Drinking Water Inspectorate - Significant, Serious and Major events in 2017

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
06 Jan 2017 For 10 hours (SRN)	Ditchling (Brighton) and Hollingdean, Sussex	3,019	Loss of supplies / poor pressure due to mains burst.	Southern Water Services Ltd Action: Repaired main. Sampled affected area. Flushed mains. Company has confirmed that recent reinstatement of the road was not related to water company activity, but may have been due to gas works carried out in summer 2016. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
06 Jan 2017 For 14 hours (UUT)	Royton,Oldham	70,000	Brown discolouration due to planned work.	United Utilities Water Plc Action: Repaired main. Sampled affected area. All samples except one were satisfactory, one failed for iron, aluminium and manganese. A resample at this property was satisfactory. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
06 Jan 2017 For 72 hours (ESK)	Malden, Southend and surrounding areas, Essex	300,000	Cryptosporidium detected in final water at Langford works.	Essex & Suffolk Water Action: Sampled affected area. The company also undertook treatment investigations and planned to replenish filter media and provide additional controls for carrying out poly electrolyte drop tests. DWI Comments and Findings: Inadequate treatment process - Clarification. Inadequate treatment process - Filtration. Inadequate risk assessment. The company identified a loss of poly electrolyte affecting the clarification process which may have contributed to this event. They also reported that two of the sand filters on site did not contain the correct amount of media and this had been the case since 2014. Recommendations were made regarding these issues. The Regulation 27 risk assessment did not identify diffuse sources of <i>Cryptosporidium</i> such as livestock.

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09 Jan 2017 For 5 hours (NNE)	Carrshield, Hexham	47	Increased turbidity due to mains burst impacting on final water tank.	Northumbrian Water Ltd Action: • Retrained staff. • Review of procedures.
				DWI Comments and Findings: Investigation ongoing. Inadequate communication caused delay in response. Inadequate contingency planning. Inadequate training / competence of staff. Inadequate procedures.
				The company have taken steps to prevent a recurrence, including updating of procedures and re-training of staff. However, there are still some unanswered questions about disinfection policy, pH site review and tank cleaning.
				Risk classification: Significant
11 Jan 2017 For 48 hours (SRN)	Winchester and Eastling	156,000	Cryptosporidium detected in Twyford works' final water.	Southern Water Services Ltd Action: • Sampled affected area.
, ,				The company carried out a catchment investigation and rectified a defective sewer in the catchment and some issues with well head works.
				DWI Comments and Findings: Inadequate investigations into root cause. Inadequate risk assessment.
				The root cause identified by the company was a blocked, defective sewer. An oocyst was detected after rectifying the sewer problem and the company had not taken any action to address this. Recommendations were made to implement additional control measures for <i>Cryptosporidium</i> and enforcement action will be considered in light of the company's response to these recommendations.
				Risk classification: Significant
19 Jan 2017 For 48 hours (SRN)	Horsham, West Sussex	24,160	Telemetry failure resulting in loss of supplies / poor pressure.	Southern Water Services Ltd Action: Review of procedures. Sampled affected area. Repaired faulty equipment. Provided bottled water on request. The company is putting in place a range of measures to improve telemetry, and to review and re-brief relevant procedures.
				DWI Comments and Findings: Inadequate communication caused delay in response. Inadequate risk assessment. Inadequate training / competence of staff. Inadequate procedures.
				The impact on customers could have been avoided if company procedures had been followed. There was a lack of knowledge and communication and inadequate risk assessments.
				Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
20 Jan 2017 For 72 hours (SVT)	17 properties in Lutterworth zone	68	Issue of Do not drink notice due to potential ingress during a mains repair.	Severn Trent Water Ltd Action: Increased chlorine residuals in the distribution system. Repaired main. Repaired faulty equipment. Sampled affected area. Provided bottled water on request. Issued a do not drink notice. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
21 Jan 2017 For 60 hours (SEW)	Burwash	3,250	Brown discolouration due to burst main.	South East Water Plc Action: Repaired main. Flushed mains. Sampled affected area. Retrained staff. Company re-briefed the procedure but did not address the resourcing issue in their response. DWI Comments and Findings: Supplied unwholesome water in breach of regulations. Inadequate contingency planning. The company procedures were not followed with respect to calm valve operations, partly due to volume of work for the weekend standby. There were a larger than average number of bursts at this time. Risk classification: Significant
25 Jan 2017 For 12 hours (DWR)	Aberystwyth	13,500	Media interest after burst main.	Dŵr Cymru Welsh Water Action: Provided an alternative supply by tanker / bowser. Provided bottled water on request. Rezoned area (brought in water from different source). Repaired main. Flushed mains. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
25 Jan 2017 For 24 hours (ESK)	Hanningfield works	948,069	Cryptosporidium detected in final water due to treatment failure.	Essex & Suffolk Water Action: Sampled affected area. Repaired faulty equipment. Company actions mainly satisfactory although a recommendation was made to review downstream zonal monitoring following future detections of <i>Cryptosporidium</i> to ensure full compliance with regulatory requirements. DWI Comments and Findings: No further DWI action to be taken. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
26 Jan 2017 For 14 hours (NNE)	Killingworth, North Shields, Whitley Bay areas	33,450	Brown discolouration due to burst main.	Northumbrian Water Ltd Action: Flushed mains. Rezoned area (brought in water from different source). Repaired main. Sampled affected area. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
26 Jan 2017 For 5 days (SWT)	Prewley West Supply Zone. The villages of St Giles- On-The-Heath, Beaworthy and Broadwoodwidger.	750	Media interest due to loss of supplies following burst main.	South West Water Ltd Action: Rezoned area (brought in water from different source). Provided an alternative supply by tanker / bowser. Provided bottled water on request. Repaired main. Sampled affected area. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
27 Jan 2017 For 2 hours (TMS)	Farnham, Windsor and Slough.	231,780	Treatment failure: Elevated turbidity at inlet to contact tank at Datchet works.	Thames Water Utilities Ltd Action: • Sampled affected area. • Shut down treatment works. DWI Comments and Findings: • Inadequate investigations into root cause. • Inadequate procedures. • Inadequate training / competence of staff. • Investigation ongoing. The company failed to establish the cause of the high turbidity. Risk classification: Significant
28 Jan 2017 For 72 hours (SVT)	Part of Cookley zone near Kidderminster.	2,388	Loss of supplies / poor pressure due to burst main.	Severn Trent Water Ltd Action: Repaired main. Repaired faulty equipment. Provided an alternative supply by tanker / bowser. Sampled affected area. Provided bottled water on request. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
30 Jan 2017 For 7 hours (WSX)	Lacock, Wiltshire.	14,500	Elevated turbidity in works final water.	Wessex Water Services Ltd Action: Sampled affected area. DWI Comments and Findings: The company failed to establish the cause of the high turbidity. No further DWI action to be taken. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
01 Feb 2017 For 6 weeks (ANH)	Turvey, Beds	25	Issue of Do not drink notice due to elevated lead.	Anglian Water Services Ltd Action:
01 Feb 2017 For 36 hours (SST)	Hayley Green, Halesowen	122,598	Treatment failure: Loss of Disinfection at Hayley Green works	South Staffordshire Water Plc Action: Shut down treatment works. The Company shutdown the works, investigated the issue and sampled, not returned to supply until plant re commissioned. DWI Comments and Findings: Inadequate risk assessment. Inadequate treatment process - Dosing. DWI recommended that the company carries out an adequate and robust risk assessment of the procedures and processes for when carrying out planned works on control system programmes., and that the company carries out a risk assessment at all of its water treatment works to mitigate the risk from both duty and standby hypochlorite dosing pumps failing due to air locking. Risk classification: Significant
02 Feb 2017 For 72 hours (SES)	Oxshott Leatherhead Cobham and Ashtead.	67,500	Treatment chemical delivery error. Sodium hypochlorite added to the ferric sulphate tank at Elmer works.	SES Water Action: Sampled affected area. Shut down treatment works. Rezoned area (brought in water from different source). The company has implemented a number of actions which should prevent a recurrence of the event. DWI Comments and Findings: Inadequate training / competence of staff. Drinking water quality was unaffected by this event, and there were no breaches of the Regulations. One recommendation) was made concerning the company's lack of checks on the status of chemical suppliers' third party accreditation. Risk classification: Serious

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
03 Feb 2017 For 6 days (ANH)	Fenland area, north east of Peterborough	13,998	Brown discolouration due to burst main.	Anglian Water Services Ltd Action: • Flushed mains. • Rezoned area (brought in water from different source). • Sampled affected area. The company completed network modelling which identified the discolouration risk however the correct status of flushing activities was not confirmed.
