

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
04 Jan 2016 For 1 week (WSX)	Chard, Somerset	2	Tarmac taste or odour due affecting a single property due to misconnection to a stagnant main	<p>Company Actions:</p> <ul style="list-style-type: none"> • Flushed mains. • Sampled affected area. • Issued a do not drink notice. • Provided bottled water on request. • Identified the new connection had been made to a stagnant section of main. • Reviewed procedures and introduced the requirement for chlorine checks before supply connections are completed. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company was issued with a formal warning letter. <p>Risk classification: Significant.</p>
05 Jan 2016 For 5 hours (SRN)	Sarum Road service reservoir, Winchester, Hampshire	7,099	Loss of supplies and discolouration caused by low water level in reservoir during planned work on the reservoir.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Returned reservoir to service to restore supplies. • Sampled affected area. • Flushed mains. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Recommended the company review its procedures to ensure that arrangements in place to maintain sufficiency of supplies during planned work on service reservoirs are strengthened. <p>Risk classification: Significant.</p>

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08 Jan 2016 For 2 days (SEW)	Tunbridge Wells, Kent	11,923	Brown discolouration due to planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Flushed mains. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Caused by transcription error leading to the work being carried out during peak demand increasing the risk of discolouration. • Recommended the company remind all staff of the importance of accurately transcribing information. <p>Risk classification: Significant.</p>
11 Jan 2016 For 5 days (ANG)	Risby, Suffolk	115	Third party damage to a main and sewer.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued a boil water notice. • Sampled affected area. • Repaired main. • Issued a written warning to the third party. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
12 Jan 2016 For 4 days (SBW)	Knapp Mill works, Bournemouth, Dorset	134,000	UV treatment compromised following raw water deterioration after heavy rainfall.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Reduced flows through the UV reactors and increased power. • The works was subsequently shut down. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The Inspectorate concluded that the operation of the UV reactor outside of its validated range constituted a breach of Regulation 26(1). • Recommended the company embeds learning from this event into future design criteria where similar UV installations are required. <p>Risk classification: Significant.</p>

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12 Jan 2016 For 5 days (SRN)	The Isle of Sheppey	44,549	Loss of supplies due to burst main located under a main road.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Rezoned area (brought in water from different source). • Provided an alternative supply by tanker/bowser. • Provided bottled water on request. • Repaired and flushed mains. • Sampled affected area. • Company installed new dual mains to restore supplies and increase resilience. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate risk assessment. • Suggestion made to review risk assessments for vulnerable infrastructure. <p>Risk classification: Significant.</p>
12 Jan 2016 For 3 days (TMS)	Childrey Warren works, Wantage, Oxfordshire	10,494	<i>Cryptosporidium</i> detection following raw water deterioration.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Considering additional measures to mitigate the risk of <i>Cryptosporidium</i>. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
13 Jan 2016 For 1 day (TMS)	Bourne Hill service reservoir, South Enfield, Essex	61,580	Evidence of microbiological contamination of a service reservoir.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Removed reservoir from supply for inspection and repaired points of ingress. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Suggested the company update their risk assessment. <p>Risk classification: Significant.</p>

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14 Jan 2016 For 24 hours (YKS)	Sheffield, Rotherham, South Yorkshire	95,000	Brown discolouration due to disturbance of mains deposits following a pump failure.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Flushed mains. • Repaired faulty equipment. • Sampled affected area. • Reviewed risk assessments for the trunk mains and the affected areas <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Lack of maintenance of equipment. • Recommended the company review risk assessment <p>Risk classification: Significant.</p>
18 Jan 2016 For 12 hours (TMS)	Central Reading, Berkshire	88	Brown discolouration due to planned work on the network causing mobilisation of stagnant water.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Rezoned area (brought in water from different source). • The company has provided a revised methodology for risk assessment and an action plan to address the shortcomings highlighted during this event. <p>DWI Comments and Findings:</p> <p>The company received recommendations regarding:</p> <ul style="list-style-type: none"> • Inadequate contingency planning. • Inadequate investigations into root cause. • Inadequate procedures. • Inadequate risk assessment. • Inadequate training / competence of staff. • The Inspectorate considered this to be an avoidable event. • Enforcement action was considered. <p>Risk classification: Significant.</p>

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19 Jan 2016 For 10 hours (SVT)	Birmingham	1,300,000	Treatment failure at Frankley works: issues with coagulation dosing leading to breach of iron PCV on final water, compromising final disinfection	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Investigation ongoing.
20 Jan 2016 For 3 days (SEW)	Groombridge works, Tunbridge Wells, Kent	2,393	Consumer complaints of musty taste and odour caused by stagnant water entering the contact tank at Groombridge works.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Works shut down • The contact tanks were inspected and cleaned • The filtration plant was drained and a faulty valve replaced to prevent stagnant water from entering the contact tank. • Sampled affected area. • Flushed mains. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Investigation ongoing.
21 Jan 2016 For 2 days (DWR)	Merthyr Tydfil, South Wales	28,750	Brown discolouration due to low level in Pengarnddu service reservoir, following an unplanned shutdown of Pontsticil water treatment works.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Repaired faulty equipment. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Lack of maintenance of equipment. • A Notice is in place for the company to build a new reservoir at Pengarnddu. <p>Risk classification: Significant.</p>

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25 Jan 2016 For 1.5 hours (SVT)	Birmingham	1,300,000	Loss of coagulation at Frankley works leading to breach of iron PCV compromising final disinfection	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • A repeat of the event that occurred on 19 January (see above) • Investigation ongoing.
28 Jan 2016 For 3 days (SVT)	Worksop, Nottinghamshire	6,137	Brown discolouration due to planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • The planned work was immediately stopped. • Flushed mains. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
01 Feb 2016 For 20 hours (CHO)	Shipton Bellinger and Cholderton, Hampshire	1,260	Treatment failure: Loss of chlorination due to plant failure at Cholderton works.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired faulty equipment. • Review of procedures. • Shut down treatment works. • Increased chlorine residuals at treatment works. <p>The company has instigated twice daily monitoring of chlorine levels using portable analytical equipment.</p> <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate treatment process–Disinfection. • Did not liaise with local/health authorities. • Inadequate follow- up sampling. • Inadequate risk assessment. <p>Risk classification: Significant.</p>

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02 Feb 2016 For 0.5 hours (NNE)	Gunnerton works, Northumberland	29,648	Improperly disinfected water due to failure of pH control following planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • The company reviewed procedures and retrained staff. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Procedures were inadequate and sampling not timely enough. There was inadequate communication causing a delay in response. • Recommendations were made regarding these deficiencies and that learning from this event is shared across all sites. <p>Risk classification: Significant.</p>
05 Feb 2016 For 2 days (SVT)	Hucknall, Nottinghamshire	40,000	Brown discolouration due to unauthorised valve operation by a third party.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Flushed mains. • Retrained staff. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
06 Feb 2016 For 3 days (TMS)	Childrey Warren works, Wantage, Oxfordshire	10,494	<i>Cryptosporidium</i> detection following raw water deterioration.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Installed a membrane treatment plant to mitigate the risk. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

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07 Feb 2016 For 4 days (SVT)	Perry Bar, Birmingham	263	Mains damage during planned work to repair a sewer.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued do not drink notices. • Provided bottled water on request. • Sampled affected area. • Repaired and chlorinated main. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
10 Feb 2016 For 1 day (YKS)	Bransholme, Hull	5,750	Brown discolouration due to burst main following third party damage.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Repaired main. • Rezoned area (brought in water from different source). • Increased flows due to the rezone caused discolouration. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Metal and turbidity failures were noted during this event, a review within the zone identified previous iron failures and a high customer contact rate for discolouration. • Recommended the company review their risk assessment for the zone ensuring adequate recording of risks associated with discolouration and metals. <p>Risk classification: Significant.</p>
11 Feb 2016 For 5 days (TMS)	Whitehall, Central London	52,876	Loss of supplies/poor pressure due to burst main caused by third party damage.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Rezoned area (brought in water from different source). • Repaired and flushed main. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Suggested the company review liaison procedures with the third party; this was the second time this main was damaged. <p>Risk classification: Significant.</p>

