bottles). The first deliveries of bottled water were provided to the site by 01:15 on 19 January 2024, with further bottled water deliveries around noon to the car park of the Sales and Marketing Suite within the boundary of the development. It is unclear whether, when, or by whom the bottled water 'station' was manned, and whether, when, and by whom bottled water was delivered to vulnerable consumers. The Inspectorate was made aware of concerns that there was a potential delay in the arrival of company staff to site on 19 January 2024 and of difficulties faced by certain vulnerable consumers in accessing the bottled water. In particular, the difficulties faced by single parents with very young children appear not to have been considered.
- 3.4. To investigate the cause of the event, the company contacted Cambridge Water on 18 January 2024 to inform them of the contacts and to seek information about a potential cause affecting the bulk water supply. On the morning of 19 January 2024, Cambridge Water confirmed that all upstream samples were satisfactory, with no taste and odour detected.
- 3.5. The company arranged for samples to be collected. Samples were collected daily from properties within the development between 18 23 January 2023.
- 3.6. Samples were also collected from hydrants within the north-east (construction area) of the development and from hydrants in the 'live' area adjacent to the construction area. All hydrant locations sampled returned detectable concentrations for petroleum hydrocarbons. The concentrations found from hydrants within the 'live' area were all below the health-based Suggested No Adverse Response Levels (SNARLs).
- 3.7. On the 18 January 2024, the company were informed that on the previous day, a connection had been made between the upstream Cambridge Water main and the company network within the construction area of the development. To protect consumers, during the afternoon of 18 January 2024, the eastern area of the development an area under construction but without consumers was isolated from the occupied part of the site by the closure of a service valve.
- 3.8. On 18 January 2024, the company liaised with the Primary School and Nursery; UKHSA; Cambridge Water; and with the Local Authority. Further liaison was carried out with the different bodies throughout the event. On 21 January 2024, the company liaised with a District Councillor.
- 3.9. The Primary School and Nursery did not open on Friday 19 January 2024. The company provided an alternative supply from a tanker to the Primary School and Nursery. The tanker supply was in operation from 22-24 January 2024. On

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- 22 January 2024, the restriction of use for the school and nursery was lifted because of the supply being from the tanker. Samples collected from the tanker were satisfactory.
- 3.10. Around noon on Monday 22 January 2024 the company delivered further pallets of bottled water. These pallets were 'dropped' at three locations within the development.
- 3.11. The company liaised with the UKHSA throughout the event, and delayed the change of restriction from DNU to do not drink (DND) at the request of the UKHSA. The site-wide DNU was changed to DND at 16:15 on 22 January 2024, in agreement with the UKHSA. The change to a DND notice followed ongoing satisfactory bacteriological results, and an absence of taste and odour in samples from customer taps following the remedial actions to isolate the construction area and flushing of the network.
- 3.12. The DND restriction of use was rescinded on 24 January 2024, in agreement with the UKHSA. Samples collected after the site was isolated and the network flushed, recorded no detections of organic compounds above the operational suggested no adverse response level (SNARL).
- 3.13. Following the restoration of normal wholesome supplies, the company continued the investigation into the cause of the event. These investigations were concerned with the self-lay provider connection of the company network to the Cambridge Water network that occurred on 17 January 2024 and issues associated with ground conditions and mains-laying.
- 3.14. The company reviewed the original contaminated land survey. No shortcomings were identified.
- 3.15. The company carried out an internal mains camera survey on 7 February 2024. This survey identified 'anomalies' within a section of main. The main was abandoned and the company subsequently installed new PE 'barrier' pipes to replace these mains.
- 3.16. The ground condition survey in the north-eastern area of the development found shortcomings. An unknown grey aggregate was found over a 'shallow' water main (less than the 700mm minimum), and a mix of clay and old tarmac was found in a pit near plot 385. This latter mix was giving off a tarmac / creosote smell.
- 3.17. Soil samples were collected between 7-9 and 19-20 February 2024. The initial soil samples were collected at 15 metre intervals along the main. The soil

samples with elevated petroleum hydrocarbons were generally located close to where two mobile fuel tanks had been located and also may be associated with the moving of material around the construction site as the build-out progressed. One fuel tank was removed from site. Although the second fuel tank was bunded, the presence of petroleum hydrocarbons in nearby standing water suggested the use of this tank may have resulted in local spillages. The company has ensured the site has appointed a "responsible person" who is accountable for its safe operation. The water main in this area is to be re-laid in 'barrier' pipe.