				DWI Comments and Findings: Inadequate risk assessment. DWI recommended that the company reviews its emergency risk assessment procedures. Risk classification: Significant
05 Feb 2017 For 24 hours (TMS)	South Tottenham, Bowes Park and South Enfield zones	424,230	Cryptosporidium detected in Hornsey works final water	Thames Water Utilities Ltd Action: • Shut down treatment works. • Sampled affected area. • Retrained staff. DWI Comments and Findings: The company's approach to risk assessment in works' catchment areas was inadequate. The Inspectorate issued a regulation 27(4) notice requiring the company to review and revise its procedures for assessing catchment risks, at all of its treatment works. Risk classification: Serious
05 Feb 2017 For 32 hours (SEW)	Burwash, Kent	879	Brown discolouration due to burst main.	South East Water Plc Action: Repaired main. Flushed mains. Sampled affected area. Rezoned area (brought in water from different source). DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
07 Feb 2017 For 5 days (SVT)	Nottingham	5,900	Loss of supplies / poor pressure due to bust main.	Severn Trent Water Ltd Action: Repaired main. Sampled affected area. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
09 Feb 2017 For 30 days (TMS)	Keston and Forestdale, near Croydon	47,000	Elevated turbidity in Shortlands works final water	Thames Water Utilities Ltd Action: Shut down treatment works. Sampled affected area. The company completed on site investigations, but these did not identify a root cause and further investigations were required. The site was removed from supply and the Inspectorate requested an additional report one month prior to return to supply. DWI Comments and Findings: Inadequate investigations into root cause. Inadequate risk assessment. Investigation ongoing. Inadequate procedures. The company did not complete an appropriate risk assessment or control measures prior to allowing a borehole into supply and did not identify a root cause.
13 Feb 2017 For 2 weeks (NNE)	Rochester, Northumberland	99	Cryptosporidium detected in Rochester works' final water	Risk classification: Significant Northumbrian Water Ltd Action: • Shut down treatment works. • Sampled affected area. • Replaced faulty equipment. Company carried out site audit and found a number of issues relating to the sampling point, which have been rectified. DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
13 Feb 2017 For 1 hour (ANH)	Suffolk	3	Contamination of GAC with feathers at Grafham works.	Anglian Water Services Ltd Action: Review of procedures. Audited chemical supplier. Retrained staff. The company found a batch of regenerated granular activated carbon (GAC) was contaminated by the supplier. The affected GAC adsorber was not in use and final water quality was unaffected. DWI Comments and Findings: The Inspectorate found that the company's procedures for verifying conformity of chemicals to BS:EN specifications were inadequate, and the supplier was unable to demonstrate compliance with the BS:EN specification. The Inspectorate identified that the GAC provided was not delivered in accordance with the British standard and recommended that the company improve its procedures to ensure traceability was maintained. A recommendation was also made that the company reviews its assessment of contamination risks Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
16 Feb 2017 For 2 hours (TMS)	North-East London	1,000,000	Treatment failure: loss of disinfection at Coppermills works due to maintenance errors.	Thames Water Utilities Ltd Action: DWI Comments and Findings: Investigation ongoing. Risk classification: Serious