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12 Feb 2016 For 10 hours (UUT)	Lancaster works, Morecombe, Langthwaite	146,667	Treatment failure: elevated turbidity on contact tank outlet.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Outlet valves on second stage filters were passing. • Partial draining of the main between the filters and contact tank resulted in air entrainment affecting the turbidity monitors. • Repaired faulty equipment. • Blended supply with another source. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
16 Feb 2016 For 3 hours (SVT)	Nottinghamshire	75,000	Loss of supplies/poor pressure due to a planned shutdown at Church Wilne works.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued do not drink notices to consumers reporting blue water due to backsiphonage. • Flushed mains. • Review of procedures and internal reorganisation of personnel. <p>DWI Comments and Findings:</p> <p>Recommendations were made to address the following:</p> <ul style="list-style-type: none"> • Inadequate risk assessment for changes to the planned work. • Inadequate training / competence of staff. • Inadequate number of samples taken and sampling was not timely enough. • Inadequate complaints response procedures. • Prioritisation of backflow installation to protect the wider network as quickly as possible. <p>Risk classification: Significant.</p>

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18 Feb 2016 For 2 days (SVT)	Draycote works, Warwickshire	91,199	Evidence of microbiological contamination (<i>E. coli</i>).	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • There is an existing Notice in place for coliforms and <i>E. coli</i> across all Severn Trent Water's treatment works. <p>Risk classification: Significant.</p>
26 Feb 2016 For 60 weeks (TMS)	Thames Water Laboratory	N/A	Deliberate alteration of baseline AQC data for organic chemistry.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Retrained staff. • Review of procedures implementing preventative measures. • Engaged with instrument manufacturers. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The Inspectorate required the company to re-submit affected data, with comments appended to reflect the inaccuracies. <p>Risk classification: Significant.</p>
29 Feb 2016 For 1 day (YKS)	Eastfield, near Scarborough, Yorkshire	8,000	Treatment failure due to elevated turbidity in raw water at Cayton Carr Lane works.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Rezoned area (brought in water from different source). • Company contained affected water in one reservoir compartment and removed this to waste. • Retrained staff and reviewed procedures to ensure compliance with Regulation 26. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate training/competence of staff. • Inadequate treatment process–Disinfection. • Lack of maintenance of equipment. <p>Risk classification: Significant.</p>

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02 Mar 2016 For 10 hours (SVT)	Chapel en Le Frith, Derbyshire	1,500	Loss of supplies/poor pressure due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired main. • Sampled affected area. • Flushed mains. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
03 Mar 2016 For 12 hours (UUT)	Huyton, Liverpool	30,865	Brown discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Flushed mains. • Repaired main. • Sampled affected area. • Updated their risk assessment to reflect the potential risk of discolouration within the area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
04 Mar 2016 For 2 weeks (SWT)	Clyst St George near Exeter, Devon	375	Risk of contamination due to illegal cross connection with private water supply.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Liaised with the local authority regarding known private water supplies. • Carried out water fittings inspections, identified and disconnected a cross connection with a private water supply. • Provided bottled water on request. • Flushed mains to remove the private supply water. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

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05 Mar 2016 For 2 days (UUT)	Woodgate Hill No.2 works, Greater Manchester	1,463,048	<i>Cryptosporidium</i> detection.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Removed contact tank from supply. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Caused by ingress whilst contact tank roof was being repaired • Investigation ongoing. <p>Risk classification: Serious.</p>
09 Mar 2016 For 6 hours (ANG)	Barrow-Upon-Humber, Lincolnshire	2,530	Brown discolouration due to planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Flushed mains. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate and delayed follow-up sampling. <p>Risk classification: Significant.</p>
09 Mar 2016 For 5 days (SWT)	Greatwell and Willmington, Devon	2,000	Risk of contamination from flooding of Hook works following heavy rainfall.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Shut down treatment works. • Flushed mains. • Inspected the contact tank and repaired routes of ingress. • Issued a boil water notice. • Worked with local farmer to avoid slurry spreading when heavy rain is forecast. • Upgraded drainage at the works and installed a diversion pipe to divert surface water away from the site. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Supplied unwholesome water in breach of regulations. • Inadequate risk assessment. <p>Risk classification: Significant.</p>

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11 Mar 2016 For 26 hours (SVT)	Castle Donington, Derbyshire	8,198	Do not use notice issued to consumers following high chlorine caused by dosing failure at Castle Donington service reservoir.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Removed service reservoir from supply. • Flushed mains. • Issued a do not use notice. • Provided bottled water. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Chaotic communications with consumers resulted in up to 125,000 people included in the do not use advice at one point. • The company missed a number of opportunities to prevent the event. • Inadequate risk assessment prior to planned operational changes. • Inadequate contingency plan for provision of alternative supplies. • The company accepted a caution for the offence of supplying water unfit for human consumption. <p>Risk classification: Serious.</p>
24 Mar 2016 For 20 weeks (SRN)	Sarisbury Green, Hampshire	3	Evidence of microbiological contamination (<i>P. aeruginosa</i>) at a single property due to contamination of the private domestic system	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

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29 Mar 2016 For 12 hours (YKS)	Keighley, West Yorkshire	8,860	Loss of supplies and discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired and flushed main. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
30 Mar 2016 For 20 hours (HPL)	Hartlepool, County Durham	17,745	Brown discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired main. • Provided bottled water on request. • Sampled affected area. • Flushed mains. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
31 Mar 2016 For 4 days (UUT)	Halewood, Merseyside	97,558	Brown discolouration due to burst main following third party damage.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Provided an alternative supply direct injection into the distribution system from tankers. • Provided bottled water on request. • Repaired and flushed main. • Sampled affected area. • Liaised with building contractors regarding the protection of a main running through building site. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Unacceptable delay in notifying Inspectorate. • Reminder to follow best practice for maintaining wholesome water supplied via tankers. • Queried an elevated plate count result from an associated reservoir, which was subsequently taken out of service for inspection and ingress identified. <p>Risk classification: Significant.</p>

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01 Apr 2016 For 1 hour (NNE)	Horsley works, Newcastle	619,333	Compromised final disinfection due to loss of control of pH correction.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired faulty equipment. • Sampled affected area. • Installed new labelling for critical instrumentation and improved visibility of potential impact on contact time when jobs are raised. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
06 Apr 2016 For 5 weeks (BRL)	Bristol Water Laboratory	N/A	Deliberate falsification of on-site chlorine analytical quality control (AQC) data by a company employee.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Company interviewed employee and started disciplinary proceedings. • Company reviewed training and completed retraining of all staff. • Reviewed procedures and introduced additional quality control checks. • Sample data resubmitted. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate training/competence of staff. • Recommendation under Regulation 16 to resubmit all sample data for the associated time period with the comment that no valid AQC data associated with it. <p>Risk classification: Significant.</p>
09 Apr 2016 For 1 day (SVT)	Mossgate works, Stoke on Trent	31,365	Evidence of microbiological contamination: (<i>E. coli</i>).	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Shut down treatment works. • Brought forward programme of work and installed ultraviolet (UV) treatment. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

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09 Apr 2016 For 2 hours (YKS)	Chellow Heights works, Bradford, Yorkshire	670,000	Treatment failure: loss of chlorination following power failure.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Increased chlorine residuals at treatment works by slug dosing the tanks. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate risk assessment. <p>Risk classification: Significant.</p>
11 Apr 2016 For 24 hours (SVT)	Strensham works, Worcestershire	691,132	Evidence of microbiological contamination: (<i>E. coli</i>) at Strensham works	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Replaced faulty equipment. • Carried out a programme of work to rectify potential sources of contamination. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • An existing Notice is in place at the works requiring improvements to the disinfection processes. The work is on target for completion by the due date. <p>Risk classification: Significant.</p>
12 Apr 2016 For 3 days (SRN)	Deal, Kent	37,039	Deliberate collection of samples from incorrect location by company employee.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Retrained staff. • Review of procedures. • Improved sampler auditing and tracking. • Repeated the samples. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

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13 Apr 2016 For 25 hours (SEW)	Maidstone, Kent	623	Brown discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired faulty equipment. • Flushed mains. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
16 Apr 2016 For 3 days (ANG)	Snitterby, Atterby, Bishop Norton villages, Lincolnshire	980	Risk of contamination following third party damage to a main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued a boil water notice. • Increased chlorine residuals in the distribution system. • Repaired main. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response was satisfactory; no further DWI action to be taken. <p>Risk classification: Significant.</p>
19 Apr 2016 For 4 hours (ANG)	Grafham works, Perry, Cambridgeshire	26,000	Media interest following chlorine gas leak and evacuation of a nearby village.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Shut down treatment works. • Rezoned area (brought in water from different source). <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Drinking water quality was unaffected and no further DWI action was taken. <p>Risk classification: Significant.</p>