- 3.18. To protect consumers' the company agreed all future mains and service pipes laid on the site will be laid in Polyethylene (PE) 'Barrier' pipe. The company abandoned the main in the north-eastern section of site and this was re-laid in PE 'Barrier' pipe.
- 3.19. The investigation into the connection made to the Cambridge Water network on 17 January 2024 found that the work was planned by Cambridge Water on 8 January 2024. The work plan detailed the actions required by Cambridge Water and the company. The work plan was shared with GTC (the SLP) but was not shared with the company.
- 3.20. The company implemented a number of actions to prevent a recurrence of the event. They agreed with Cambridge Water that prior to all future connections all three parties involved Cambridge Water, the company, and the SLP will be notified. The company agreed that all future mains and service pipes laid on the site will be laid in Polyethylene (PE) 'Barrier' pipe. The company has subsequently recommended that the role of the Field Technician will be refocussed to concentrate on mains construction activities.
- 4. The Inspectorate's Conclusions and Recommendations
- 4.1. On the quality of water supplied to consumers, I conclude that the company supplied water which had detectable taste and odours in excess of the prescribed concentration(s) or value(s) specified in Schedule 1 of the Regulations, and therefore the water supplied was unwholesome. Furthermore, twenty-four consumers contacted the company on 18 January 2024 with taste and odour concerns. It is reasonable to conclude that these consumers rejected the water supplied within the Newmarket Road development on 17-18 January 2024. This matter is dealt with in Section 5 'Offences' below.
- 4.2. On 18 January 2024, one sample from a consumer property recorded a detectable taste and odour. The taste was reported as a 'very slight

- metal/rubber taste' and a 'slight nail varnish/metal/rubber odour'.
- 4.3. Two samples from consumer taps detected compounds indicative of diesel contamination. One sample from a consumer property on 19 January 2024 and one from downstream of the school cold water storage tank on 21 January 2024. Both sets of results were below the Suggested No Adverse Response Levels (SNARLs) for the compounds detected.
- 4.4. Numerous hydrant samples recorded the presence of organic compounds indicative of diesel fuel.
- 4.5. A further sample collected during the event was in excess of the prescribed concentration or value specified in Schedule 1 of the Regulations for nickel. This was shown to be a property-related issue and not because of the event.
- 4.6. During the event an 'inappropriate container was used' when collecting samples for analysis of Polycyclic Aromatic Hydrocarbons. I recommend (ref: 2025/0016) that the company amends its sampling procedures to ensure that the appropriate requirements specified in regulation 16 are always complied with.
- 4.7. **On the company's risk assessment of the** planned operation to connect previously laid water main to the Cambridge Water network at the Newmarket Road development, I **conclude** that the company failed to carry out a risk assessment for the supply system as required by regulation 27 of the aforementioned Regulations, and/or to keep the risk assessment for the supply system under continuous review.
- 4.8. The company were unaware of the planned connection on 17 January 2024 between the upstream Cambridge Water main and the company network. The connection was made by GTC the self-lay provider (SLP) for this development. I **conclude** that the company had inadequate oversight of work being completed on its behalf to ensure water quality risks were mitigated. I **note** that the company subsequently recommended that the role of the Field Technician be amended to focus on construction activities. I **require** the company to provide evidence that this recommendation was implemented.
- 4.9. The company was unaware in advance of the connection made on 17 January 2024. The company has stated that it was "... therefore unable to complete any pre-connection checks". I **require** the company to provide details of the pre-connection checks that would have been completed had it been made aware of the planned connection in advance that would have mitigated the event