16 Feb 2017 For 1 week (TMS)	Rotherhithe, SE London	315	Taste/odour due to tainting of tank stored water by paint primer fumes.	Thames Water Utilities Ltd Action: Provided bottled water on request. Issued a do not drink notice. Sampled affected area. The company investigation identified recent application of a paint primer in close proximity to a stored water tank that supplies the three buildings. Whilst there is no evidence of direct contamination of the water supply there was an atmospheric point of entry in the tank via air vents and fumes from the paint primer most likely tainted the water supply. A water fittings inspection identified several infringements of the water fitting regulations and the managing agents are looking to replace the tank. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
17 Feb 2017 For 14 hours (DWR)	Merthyr Tydfil	4,250	Brown discolouration - cause thought to be unauthorised use of hydrants by an unidentified third party	Dŵr Cymru Welsh Water Action: • Flushed mains. • Sampled affected area. DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
17 Feb 2017 For 4 days (SVT)	South Birmingham	284,000	Enterococci detected in Northfield service reservoir	Severn Trent Water Ltd Action: Removed service reservoir from supply. Repairs were carried out to mitigate risks of potential ingress DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
20 Feb 2017 For 12 days (NNE)	Newcastle	5	Issue of Do not drink notice due to back siphonage.	Northumbrian Water Ltd Action: Issued a do not drink notice. Provided bottled water on request. Sampled affected area. Two water fittings inspections were carried out, before and after the repair of the faulty valve. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
20 Feb 2017 For 72 hours (AFW)	High Barnet, Finchley	32,500	Loss of supplies / poor pressure due to planned work to remove Arkley service reservoir from supply.	Affinity Water Ltd Action: Repaired faulty equipment. Provided bottled water on request. Retrained staff. Review of procedures. Rezoned area (brought in water from different source). Sampled affected area. The company restored supplies by re-zoning the affected area with supplies from elsewhere while the problem was rectified. The company have reviewed procedures and retrained staff in order to prevent a reoccurrence. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken.
				Risk classification: Significant
21 Feb 2017 For 72 hours (ESK)	Saxmundham, Suffolk.	3	Petrol taste/odour due to ground contamination by hydrocarbon spillage.	Essex & Suffolk Water Action: Issued a do not drink notice. Provided bottled water on request. Sampled affected area.
				DWI Comments and Findings: • The Inspectorate was critical that mis-recording of the nature of the initial consumer contact on the company system lead to a delay in the company response.
21 Feb 2017	Bracknell, Berks.	4,555	Brown discolouration due to	Risk classification: Significant South East Water Pic Action:
For 36 hours (SEW)	Diadkitell, Derks.	4,000	burst main.	Repaired main. Sampled affected area. Flushed mains.
				DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Biglic classification: Significant
21 Feb 2017	Bletchley,	7,270	Cloudy water due to damage	Risk classification: Significant Anglian Water Services Ltd Action:
For 58 hours (ANH)	Buckinghamshire.		to main caused by staff.	 Flushed mains. Provided bottled water on request. Repaired main. Rezoned area (brought in water from different source).
				Prior to the rezoning, an operational risk assessment was carried out which identified a risk of discoloured water. The company flushed upstream of the boundary valves and made visual checks for discolouration before the zone valves were opened. These actions were insufficient to prevent the occurrence of discoloured water.
				DWI Comments and Findings: Inadequate risk assessment. Supplied water unfit for human consumption.
				Recommendation to company to resubmit relevant regulation 28 risk assessments.
				Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
21 Feb 2017 For 20 weeks (UUT)	Single commercial customer, Runcorn.	3	Company failed to take regulatory compliance samples from Runcorn No.2 service reservoir for 20 weeks.	United Utilities Water Plc Action: Review of procedures. The company made improvements to its internal procedures to prevent a recurrence of the sampling shortfall. DWI Comments and Findings: Did not liaise with local / health authorities. Inadequate follow up sampling. Inadequate contingency planning. Inadequate risk assessment. Inadequate procedures. Samples not analysed for appropriate parameters. Sampling was not timely enough. Unacceptable delay in notifying local / health authorities. The DWI will keep this under review and monitor the company's compliance with its regulatory sampling programme. Risk classification: Significant
23 Feb 2017 For 8 hours (UUT)	Macclesfield.	18,244	Brown discolouration caused by disturbance of mains deposits.	United Utilities Water Plc Action: • Sampled affected area. • Flushed mains. Company responded well to the power outage during severe weather but needs to be mindful of the risk of discoloured water until mains conditioning work is complete. DWI Comments and Findings: • Inadequate risk assessment. Review risk assessments until mains conditioning work is complete. Risk classification: Significant
24 Feb 2017 For 24 hours (ANH)	Levington, Suffolk.	75	Brown discolouration due to planned work.	Anglian Water Services Ltd Action: Review of procedures. Flushed mains. Sampled affected area. Company to consider invoking it's powers to encourage replacement of a private cast iron main. DWI Comments and Findings: Inadequate risk assessment. DWI recommended that the company reviews its risk assessment procedures to ensure that all risks are captured and that there are adequate steps to check and record whether identified mitigation measures such as flushing have been successfully completed. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
03 Mar 2017 For 72 hours (PRT)	Fareham, Hants.	276,045	Cryptosporidium detected in Maindell works final water	Portsmouth Water Plc Action: Sampled affected area. Shut down treatment works. Review of procedures. The company removed the treatment works from supply for the duration of the investigation. New procedures have been implemented to reduce the likelihood of reoccurrence. DWI Comments and Findings: Inadequate risk assessment. DWI issued a Regulation 27(4) Notice, requiring the company to review the risk assessments for this supply system, and Reg 28 Notice to upgrade the treatment works. Risk classification: Significant
03 Mar 2017 For 4 days (TMS)	North Downs.	33	Risk of contamination from a fractured sewer near a clean water excavation during planned work.	Thames Water Utilities Ltd Action: Provided bottled water on request. Issued a do not drink notice. Issued a boil water notice. Increased chlorine residuals in the distribution system. Flushed mains. Repaired main. DWI Comments and Findings: Did not keep customers informed. Inadequate communication caused delay in response. Inadequate procedures. Inadequate risk assessment. Inadequate training / competence of staff. The DWI found that the company did not follow proper hygiene procedures and recommended that the company improves its procedures for risk-assessing work in the distribution system and for communicating appropriately with consumers. Risk classification: Significant
04 Mar 2017 For 2 weeks (ANH)	Lincolnshire	2,610	Loss of supplies / poor pressure due to burst main.	Anglian Water Services Ltd Action: Blended supply with another source. Replaced main. Rezoned area (brought in water from different source). Sampled affected area. Provided an alternative supply by tanker / bowser. DWI Comments and Findings: The company's response to the event was satisfactory and no further DWI action to be taken. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
06 Mar 2017 For 72 hours (SSE)	Waterlooville, Hampshire.	1,050	Cryptosporidium detected in Maindell works final water, operated by Portsmouth Water. Supply provided to	Scottish and Southern Energy Action: • Sampled affected area. The company sampled the affected area and liaised with stakeholders.
			SSE site.	DWI Comments and Findings:
				The company's response to this event was satisfactory and no further action to be taken.
				Risk classification: Significant
10 Mar 2017	Gillingham, Kent	1,500	Telemetry failure leading to loss of supplies / poor	Wessex Water Services Ltd Action: Provided bottled water on request.
For 20 hours (WSX)			pressure.	Repaired faulty equipment. Replaced faulty equipment. Review of procedures. Sampled affected area.
				The company repaired the faulty valve, replaced the faulty level transducer and relocated the float switch. Procedures amended to ensure float switch locations are checked as part of reservoir inspections. Risk assessment reviewed and new hazard added for equipment failure.
				DWI Comments and Findings: Inadequate risk assessment.
				Suggested that hazards associated with potential loss of supplies are assessed for all sites that currently don't have this assessment.
				Risk classification: Significant
13 Mar 2017 For 48 hours (SBW)	West Moors	3,468	Petrol-like taste/odour due to stagnant main being connected to supply.	Sembcorp Bournemouth Water Ltd Action: • Sampled affected area. • Flushed mains.
1 01 40 110013 (OBVV)			connected to supply.	Review of procedures.
				Company flushed the area to remove the contaminated water and implemented a new flushing regime for all such mains that carry this risk.