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22 Apr 2016 For 1 week (YKS)	Hull and Holderness, Yorkshire	200,000	Earthy taste and odour due to increase of geosmin and methylisoborneol in the raw water at Tophill Low works.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Attempted to commence powdered activated carbon (PAC) dosing, however there was an electrical fault. • Reduced flow through the works and repaired faulty equipment. • Due to customer contacts the dose was increased, this then caused damage to the power inverter and the system failed. • Sampled affected area. • Reviewed triggers to initiate PAC dosing. • Introduced a proactive process to test dosing systems. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Recommended the company consider earlier responses from maintenance personnel for systems critical to maintain compliance with Regulation 4. • Recommended the company advance investigations to mitigate the risk of treatment failure. • Suggested the company ensure they have spare parts available for critical assets. <p>Risk classification: Significant.</p>
28 Apr 2016 For 24 hours (SEW)	Bexhill, Surrey	12,785	Loss of supply/low pressure followed by aeration and discolouration caused by planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Flushed mains. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Recommended the company ensure sampling is more timely. • Inadequate training/competence of staff. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
03 May 2016 For 3 days (YKS)	Silkstone and Cawthorne, South Yorkshire	4,750	Brown discolouration due to burst main associated with planned work on the network.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Replaced faulty equipment. • Sampled affected area. • Rezoned area (brought in water from different source). <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate communication caused delay in response. • Lack of maintenance of equipment. • Recommended the company review the operation of all automated valve and pumping station controllers. <p>Risk classification: Significant.</p>
04 May 2016 For 3 weeks (DWR)	New Moat, Pembrokeshire	3	Evidence of contamination with hydrocarbons affecting a single property	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Provided bottled water on request. • Issued a do not drink notice. • Served a notice on the property owner to replace plastic service pipe with barrier pipe. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
04 May 2016 For 4 weeks (UUT)	Liverpool	125	Metallic taste and evidence of contamination in a block of flats.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected properties. • Issued a do not drink notice. • Provided bottled water on request. • Fittings inspections identified contraventions likely to have caused contamination. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Recommended the company review complaint responses as the initial complaint was not recorded properly delaying the investigation. <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
09 May 2016 For 4 weeks (SWT)	Plymouth, Devon	172,112	Musty taste or odour due to an increase in concentrations of geosmin in the raw water at Crownhill WTW.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Flushed mains. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate contingency planning. • Inadequate treatment process—lack of effective carbon dosing. • Recommended the company improve its investigative monitoring of raw water. <p>Risk classification: Significant.</p>
12 May 2016 For 3 days (SEW)	Paddlesworth and West Malling, Snodland, Kent	15,263	Brown discolouration due to planned work (incorrect valve operation).	<p>Company Actions:</p> <ul style="list-style-type: none"> • Flushed mains. • Sampled affected area. • Reviewing the flushing regime. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate procedures. • There was a known risk of discolouration in this area and the procedures in place to manage this risk were not followed. • An existing Notice is in place to address discolouration within the zone. <p>Risk classification: Significant.</p>
12 May 2016 For 1 day (WSX)	East Burton and Wool, Dorset	1,438	Loss of supplies/poor pressure due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Provided an alternative supply by tanker / bowser. • Provided bottled water on request. • Repaired main. • Assessed options to increase resilience of mains travelling beneath railways. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
16 May 2016 For 10 hours (SRN)	Southampton, Hampshire	3,360	Brown discolouration due to planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired main. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate risk assessment. • Inadequate contingency planning. • Enforcement action considered. <p>Risk classification: Significant.</p>
20 May 2016 For 20 weeks (ANG)	Leighton Buzzard, Bedfordshire	125	Do not drink advice issued to consumers, including inhabitants of a caravan park, due to an illegal connection running through a cess pit.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Do not drink advice issued • Installed backflow protection. • Sampled affected area. • Replaced and extended the existing main to ensure sufficient supply of water to the area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
03 Jun 2016 For 18 hours (SVT)	Groby, Leicestershire	18,610	Brown discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Sampling was not timely enough. • Supplied unwholesome water in breach of regulations. • Inadequate follow up sampling. <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
06 Jun 2016 For 1 week (UUT)	Clitheroe, Lancashire	3	Brown discolouration and loss of supply due to property connected to an untreated source.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected property and neighbours. • Issued a do not drink notice. • Connected the property to the public supply. • Carried out water fittings inspections. • Investigated other former concessionary supplies connected to the mains to confirm absence of similar issue elsewhere. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Supplied unwholesome water in breach of regulations. • This property had previously been supplied with an untreated concessionary supply, operated by UUT, which the company had connected to the public supply network under the terms of a formal Notice. Contractors employed by UUT reconnected the plumbing to the untreated supply in error. Numerous breaches of the Water Fittings Regulations were identified. • The company failed to comply with the conditions of the Notice <p>• See also 21 June, (UUT), Rossendale, Lancashire below.</p> <p>Risk classification: Significant.</p>
08 Jun 2016 For 4 days (SVT)	Tewkesbury, Gloucestershire	30,000	Loss of supplies/poor pressure due to burst outlet main at Mythe works.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Rezoned area (brought in water from different source). • Provided bottled water on request. • Sampled affected area to ensure no contamination caused by the complex repair. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Recommended the development of a robust risk based procedure ensuring water quality risks associated with valve operations are assessed prior to their operation. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
09 Jun 2016 For 1 hour (ANG)	Stotfold, Bedfordshire	40	Brown discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired main. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Made a suggestion that risk and impact assessments are carried out for jobs in areas known to be at risk of discolouration. <p>Risk classification: Significant.</p>
10 Jun 2016 For 12 hours (AFW)	Mill Hill and Harrow, North London	45,000	Loss of supplies/poor pressure due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired main. • Provided bottled water on request. • Rezoned area (brought in water from different source). • Flushed mains. • Risk assessment prior to recharge of the main and reduced the likelihood of any discolouration upon restoration of supplies. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
14 Jun 2016 For 49 hours (WSX)	Trowbridge, Wiltshire	22,163	Aerated water due to planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired main. • Flushed mains. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate procedures. • Recommended the company review their risk assessment. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
16 Jun 2016 For 48 hours (UUT)	Huntington works, near Chester	1,204,982	<i>Cryptosporidium</i> detection due to raw water deterioration.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Shut down treatment works. • Improperly treated water retained on site and run to waste until conditions stabilised. • Rezoned area (brought in water from different source). • Sampled affected area. <p>DWI Comments and Findings: The Inspectorate made recommendations regarding the following:</p> <ul style="list-style-type: none"> • Inadequate contingency planning. • Inadequate communication caused delay in response. • Inadequate sampling response including number taken and timeliness. • Inadequate investigations into root cause. • Inadequate procedures. • Inadequate risk assessment. • Inadequate treatment process–Clarification. • Enforcement action was considered. <p>Risk classification: Significant.</p>
20 Jun 2016 For 20 weeks (SRN)	Southern Water Supply area	N/A	Inaccuracies in the application of the reduced sampling frequency flag in compliance data.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Retrained staff. • Repaired faulty equipment. • Introduced additional manual checks. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • A final enforcement order (FEO) was previously served (under section 18 of the Water Industry Act 1991) for similar issues. • The corrective actions required by the enforcement order are sufficient to prevent a recurrence. • The DWI has carried out an audit of the company's compliance with the requirements of the FEO, which was found to be unsatisfactory. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
20 Jun 2016 For 13 hours (SVT)	Handsworth and Smethwick, Birmingham	10,713	Brown discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired main. • Rezoned area (brought in water from different source). • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
21 Jun 2016 For 3 years (UUT)	Rossendale, Lancashire	3	Evidence of microbiological contamination (coliforms) at a concessionary supply.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Property found to be connected to a raw water main. • Issued a boil water notice. • Inspected and confirmed there were no cross connections with the mains supply. • Sampled affected area. • The property should have been transferred to the public supply network under the terms of a formal notice, by contractors who failed to complete the necessary work. The work was completed following this event. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Poor control of contractors. • Delay in lifting the boil water notice, recommended the company review these timescales. • This property should have been connected to the public supply network under the terms of a formal Notice. • The company had failed to comply with the conditions of this Notice for the second occasion in 2016 - see also event on 6 June, (UUT), Clitheroe, Lancashire above. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
22 Jun 2016 For 3 days (UUT)	Sandbach, Cheshire	5	Consumer advised to boil water following third party damage to supply pipe.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued boil water advice. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
24 Jun 2016 For 15 days (SES)	Gravelly Hill Tower, Caterham, Surrey	1,640	Evidence of microbiological contamination (<i>E. coli</i>) at a service reservoir.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Likely cause due to ingress following heavy rainfall. • Improved roof drainage and installed a new raised access cover. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
24 Jun 2016 For 48 hours (TMS)	Chigwell reservoir, Essex	110,240	Evidence of microbiological contamination: (<i>E. coli</i>).	<p>Company Actions:</p> <ul style="list-style-type: none"> • Removed service reservoir from supply. • Company to review service reservoir turnover. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
24 Jun 2016 For 1 day (TMS)	Hampstead Heath and Cockfosters service reservoirs, London	146,199	Evidence of microbiological contamination: (coliforms and <i>E. coli</i>) caused by ingress into two service reservoirs (structural failure).	<p>Company Actions:</p> <ul style="list-style-type: none"> • Samples were taken following heavy rainfall. • Removed both service reservoirs from supply for internal inspections, ingress and a contaminated sample line were discovered as the root causes. • Replaced roof membrane and disinfected sample lines. • Company completed a sampling programme including dip samples following reservoir isolation. • Retrained staff. • Review of procedures implementing preventative measures. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Suggested a review of sample tap material and sample tap disinfection frequency. • Suggested a review of the condition and effectiveness of roof membranes at service reservoirs. <p>Risk classification: Significant.</p>
26 Jun 2016 For 3 days (SEW)	Maidstone, Kent	71,620	<i>Cryptosporidium</i> detection in bulk supply from Southern Water (Eastling Works).	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Rezoned area (brought in water from different source). • Turned off the bulk supply. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate risk assessment. <p>See 26 June (SRN), Eastling works - below.</p> <p>Risk classification: Serious.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
26 Jun 2016 For 18 days (SRN)	Eastling works, Faversham, Kent	235,895	<i>Cryptosporidium</i> detection.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Removed raw water sources from supply. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Investigation ongoing.
26 Jun 2016 For 1 week (SRN)	Ventnor, Isle of Wight	7,999	<i>Cryptosporidium</i> detection in Ventnor works treated water.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Flushed mains. • Shut down treatment works. • Sampled affected area. • Rezoned area (brought in water from different source). • Increased chlorine residuals at treatment works. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate risk assessment. • Inadequate contingency planning. • Inadequate follow-up sampling. • Samples not analysed for appropriate parameters. • Sampling was not timely enough. • Enforcement action was initiated requiring the risk of <i>Cryptosporidium</i> to be addressed before Ventnor works was returned to supply. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
28 Jun 2016 For 3 days (SWT)	Boohay service reservoir, Kingwear, South Devon	500	Evidence of microbiological contamination: (coliforms) at a service reservoir.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Removed service reservoir from supply. • Rezoned area (brought in water from different source). • Reviewed their reservoir operation to reduce the storage age of the water in the network. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate procedures. • Suggested the company review their risk assessment in relation to their internal standard for chlorine residuals. <p>Risk classification: Significant.</p>
29 Jun 2016 For 5 days (HPL)	Hartlepool, County Durham	13,750	Loss of supplies/poor pressure due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired main. • Sampled affected area. • Rezoned area (brought in water from different source). <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
29 Jun 2016 For 1 hour (SRN)	Otterbourne works, near Winchester, Hampshire	250,000	Treatment failure: Loss of chlorination due to planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Upon restart there were three short intermittent periods where chlorine dosing did not operate resulting in a drop of chlorine within the contact tank. • Retrained staff. • Review of procedures. • Sampled affected area. • The company produced an action plan identifying the need for an increase in investment for the resource, maintenance, equipment and assets. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Carried out a technical audit. • Made recommendations to improve final disinfection arrangements. • Initiated enforcement action requiring risks associated with <i>Cryptosporidium</i> and inadequate disinfection to be addressed. <p>See also 18 October (SRN), Otterbourne works treatment failure. Risk classification: Significant.</p>
29 Jun 2016 For 1 day (TMS)	Horton Kirby works, London	90,000	<i>Cryptosporidium</i> detection.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Shut down treatment works. • Sampled affected area. • Filtration to be installed before the works is returned to service. <p>DWI Comments and Findings:</p> <p>Recommendations were made regarding:</p> <ul style="list-style-type: none"> • Inadequate risk assessments. • Inadequate procedures for investigating the causes of microbiological detections at groundwater sites. • Ensure hydraulic risks have been appropriately considered. • Improve understanding of the source, potential pathways and how the operation of aquifer storage and recovery schemes may affect water quality. • The specification of the proposed filtration units. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
30 Jun 2016 For 6 days (SRN)	Meopham, Gravesend, Kent	8	Consumer concern about cases of illness.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Investigated both public and private mains in the area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
30 Jun 2016 For 3 weeks (SRN)	Burpham works, West Sussex	61,134	Potential contamination of source with hydrocarbons due to third-party spillage of fuel within the source protection zone.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Liaised with the Environment Agency and other organisations to assess the risk of borehole contamination. • Carried out hydraulic modelling. • Developed contingency plans. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Recommended the company update their Regulation 27 risk assessment to reflect the risk of hydrocarbon contamination. • Suggested robust contingency plans are produced should there be a risk on sufficiency of supply from this site. <p>Risk classification: Significant.</p>
01 Jul 2016 For 1 day (SEW)	Blackmoor, Hampshire	3,500	Brown discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired and flushed main. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Suggested the company review its risk assessment. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
02 Jul 2016 For 2 days (UUT)	Accrington, Lancashire	15,000	Loss of supplies/poor pressure due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Provided an alternative supply by tanker/bowser. • Provided bottled water on request. • Repaired main. • Assessing the condition of the main and will make repairs as required. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
03 Jul 2016 For 1 day (TMS)	Merton, London	87,500	Loss of supplies/poor pressure due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired main. • Sampled affected area. • Retrained staff. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate communication caused delay in response. • Inadequate follow-up sampling, company procedures were not followed. • No information regarding sampling results was provided in reports, upon receipt the sampling deficiency was identified. <p>Risk classification: Significant.</p>
03 Jul 2016 For 3 weeks (UUT)	Blackpool, Lancashire	13	Petrol taste and odour due to bitumen-lined main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued a do not drink notice. • Sampled affected area. • Replaced the section of main. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Recommended the company review their risk assessment. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
03 Jul 2016 For 3 days (YKS)	Rivelin works, Sheffield	575,000	<i>Cryptosporidium</i> detection.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Review of procedures. • Plan to upgrade treatment processes. • Reviewed performance and operation of the sludge thickener system and repaired associated monitoring equipment. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