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- occurring. I **further require** the company to provide evidence of pre-connection checks completed at this development for all other mains connections made.
- 4.10. The 17 January 2024 connection was originally scheduled to be completed in October 2023 but had been postponed because the trench depth was not adequate. During the investigation the company identified other instances where inappropriate backfill material had been used and / or the water main was installed at too shallow a depth. I conclude there is evidence to indicate non-compliance with the National Joint Utilities Group (NJUG) recommended minimum depths for water mains, and thereby potentially non-compliance with the Water Fittings Regulations 1999 for service pipe depth. I recommend (ref; 2025/0017) the company complete a site-wide review of mains and services depth to ensure they comply with the Water Fittings Regulations and thereby minimise the risk of supplying unwholesome water. I require the company to provide a report on the outcome of this review.
- 4.11. The company and Cambridge Water has agreed that both the SLP and IWN will be informed of all future connections to the Cambridge network. This will provide reassurance for connections within this one water company area. As the company operates across many other water company areas, to avoid a recurrence in any area, I recommend (ref: 2025/0018) that the company ensures it is informed by all other water companies that are its bulk suppliers in an equivalent way to that agreed with Cambridge Water.
- 4.12. I **require** the company to provide evidence that sufficient alternative water (bottled water) was provided to domestic consumers while the DNU restriction was in place to comply with the 10 litres per person per day requirement in the Security and Emergency Measures Direction. The site-wide DNU was in place from 17:00 on 18 January 2024 until 16:15 on 22 January 2024.
- 4.13. I **require** the company to provide the company definition of 'vulnerable customer' and details of how, when, and by whom vulnerable customers / Priority Services Register consumers were provided for during the event.
- 4.14. The provisional Event Risk Index (ERI) score for this event is 7.416. This has been calculated using a population of 920 (350 domestic properties plus a school/nursery), a duration of 149 hours (period of restriction of use), an Inspector's assessment of 4 (prosecution considered) and a seriousness score of 3 (DNU, media).

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5. Offences

- 5.1. Water may be regarded as being unfit for human consumption if either, when drunk it would be likely to, or did in fact, cause injury to the consumer or, where by reason of its appearance or smell, it was of such quality that it would cause a reasonable consumer of firm character to reject the water for drinking and food preparation.
- 5.2. Twenty-four consumers contacted the company on 18 January 2024 with taste and odour concerns. It is reasonable to conclude that these consumers rejected the water supplied within the Newmarket Road development on 17 January 2024.
- 5.3. The Inspectorate has considered further enforcement action and potentially prosecution following this event. The company implemented several actions to prevent a recurrence of the event. They agreed with Cambridge Water that prior to all future connections all three parties involved Cambridge Water, the company, and the SLP will be notified. The company agreed that all future mains and service pipes laid on the site will be laid in Polyethylene (PE) 'Barrier' pipe. The company has subsequently recommended that the role of the Field Technician be refocussed to concentrate on mains construction activities.
- 5.4. After carefully assessing all the circumstances of the incident and the actions taken by the company, I **shall not** be recommending proceeding with a prosecution under Section 70 of the Water Industry Act 1991.

6. Other relevant matters

- 6.1. Please respond to my three recommendations and five requests for information in paragraphs 4.6 to 4.13 within 20 working days of the date of this letter.
- 6.2. I am copying this letter to South Cambridge District Council and to UKHSA East of England team.

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Please contact me if you have any queries regarding this letter.

Yours sincerely

[Redacted] Inspector

Definitions / explanation of terms

Event Risk Index (ERI) – a measure designed to illustrate the risk arising from the event. The ERI considers the seriousness of the event; the company performance in managing the event; and the impact in terms of population and time.

Significant event – an event with the potential for consumers to be directly affected and/or potential for consumer concern. Events are categorised on a 1-5 scale based on the time required to assess an event, its complexity, as well as the impact on consumers. A 'significant' event is 3 on the scale and requires a detailed investigation and assessment of the event.

Suggested No Adverse Response Levels (SNARLs) – the concentration of a chemical in water that is expected not to cause an adverse health effect.

Wholesome – water is considered wholesome if it meets the standards and other requirements set out in the Water Supply (Water Quality) regulations 2016, as amended.

Unfit - Water may be regarded as being unfit for human consumption if either, when drunk it would be likely to, or did in fact, cause injury to the consumer or, where by reason of its appearance or smell, it was of such quality that it would cause a reasonable consumer of firm character to reject the water for drinking and food preparation. If unfit water was supplied, the company did not exercise all due diligence (as a result of deficiencies in its response or failings in its actions) and if it is in the public interest, the Inspectorate may either initiate prosecution proceedings or issue a formal caution for a criminal offence.

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