				DWI Comments and Findings: Inadequate procedures. Inadequate risk assessment.
				No further DWI action to be taken.
				Recommendations made regarding formalisation of procedures and reviewing risk assessment.
				Risk classification: Significant

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14 Mar 2017 For 24 hours (NNE)	Murton works, Berwick.	15,000	Failure of caustic dosing pump at Murton works, leading to low pH the final water	Northumbrian Water Ltd Action:
				DWI Comments and Findings:
				The Inspectorate served a Regulation 28(4) notice for this site, and issued warning letters for use of unapproved products in the treatment process and for providing incorrect information in the company's reports to DWI.
				Risk classification: Significant
15 Mar 2017 For 5 days (SVT)	Single property in Kenilworth.	3	Issue of Do not drink notice due to ground contamination from hydrocarbon spillage.	Severn Trent Water Ltd Action: • Issued a do not drink notice.
, ,			, , ,	Issued a DND, the company remain in contact with contractor regarding remedial works.
				DWI Comments and Findings: • Suggested the company should have considered serving Section 75 to ensure the risk was fully removed.
				Risk classification: Significant
16 Mar 2017	Single property in Stratford upon	3	Issue of Do not drink notice due to back siphonage	Severn Trent Water Ltd Action: • Issued a do not drink notice.
For 15 days (SVT)	Avon.			Company carried out fittings inspections and instructed consumer to install adequate backflow protection on the vehicle wash system.
				DWI Comments and Findings: No further DWI action to be taken.
				Risk classification: Significant
19 Mar 2017 For 28 hours (SVT)	Stoke	60,000	Brown discolouration due to planned work	Severn Trent Water Ltd Action: • Flushed mains. • Sampled affected area. • Retrained staff.
				The company has carried out internal briefing relating to the replacement of PRV valves.
				DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken.
				Risk classification: Significant

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19 Mar 2017 For 4 days (SVT)	Little Eaton, Derby.	5,175	Loss of supplies / poor pressure due to burst main.	Severn Trent Water Ltd Action: Provided an alternative supply by tanker / bowser. Repaired main. Rezoned area (brought in water from different source). Sampled affected area. Deficiencies identified in the sampling process were rectified. Also new template for service reservoir risk assessment has been introduced. DWI Comments and Findings: Inadequate contingency planning. Inadequate follow up sampling. Inadequate procedures. Inadequate risk assessment. Sampling was not timely enough.
				Recommended that steps are taken to ensure that investigational samples are analysed soon after being taken, and suggested that in future the company utilise such tools as network modelling to inform and update their risk assessments. Risk classification: Significant
20 Mar 2017	Ipswich, Suffolk.	20,000	Brown discolouration due to	Anglian Water Services Ltd Action:
E 041 (4111)			burst main.	Repaired main.
For 24 hours (ANH)				Sampled affected area. Review of procedures.
21 Mar 2017	South East	1	Missing samples due to staff	The company operational risk assessment was carried out but did not highlight a risk of discoloured water in Belstead Zone. DWI Comments and Findings: Inadequate risk assessment. The company's procedures did not require a risk assessment for the planned repair. Furthermore the risk assessment for emergency valve operations did not highlight a risk of discoloured water, even though there is a notice in place for Belstead Public Supply Zone and this zone is known to be associated with consumer complaints of discolouration. Recommend, that the company reviews its approach to carrying risk assessments in advance of planned operations to include all information about risks to drinking water quality and to ensure that drinking water quality risks are adequately mitigated. Risk classification: Significant Southern Water Services Ltd Action:
ZI WAI ZUI/	England.	'	error.	Southern Water Services Ltd Action: • Retrained staff.
For 72 hours (SRN)	g.s			• Review of procedures.
, <i>,</i>				The company are addressing the issues as part of the work to meet the final enforcement order. DWI Comments and Findings: Inadequate number of samples taken. The Inspectorate investigated this event as part of the body of evidence for a final enforcement order.