07 Jul 2016 For 3 days (SVT)	Whitchurch, Shropshire	48	Loss of supply due to burst main following third party damage.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued a do not drink notice due to risk of ingress. • Repaired and flushed the main. • Increased chlorine residuals in the distribution system. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
08 Jul 2016 For 73 hours (SVT)	Areas of Birmingham	24,000	Brown discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Provided bottled water on request. • Repaired main. • Rezoned area (brought in water from different source). • Sampled affected area. <p>DWI Comments and Findings:</p> <p>Made recommendations to:</p> <ul style="list-style-type: none"> • Undertake modelling in future to inform planned flushing operations. • Promptly visit other sites operated by the contractor to ensure any mains protection measures have been implemented. • Plan how to reduce the likelihood of discolouration during future flow increases. • Include liaison with third parties working over strategic mains as a control measure in risk assessment reports. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
11 Jul 2016 For 19 hours (SVT)	Areas of Nottingham	10,000	Loss of supplies due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired main. • Rezoned area (brought in water from different source). • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
12 Jul 2016 For 2 days (ESK)	Occold, West Suffolk	1,540	Brown discolouration due to flow changes following a pump failure, caused by a mains cleaning swab lodged in the pump.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Flushed mains. • Provided bottled water on request. • Removed service reservoir from supply. • Review of procedures. • Sampled affected area. • Retrained staff. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate communication caused delay in response. • Inadequate procedures. • Recommended the tracking of swabs and water quality contact escalation processes are improved. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
13 Jul 2016 For 1 day (AFW)	Preston service reservoir, Stevenage, Hertfordshire	150,000	Evidence of microbiological contamination at a service reservoir: (coliforms) due to ingress.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Removed service reservoir from supply • Inspected and repaired the reservoir before returning to supply. • Increased chlorine residuals in the distribution system. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Sampling point was 8km downstream of the service reservoir outlets and consumers were supplied before this point. <p>Risk classification: Significant.</p>
13 Jul 2016 For 1 day (SVT)	Bordesley, Birmingham, West Midlands	133	Backsiphonage of blue water due to a cross connection affecting a block of flats.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued a do not drink notice. • Provided bottled water on request. • Sampled affected area. • Carried out fittings inspection. • Double non-return valve (NRV) installed on the inlet to the building and worked with the flat management company to install NRVs on each flat. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
14 Jul 2016 For 8 days (ANG)	Barrow works, Lincolnshire	104,190	Treatment failure: elevated fluoride caused by failure of dosing equipment.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Repaired faulty equipment. • Shut down treatment works. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The failed to comply with the Code of Practice on Fluoridation of Water Supplies. • Inadequate treatment process. • Enforcement action was considered, however the causes were resolved and additional monitoring installed. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
18 Jul 2016 For 1 day (SRN)	Rochester, Kent	37,068	Discolouration caused by flow changes following low reservoir level caused by pump failure.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Provided bottled water on request. • Flushed mains. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Investigation ongoing.
18 Jul 2016 For 2 days (SVT)	Westbourne, Telford, Shropshire	58	Risk of contamination from ingress during planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired faulty equipment. • Issued a do not drink notice. • Provided bottled water. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
19 Jul 2016 For 13 hours (SVT)	Trimley works, near Kidderminster, Worcestershire	418,195	Treatment failure: low pH due to lime dosing failure.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Replaced faulty equipment. • Review of procedures. • Rezoned area (brought in water from different source). • Shut down treatment works. • Sampled affected area. • Introduced better testing of batch strength of lime for dosing. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
26 Jul 2016 For 1 day (NNE)	Warkworth works, Morpeth, Northumberland	153,496	<i>Cryptosporidium</i> detection following heavy rainfall and increase in raw water colour.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
26 Jul 2016 For 10 months (TMS)	Newbury, Berkshire	3	Evidence of contamination with hydrocarbons affecting a single property.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued a do not drink notice. • Provided bottled water on request. • Inspected barrier pipe previously installed at the site. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
29 Jul 2016 For 4 days (YKS)	Thorne, near Doncaster, South Yorkshire	3,500	Evidence of microbiological contamination following backsiphonage due to an illegal cross connection at a poultry processing factory.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Carried out fittings inspections and identified a number of contraventions at a nearby poultry factory including two tanks with no backflow protection. • Immediately isolated the supply to the poultry factory. • Issued do not drink notices to affected consumers. • Provided an alternative supply by tanker/bowser and bottled water on request. • Thoroughly flushed the network to remove all the contaminated water. • Learning from the event has been incorporated into company procedures. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Serious.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
03 Aug 2016 For 2 hours (ESK)	Layer works, Colchester, Essex	191,967	Treatment failure: elevated turbidity due to planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Review of procedures. • Company has checked all similar sites where disinfection improvements have been carried out to ensure that associated software upgrades have been carried out. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate procedures. • Company to improve its planning and commissioning of capital schemes. <p>Risk classification: Significant.</p>
04 Aug 2016 For 1 day (DWR)	Llanelli, Carmarthenshire	65,000	Brown discolouration due to defective valve on inlet to Felinfoel service reservoir, causing flow changes and disturbance of deposits in the network.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired faulty equipment and flushed mains. • To prevent a recurrence a larger mesh filter to increase the surface area and decrease the likelihood of blockage has been installed. • Automatic flow control has also been commissioned. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
05 Aug 2016 For 5 days (SVT)	Belper, Derbyshire	4,198	Brown discolouration caused by flow changes following a burst on the inlet main of Boundary Tower service reservoir.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired inlet main. • Provided bottled water on request. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
06 Aug 2016 For 4 days (SVT)	Shipston-on-Stour, Warwickshire	1,260	Loss of supplies/poor pressure due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired main. • Rezoned area (brought in water from different source). • Sampled affected area. • The main has been identified for investment and is awaiting approval. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
15 Aug 2016 For 2 weeks (DWR)	Ceredigion, West Wales	5	Evidence of microbiological contamination (<i>E. coli</i>) following a burst main repair.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued a boil water notice. • Provided bottled water on request. • Sampled affected area. • Chlorinated and flushed the main. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
15 Aug 2016 For 4 weeks (UUT)	Carlisle, Cumbria	90,639	Brown discolouration due to planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Review of procedures. • Repaired main. • New communication plan to better inform consumers. • Installed network turbidity meters. • Made improvements to network models. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Did not keep customers informed. • Unacceptable delay in notifying local/health authorities. • Inadequate investigations into root cause. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
17 Aug 2016 For 3 days (SVT)	Redditch, Worcestershire	18,000	Loss of supplies due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Provided bottled water on request. • Repaired main. • Rezoned area (brought in water from different source). <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate investigations into root cause. • Recommended the company improve event reports in line with the information direction. <p>Risk classification: Significant.</p>
18 Aug 2016 For 24 hours (DWR)	Tynywaun works, South Wales	23,000	Treatment failure: lime dosing malfunction due to faulty sensor.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Repaired faulty equipment. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate treatment process–Filtration. • Samples not analysed for appropriate parameters. • Recommended sampling for <i>Cryptosporidium</i> is undertaken during similar event investigations. • Recommended the company improve their response time to suspected treatment failures. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
18 Aug 2016 For 24 hours (WSX)	Kingston St Mary reservoir, Taunton, Somerset	100,000	Evidence of microbiological contamination: (<i>E. coli</i>).	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Bypassed service reservoir and removed from supply for inspection. • Replaced the sample line and tap. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
19 Aug 2016 For 2 days (DWR)	Aberdare and Merthyr Tydfil, South Wales	50,000	Brown discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired main. • Flushed mains. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
19 Aug 2016 For 72 hours (SEW)	East Meon works, Hampshire	1,350	<i>Cryptosporidium</i> detection.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Shut down treatment works. • Sampled affected area. • Flushed mains to remove any potentially contaminated water. • Installed a temporary continuous sampling rig for <i>Cryptosporidium</i>. <p>DWI Comments and Findings:</p> <p>An audit was carried out and recommendations made:</p> <ul style="list-style-type: none"> • Review procedures for the maintenance, calibration and checking of pressure sensors for membrane integrity tests. • Review risk assessments for <i>Cryptosporidium</i> mitigation and pathways for contamination in response to all similar events. • Inadequate investigations into root cause. • Review the volume of water sampled for <i>Cryptosporidium</i> monitoring across all at risk sites. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
19 Aug 2016 For 4 days (SVT)	Malvern, Worcestershire	25,000	Loss of supplies/poor pressure due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Provided an alternative supply of water by tanker/bowser. • Rezoned area (brought in water from different source). • Provided bottled water on request. • Sampled affected area. • Repaired and flushed mains. • Review of procedures. <p>DWI Comments and Findings</p> <ul style="list-style-type: none"> • Recommended the improve procedures for assessing the condition of assets. • Suggested a review of procedures to ensure water supplied by tankers is wholesome • Enforcement action considered. <p>Risk classification: Significant.</p>
22 Aug 2016 For 1 hour (HPL)	Dalton Piercy works, Hartlepool	88,875	Treatment failure: Elevated turbidity due to sediment in the on-line analyser's sample line.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Flushed mains. • Sampled affected area. • Sample line was cleared. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Lack of maintenance of equipment. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
23 Aug 2016 For 8 hours (DWR)	South Pembrokeshire, Wales	17,500	Brown discolouration following third party damage to a main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Provided bottled water on request. • Rezoned area (brought in water from different source). • Sampled affected area. • Repaired main. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
23 Aug 2016 For 1 hour (ESK)	Langham works, Chelmsford, Essex	1,689,928	Elevated turbidity from debris entering the process during an inspection of an unsealed former dosing point.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Sealed the dosing point and repaired similar issues at other sites. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Suggested Regulation 28 reports for the site are reviewed. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
24 Aug 2016 For 4 weeks (DWR)	North Cardiff, Wales	94,000	Musty taste and odour due to increased levels of methyl-isoborneol in raw water at Llwynon works.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Blended supply with another source and rezoned areas. • Sampled affected area. • Initiated PAC dosing at the works for more effective removal of methylisoborneol. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate communication caused delay in response. • Inadequate training/competence of staff. • Inadequate treatment process–filtration. • Sampling was not timely enough. • Inadequate risk assessment. • Enforcement action has been initiated requiring the company to investigate the emergence of taste and odour giving compounds in the impounding reservoirs. <p>Risk classification: Significant.</p>
24 Aug 2016 For 8 days (SRN)	Ryde, Isle of Wight	3	<i>Cryptosporidium</i> detection at a consumer's property following burst main repair in vicinity of damaged sewer.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled the affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
27 Aug 2016 For 11 hours (SRN)	Ryde, Isle of Wight	7,500	Loss of supplies/poor pressure due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Rezoned area (brought in water from different source). • Sampled affected area. • Identified two sections of mains that need replacing. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Enforcement action has been initiated requiring improvements to the network to mitigate risks associated with loss of supply and discolouration. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
01 Sep 2016 For 5 days (UUT)	South Liverpool	56,000	Brown discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Retrained staff on updating records. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inaccurate mains records. • Recommended appropriate training is given to both company network operators and contractors. <p>Risk classification: Significant.</p>
03 Sep 2016 For 5 days (AFW)	Dovercourt service reservoir, Harwich, Essex	48,665	Evidence of microbiological contamination (coliforms) in service reservoir.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Removed reservoir from service. • Sampled affected area. • Repaired faulty equipment. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Recommended the company reviews its procedures and puts in place adequate checks to ensure compliance with Regulation 31. • Recommended the company reviews its risk assessment procedure for the inspection of storage tanks and puts in place adequate checks to mitigate the ingress risks. <p>Risk classification: Significant.</p>
04 Sep 2016 For 2 days (BRL)	Skinners Hill, Bristol	5	Evidence of microbiological contamination (coliforms) following planned work to repair a main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Identified as associated with the hydrant which has since been disinfected. • Updated hydrant sampling procedures. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate procedures. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
04 Sep 2016 For 1 week (UUT)	Ravenglass, Cumbria	5	Issue of boil notice to two properties following failure of UV disinfection at a point-of-use treatment unit.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued a boil water notice. • Took investigational samples at the treatment works and in the properties supplied • Repaired faulty equipment. • Made improvements to the treatment process • Carried out a plumbing inspection at the properties and repaired defects <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate risk assessment. • Inadequate maintenance regime. • The properties are supplied with a concessionary supply. A Notice was in place (UUT 3173) that was closed without all available sample results been submitted to the DWI. This was revealed as part of the event review, and a recommendation was made to improve reports submitted under the requirements of formal notices. • A technical audit of the company's point of use treatment units was carried out in July 2017. <p>Risk classification: Significant.</p>
09 Sep 2016 For 20 days (YKS)	Skirlaugh, Yorkshire	3	Taste or odour due to coal tar lined mains.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued a do not drink notice and provided bottled water on request. • Sampled affected area. • Weekly flushing programme for the main. • Cut out a section of main confirming the presence of a bitumen lining. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
14 Sep 2016 For 8 days (UUT)	Low Gill, Lancashire	15	Use of a tank for temporary storage of treated water supplied to consumers which was manufactured from an unapproved material.	<p>Company Actions:</p> <ul style="list-style-type: none"> • The temporary tank was removed from supply immediately. • Provided an alternative supply by tanker/bowser. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company failed to comply with the requirements of Regulation 31, which is a criminal offence. • Prosecution considered for breach of Regulation 31, but not progressed due to procedural improvements made by the company. <p>Risk classification: Significant.</p>
16 Sep 2016 For 3 days (ANG)	Norwich, Norfolk	15,150	Microbiological contamination (<i>E. coli</i>) at Framingham No.2 water tower.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Increased chlorine residuals at service reservoir. • Sampled affected area. • Bypassed service reservoir. • Removed service reservoir from supply. • Rezoned area (brought in water from different source). • Repaired points of ingress in reservoir. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
16 Sep 2016 For 2 days (SVT)	Milford works, Stafford	33,619	Evidence of microbiological contamination: (Enterococci).	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Reviewed treatment process and found no issues. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
17 Sep 2016 For 2 days (WSX)	Penridge reservoir, Wincanton, Somerset	7,500	Loss of supplies/poor pressure due to equipment failure.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Bypassed service reservoir. • Provided an alternative supply by tanker/bowser. • Replaced faulty equipment. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
19 Sep 2016 For 12 hours (DVW)	Wrexham, North Wales	42,000	Brown discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired main. • Rezoned area (brought in water from different source). • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
19 Sep 2016 For 4 weeks (UUT)	Broughton near Preston, Lancashire	3	Tarmac taste or odour and microbiological contamination caused by ingress following accidental damage to a consumer's service pipe during planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Repaired main. • Issued a do not drink notice. • Provided bottled water on request. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Did not forewarn consumers. • Inadequate training/competence of staff. <p>Risk classification: Significant.</p>

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20 Sep 2016 For 1 week (SES)	Worcester Park, South West London	3	Evidence of contamination following the connection of a property's supply pipe to a stagnant main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Provided bottled water on request. • Reviewed procedures associated with customer communication and records. • Retrained staff on basic water quality checks before completing a connection. • Checked to ensure all resilience mains are not acting as dead legs. • Transferred the property's supply to the correct main <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Supplied unwholesome water in breach of regulations. • Inadequate communication with consumer caused a delay in response. • The company was issued with a formal warning letter. <p>Risk classification: Significant.</p>
20 Sep 2016 For 3 days (SVT)	Ranton, Staffordshire	60	Chemical taste and odour due to unknown cause.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued a do not drink notice. • Sampled affected area. • Carried out water fittings inspections. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
21 Sep 2016 For 3 days (UUT)	Atherton, Walkden and Swinton, Greater Manchester	425,000	Brown discolouration due to planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Improved valving configurations to better balance flows in the ring main. • Introduced a high flow alarm to prevent a recurrence. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Recommend the company embeds learning from this event during any future network reconfigurations and adequately monitor flow. • Recommend appropriate recording of network changes on the company systems. <p>Risk classification: Significant.</p>
22 Sep 2016 For 8 hours (TMS)	Aylesbury, Buckinghamshire	63,500	Loss of supplies/poor pressure due to planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • The area was rezoned and alternative supplies made from other sources. • Repaired main. • Sampled affected area. <p>DWI Comments and Findings:</p> <p>Recommendations were made regarding:</p> <ul style="list-style-type: none"> • Inadequate training/competence of staff. • Inadequate risk assessment; did not capture the issue with the valve. • Inadequate maintenance of equipment. • Inadequate number of samples taken. <p>Risk classification: Significant.</p>
26 Sep 2016 For 33 days (UUT)	Manchester	600,000	Musty taste and odour due contamination of aqueduct supplying Lostock works.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area • Carried out catchment investigations • Installed powdered activated carbon dosing at Lostock works • Flushed the distribution system <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Investigation ongoing.