	1			Risk classification: Significant

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23 Mar 2017 For 48 hours (ANH)	Ipswich, Suffolk.	438	Media interest following a burst main.	Anglian Water Services Ltd Action: Repaired main. Provided an alternative supply by tanker / bowser. Provided bottled water on request. Will review sampling procedures to prevent a recurrence of investigational samples being missed again. Assessed whether further operational changes are required to prevent a recurrence, company concluded that the burst rate was not high enough to warrant further work. DWI Comments and Findings: Sampling was not timely enough. Samples not analysed for appropriate parameters. Sampling for metals occurred four weeks after the burst. Recommendation made for company to review procedures to ensure an appropriate sampling response to events/failures.
24 Mar 2017 For 48 hours (YKS)	Horbury, Wakefield.	5	Issue of Do not drink notice due to back siphonage.	Yorkshire Water Services Ltd Action: Repaired main. Flushed mains. Issued a do not drink notice. Provided bottled water on request. Sampled affected area. Incorrect valve operations caused the depressurisation across three areas. DWI Comments and Findings: Inadequate training / competence of staff. Recommended that the company reviews its mains records and information provided to technicians to ensure that technicians are fully aware of the status of valves in the network. Risk classification: Significant
28 Mar 2017 For 4 days (SVT)	Rednal, Birmingham.	21,000	Loss of supplies / poor pressure and discolouration due to burst main.	Severn Trent Water Ltd Action: Repaired main. Flushed mains. Sampled affected area. Deficiencies identified in the sampling process during the event. DWI Comments and Findings: Inadequate follow up sampling. Inadequate procedures. Recommended that the company makes improvements to its approach to investigational sampling in response to discolouration events. Risk classification: Significant

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29 Mar 2017 For 5 days (ANH)	Three properties Ashill, Swaffham.	8	Detection of hydrocarbons associated with low flow conditions in an HDPE water main.	Anglian Water Services Ltd Action: • Flushed mains. • Sampled affected area. • Provided bottled water on request. • Issued a do not drink notice. The company has put in measures to increase turn over in newly laid HDPE mains. DWI Comments and Findings: • Did not notify Inspectorate. Where there is a question over the suitability or quality of an approved product the company should work closely with the Inspectorate's Regulation 31 team to provide an independent view. Risk classification: Significant
29 Mar 2017 For 1 week (SVT)	Single property in Spondon, Derby.	3	Issue of Do not drink notice due to localised depressurisation of main.	Severn Trent Water Ltd Action: Provided an alternative supply by tanker / bowser. Provided bottled water on request. Sampled affected area. Issued a do not drink notice. Review of procedures. DWI Comments and Findings: Inadequate risk assessment. Recommended that the company improves its procedures for risk assessing single properties. Risk classification: Significant
03 Apr 2017 For 20 days (SRN)	Woodnesborough, Sandwich, Kent.	17	Detection of coliforms, Clostridium perfringens and elevated turbidity, aluminium and iron due to mains damage.	Southern Water Services Ltd Action: Issued a boil water notice. Repaired main. Review of procedures. Review procedures to align with industry good practice and ensure appropriate response to on-site water quality reports. DWI Comments and Findings: Inadequate procedures. Suggested deviations away from company procedures and industry good practice that protects water quality be escalated in a timely manner. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
04 Apr 2017 For 10 days (UUT)	Bearstone, Nantwich.	8	Contamination from bitumen lined cast iron main causing taste and odour issues.	United Utilities Water Plc Action: • Flushed mains. • Issued a do not drink notice. • Provided an alternative supply by tanker / bowser. • Review of procedures. • Sampled affected area. The company plans to transfer these properties to a different main, operated by Severn Trent water. Company to update when customers are transferred onto a new supply. DWI Comments and Findings: • Inadequate risk assessment. • Inadequate procedures. The investigation established that the company was unaware that these properties were supplied from its own service reservoir. The proposed permanent solution should prevent a recurrence of the issue. Risk classification: Significant
06 Apr 2017 For 72 hours (SRN)	Sites across the company.	1	Missing samples.	Southern Water Services Ltd Action: Retrained staff. Review of procedures. The company is reviewing and updating their data systems as part of the work under a final enforcement order. DWI Comments and Findings: Inadequate number of samples taken. Insufficient samples were collected from the affected sites, causing a sampling shortfall. This has been investigated under final enforcement order.