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27 Sep 2016 For 7 hours (ANG)	Kings Lynn, Norfolk	22,500	Loss of supplies/poor pressure due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Provided an alternative supply by tanker/bowser. • Repaired and flushed the main. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
27 Sep 2016 For 2 days (SEW)	Maidstone, Kent	47,000	<i>Cryptosporidium</i> detection in bulk supply from Southern Water (Eastling works).	<p>Company Actions:</p> <ul style="list-style-type: none"> • Turned off the bulk supply. • Rezoned area (brought in water from different sources). • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Recommended the company review risk assessment as prolonged water quality problems with bulk supply are not fully mitigated and the likelihood increased. <p>See 27 September (SRN), Eastling works, below. Risk classification: Significant.</p>
27 Sep 2016 For 3 days (SRN)	Eastling works, Faversham, Kent	1,004,741	<i>Cryptosporidium</i> detection.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Removed raw water source from supply. • Initiated enhanced monitoring of the raw water. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Investigation ongoing.

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28 Sep 2016 For 3 days (AFW)	Staines-upon-Thames, Surrey	8	Petrol/bitumen taste and odour following planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued do not drink notices. • Flushed mains. • Risk assessed other valves which could be at risk of a similar event occurring and incorporating the findings into their drinking water safety plan. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Cause was found to be a valve opened in error releasing stagnant water. • Inadequate risk assessment prior to planned work. • Poor internal communications. <p>Risk classification: Serious.</p>
02 Oct 2016 For 3 days (SRN)	Nashenden works, Kent	207,996	<i>Cryptosporidium</i> detection following deterioration in raw water.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Shut down treatment works. • Surveyed the local catchment. • Improved water quality monitoring. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate risk assessment. • Recommended improvements to water quality monitoring. <p>Risk classification: Significant.</p>
06 Oct 2016 For 5 days (UUT)	Haslingden, Lancashire	3	Backsiphonage of water in a golf club's premises, from drinks carbonator reacting with copper pipework causing blue water.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued a do not drink notice. • Provided bottled water on request. • Sampled affected area. • Carried out a fittings inspection and repaired faulty valve on appliance. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

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Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
07 Oct 2016 For 5 days (ESK)	Mayland, Chelmsford	3	Evidence of microbiological contamination (<i>E.coli</i>) following a burst main repair.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued boil water advice to a single property. • Sampled the affected area • Implemented actions to mitigate against a recurrence <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • A turbidity breach had not been responded to, follow-up sampling was inadequate and samples were not analysed for appropriate parameters. • Suggested procedures were reviewed to include actions when ingress during a mains repair is suspected. <p>Risk classification: Significant.</p>
08 Oct 2016 For 1 hour (TMS)	Deptford works, London	145,550	Elevated turbidity in water supplied from treatment works.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Shut down the treatment works. • Cleaned sampling lines and associated apparatus and returned the works to service. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Lack of maintenance of sampling apparatus. • Inadequate maintenance regime for online instruments • Recommended that the company ensures that its asset inventory is complete. • The borehole headworks were found to be uncovered following planned work. <p>The company was reminded of the requirements of good practice for protection of sources.</p> <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
09 Oct 2016 For 36 hours (DWR)	Swansea and Morriston, South Wales	13,250	Brown discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired main. • Provided an alternative supply by tanker/bowser. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Lack of maintenance of equipment. • Recommendation made to not delay the implementation of the zonal study. <p>Risk classification: Significant.</p>
09 Oct 2016 For 48 other (TMS)	Dartford, Kent	50,000	Loss of supplies due to mains damage during planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Rezoned area (brought in water from different source). • Repaired and flushed mains. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Investigation ongoing.
11 Oct 2016 For 48 hours (YKS)	York	11,000	Brown discolouration due to suspected scouring of mains following planned work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • During work to replace a flow meter on site at a treatment works, a valve used to isolate the meter did not fully close allowing reverse flow from a trunk main. • Flushed main and sampled affected area. • Review of procedures. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
12 Oct 2016 For 48 hours (SST)	Walsall, Brownhills, Streetly, Sutton Coldfield & surrounding areas, West Midlands	19,000	Brown discolouration due to flow fluctuations from treatment Seedy Mill works.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Flushed mains. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Investigation ongoing.
15 Oct 2016 For 36 hours (TMS)	Norwood South London	350,000	Loss of supplies due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Rezoned area (brought in water from different source). • Repaired main. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
18 Oct 2016 For 1 hour (SRN)	Otterbourne works, near Winchester, Hampshire	284,450	Treatment failure: Filtration failure caused by failure of valves and actuators.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Following backwash of rapid gravity filter turbid water was released on return to service, the filter was immediately shut down. • A valve failure caused the filter to dry out. • Sampled affected area. • Repaired faulty equipment. • The company produced an action to address the lack of investment and maintenance. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate treatment process–Filtration. • Inadequate risk assessment. • Inadequate training/competence of staff. • Lack of maintenance of equipment. • Carried out a technical audit. • Made recommendations to improve final disinfection arrangements. • Initiated enforcement action requiring risks associated with Cryptosporidium and inadequate disinfection to be addressed. <p>See also 29 June (SRN), Otterbourne works treatment failure (above).</p> <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
18 Oct 2016 For 3 weeks (SWT)	South West Water Laboratory, Exeter	N/A	Laboratory taste and odour method suspended following independent audit.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Review of procedures for method changes. • Updated taste and odour method to meet the requirements of the 2014 Blue Book method and regained accreditation. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Recommended the company ensure the procedure is fully briefed to all staff and results provided to customers have an appropriate flag if the unaccredited method is used. <p>Risk classification: Significant.</p>
07 Nov 2016 For 24 hours (ESK)	Hanningfield works, Chelmsford, Essex	949,204	<i>Cryptosporidium</i> detection.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Increased frequency of raw and final treated <i>Cryptosporidium</i> monitoring. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Recommended the company reviews its risk-based approach to raw water monitoring across all surface water sites ensuring sampling frequencies are appropriate to the level of risk associated with <i>Cryptosporidium</i>. <p>Risk classification: Significant.</p>
09 Nov 2016 For 1 hour (SRN)	Eastling works, Faversham, Kent	247,363	Treatment failure: loss of chlorination due to power supply failure.	<p>Company Actions:</p> <ul style="list-style-type: none"> • The works shutdown preventing water from entering supply. • Manually dosed water with sodium hypochlorite. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Investigation ongoing.

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
09 Nov 2016 For 8 hours (SVT)	Nottingham	7,500	Loss of supplies/poor pressure due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Identified cause a mains fitting failure. • Rezoned area (brought in water from different source). • Provided an alternative supply by tanker/bowser. • Repaired main. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
10 Nov 2016 For 8 days (NNE)	Boulby, Cleveland	80	Evidence of microbiological contamination (<i>E. coli</i>) following a burst main repair.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued a do not drink notice. • Sampled affected area. • Increased chlorine residuals in the distribution system. • Regular flushing programme initiated and supply main due to be replaced. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Recommended a review of mains records and maintenance activities ensuring accuracy. • Recommended the company review internal quality control regarding quality of reports. <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
12 Nov 2016 For 1 day (BRL)	Nailsea, Bristol	8	Evidence of microbiological contamination (Enterococci) following planned work to repair a main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled the affected area. • The standpipe was removed from use and cleaned. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequately disinfected hydrant standpipe used for sampling was the most likely cause. • Inadequate sampling procedures. • Raised concerns with the company because this was a repeat event. <p>Risk classification: Significant.</p>
13 Nov 2016 For 14 hours (SRN)	Horsham, West Sussex	3,710	Loss of supplies/poor pressure due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate risk assessment. <p>Risk classification: Significant.</p>
14 Nov 2016 For 1 week (SBW)	Knapp Mill works, Bournemouth, Dorset	134,000	UV disinfection operating outside validated range following raw water deterioration.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Assessed mitigation measures. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The existing notice for this site has been amended to require mitigation for the deterioration of raw water quality. <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
14 Nov 2016 For 16 hours (UUT)	Bury and Bolton, Greater Manchester	122,387	Brown discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Rezoned area (brought in water from different source). • Repaired and flushed main. • Sampled affected area. • Two incidents of blue water backsiphonage caused by depressurisation were investigated. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
16 Nov 2016 For 24 hours (NNE)	Mosswood works, County Durham	1,564,161	<i>Cryptosporidium</i> detection.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Investigated changes in catchment. • Improved in-process water quality monitoring. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Investigation on going
16 Nov 2016 For 1 day (SRN)	Burpham works, West Sussex	109,426	<i>Cryptosporidium</i> detection.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Inspected the structural integrity of the boreholes. • Reviewed procedures. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Investigation ongoing.
17 Nov 2016 duration N/A (SRN)	Ringwould, Kent	N/A	Failure to sample a service reservoir.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Notified the Inspectorate in January 2017 <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The sampling shortfall incurred is not recoverable • Investigation ongoing.

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
17 Nov 2016 For 3 days (YKS)	Elvington works, Yorkshire	750,000	Evidence of microbiological contamination: (<i>Clostridium perfringens</i>).	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Identified a number of actions to improve treatment optimisation and prevent a recurrence. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
20 Nov 2016 For 2 days (SRN)	Testwood works, Totton, Hampshire	160,000	<i>Cryptosporidium</i> detection.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Reviewed treatment process. • Reviewed the catchment. • A cause for the detection has not been identified. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Investigation ongoing.
21 Nov 2016 For 2 days (SWT)	Sourton, Lydford, Brentor and Mary Tavy, Devon	2,500	Brown discolouration due to disturbance of mains deposits during valve operations.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Provided an alternative supply by tanker/bowser. • Rezoned area (brought in water from different source). • Flushed mains. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate contingency planning. • Lack of maintenance of equipment. • There is an existing Notice in place for the water supply zone to mitigate the risk of discolouration. <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
22 Nov 2016 For 2 days (SWT)	South Devon	1,250	Musty taste or odour due to an increase in concentrations of geosmin in the raw water at Avon works.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Review of procedures. • New treatment process on standby to address a recurrence. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
24 Nov 2016 For 1 week (HPL)	Hartlepool, County Durham	220,000	Loss of supplies/poor pressure due to burst main, with localised flooding.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired and flushed mains. • Sampled affected area. • Carrying out structural integrity testing of the main and investigating possible pressure changes that caused the burst. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. • There is an existing Notice for this zone to address issues with discolouration. <p>Risk classification: Significant.</p>
24 Nov 2016 For 1 hour (NNE)	Gunnerton works, Hexham, Northumberland	29,833	Compromised final disinfection due to loss of control of pH correction.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired faulty equipment. • Sampled affected area. • Reviewed procedures and made changes to equipment on site. • Revised risk assessments. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The Inspectorate considered this to be an avoidable event. • Recommendation made to review risk assessment for the works. <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
25 Nov 2016 For 1 week (WSX)	Bridgwater, Somerset	3	Lead uptake from service pipe at a single property.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued a do not drink notice. • Provided bottled water on request. • Sampled affected area. • Replaced service pipe. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
26 Nov 2016 For 24 hours (NNE)	Whittle Dene works, Newcastle	650,000	<i>Cryptosporidium</i> detection following heavy rainfall and raw water deterioration.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Catchment area review. • Implemented a performance plan when operating under challenging raw water conditions. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
30 Nov 2016 For 6 days (TMS)	Muswell Hill and Hampstead Heath, North London	125	Potential contamination of supply due to mains burst in close proximity to sewer repair.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued a boil water notice. • Provided bottled water on request. • Flushed and disinfected mains. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
02 Dec 2016 For 3 days (SRN)	Weirwood works, Hampshire	18,115	Evidence of microbiological contamination.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Shut down treatment works. • Rezoned area (brought in water from different source). • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company provided credible evidence that the sample bottle was contaminated and taken appropriate steps to prevent a recurrence. • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
06 Dec 2016 For 1 hour (SVT)	Trimpley works, near Kidderminster, Worcestershire	418,000	Evidence of microbiological contamination (<i>E. coli</i>).	<p>Company Actions:</p> <ul style="list-style-type: none"> • Sampled affected area. • Reviewed procedures. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • The company was unable to determine a root cause. • There is an existing Regulation 28 Notice in place at Trimpley works to improve treatment processes. <p>Risk classification: Significant.</p>
06 Dec 2016 For 9 hours (UUT)	Stockport, Greater Manchester	171,377	Brown discolouration due to valve operations.	<p>Company Actions:</p> <ul style="list-style-type: none"> • During the isolation of a burst a closed valve, thought to be open, was operated and reversed the flow through a main resulting in the suspension of sediment. • Sampled affected areas. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Made recommendations to review the risk of discolouration in the supply zone and to improve risk assessments prior to working on the network <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
09 Dec 2016 Less than 1 hour (SRN)	Falmer works, Brighton	3,000	Treatment failure: loss of chlorination.	<p>Company Actions.</p> <ul style="list-style-type: none"> • Shut down treatment works • Removed the undisinfected water. • Review of procedures and retrained staff. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate investigations into root cause. • Inadequate risk assessment. • Inadequate training/competence of staff. • Inadequate treatment process–disinfection. • Recommendations made that company ensures critical alarms are responded to appropriately and improves record keeping. <p>Risk classification: Significant.</p>
10 Dec 2016 For 63 hours (UUT)	Buckton Castle works, near Ashton under Lyne, Stockport	42,785	Treatment failure: elevated turbidity due to clarification failure, which compromised final disinfection.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Rezoned area (brought in water from different source). • Issued boil water notice to affected consumers. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Investigation ongoing.
12 Dec 2016 For 1 week (SRN)	Whitwell, Isle of Wight	377	Localised contamination of network with hydrocarbons caused by fuel spillages from petrol station.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Issued a do not drink notice. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Samples were taken four months after the contamination was reported to the company and a recommendation was made to improve the timeliness of investigations. • Inadequate identification of risk associated with potentially permeable water mains and service pipes. <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
13 Dec 2016 For 3 hours (NNE)	Mosswood works, County Durham	1,564,161	Treatment failure: elevated turbidity following planned work on a filter.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Increased chlorine concentrations at Mosswood works. • Sampled the affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate sampling. • Inadequate contingency planning. • Inadequate risk assessment. • Inadequate procedures. <p>Risk classification: Significant.</p>
14 Dec 2016 For 7 days (BRL)	Wells, Somerset	3	Evidence of microbiological contamination (<i>E. coli</i>) at a single property.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Review of procedures. • Sampled affected area. • Provided consumers with advice on tap hygiene. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate investigation into root cause. • Recommended the company review its risk assessment procedure to thoroughly consider probable causes when microbiological failures at consumers' properties. <p>Risk classification: Significant.</p>
14 Dec 2016 For 24 hours (SVT)	Hagley, West Midlands	83,525	Brown discolouration due to planned work in the network.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Flushed mains. • Sampled affected area. • Review of procedures. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate procedures. • Enforcement action was considered due previous similar events associated with inaccurate records of underground assets. This will be taken into account as part of the Inspectorate's risk-based audit programme. <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
14 Dec 2016 For 5 days (SWT)	Paignton, Devon	10,000	Brown discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired and flushed mains. • Retrained staff regarding valve operations. • Risk-based distribution operation and maintenance flushing. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Inadequate risk assessment. • The company's response to this event was satisfactory and no further DWI action to be taken. <p>Risk classification: Significant.</p>
17 Dec 2016 For 3 days (NNE)	Stanley, County Durham	10,054	Chemical taste and odour following recommissioning of South Moor SR after planned maintenance work.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Removed service reservoir from supply. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Investigation ongoing.
23 Dec 2016 For 2 days (SWT)	Winkleigh and surrounding area, mid Devon	5,000	Brown discolouration due to burst main.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired and flushed mains. • Rezoned area (brought in water from a different source). • Retrained staff. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Unacceptable delay in notifying Inspectorate and local/health authorities. • Sampling was not timely enough. • Inadequate risk assessment. <p>Risk classification: Significant.</p>

Drinking water 2016 – Summary of all significant, serious and major events – England and Wales

Date and duration	Area	Estimate of population affected	Nature and cause of event	Main actions and findings from the Inspectorate investigation
25 Dec 2016 For 12 hours (TMS)	South West London	35,000	Unplanned failure of Hampton works due to electrical fault.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Repaired faulty equipment. • Managed return to operation to avoid over pressurising mains. • Sampled affected areas. • Bottled water provided on request. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Investigation ongoing.
26 Dec 2016 For 2 hours (YKS)	Blackmorefoot works, Huddersfield	125,000	Treatment failure: loss of chlorination.	<p>Company Actions:</p> <ul style="list-style-type: none"> • Power interruption led to failure of automatic shutdown system. • Shut down treatment works. • Review of procedures and retrained staff. • Sampled affected area. <p>DWI Comments and Findings:</p> <ul style="list-style-type: none"> • Recommendations made that company ensures critical alarms are responded to appropriately and improves record keeping. <p>Risk classification: Significant.</p>