10 Apr 2017 For 32 hours (NNE)	Winlaton, near Gateshead.	9,373	White water (air) during planned work.	Northumbrian Water Ltd Action: Sampled affected area. Flushed mains. Rezoned area (brought in water from different source). Company has re-briefed relevant staff of the requirement to complete a risk assessment prior to undertaking planned work on the network. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant

Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
Bridgwater.	45,000	Elevated turbidity due to condition of main and position of sampling point.	Wessex Water Services Ltd Action: Sampled affected area. Company investigations determined the likely source of the turbidity was due to the condition of the delivery main and location of the sample point tapping. The company moved the position of the tapping closer to the outlet of the works, to give a more representative sample of water leaving the site and is investigating the condition of the delivery main. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
Newton Aycliffe, County Durham.	3	Issue of Do not drink notice due copper pipework in consumer's property.	Northumbrian Water Ltd Action: • Issued a do not drink notice. • Sampled affected area. Company conducted a water regulations inspection which identified internal copper pipework. The consumer was given advice to flush regularly. DWI Comments and Findings:
Prudhoe, near Newcastle.	538,114	Failure of clarification system at Horsley WTW	The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant Northumbrian Water Ltd Action: Sampled affected area.
			Company has made changes to the operation of the works to prevent a recurrence of this event whilst a permanent solution is investigated and implemented. DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Final water quality was unaffected. Risk classification: Significant
Knottingley.	15,000	Brown discolouration due to planned work.	Yorkshire Water Services Ltd Action: Flushed mains. Repaired main. Replaced faulty equipment. Sampled affected area. Added the affected areas to company flushing programme. Will consider adding trunk main to reconditioning programme. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken.
	Newton Aycliffe, County Durham. Prudhoe, near Newcastle.	Rewton Aycliffe, County Durham. Prudhoe, near Newcastle. 538,114	Bridgwater. Affected Incident Elevated turbidity due to condition of main and position of sampling point. Newton Aycliffe, County Durham. Sampling point. Issue of Do not drink notice due copper pipework in consumer's property. Prudhoe, near Newcastle. Failure of clarification system at Horsley WTW

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
12 Apr 2017 For 24 hours (TMS)	Marylebone and Paddington zone.	56,650	Brown discolouration due to planned work.	Thames Water Utilities Ltd Action: Sampled affected area. Flushed mains.
				The company is reassessing the Reg28 Risk Assessments to take into account the risk of discoloured water, and has carried out some internal briefings about handling consumer illness complaints.
				DWI Comments and Findings: Inadequate risk assessment. Supplied unwholesome water in breach of regulations.
				The area was not previously identified as high risk for discoloured water.
				Risk classification: Significant
19 Apr 2017 For 4 weeks (WSX)	Dodington, Somerset.	5	Issue of Boil Notice following detection of <i>E.coli</i> in a sample taken at a property on a private estate.	Wessex Water Services Ltd Action: • Issued a boil water notice. • Sampled affected area.
			on a private estate.	Company identified that the estate was supplied from a private supply. The case was handed over to the local authority, with the boil water advice in place.
				DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken.
				Risk classification: Significant
19 Apr 2017 For 10 days (AFW)	Stevenage.	94,779	Treatment failure - water intermittently bypassing UV stage due to valve failure.	Affinity Water Ltd Action: • Shut down treatment works. • Repaired faulty equipment. • Rezoned area (brought in water from different source). • Sampled affected area.
				The company found and repaired the passing valve. The company have also updated procedures to ensure documented valve checks are undertaken as part of the ultra-violet system servicing.
				DWI Comments and Findings: • Recommendations made concerning immediate checks of valves on gravity fed works and updating site risk assessment.
				Risk classification: Significant
20 Apr 2017	Peterborough.	3	Issue of boil notice to a single property after water	Anglian Water Services Ltd Action: • Repaired main.
For 72 hours (ANH)			from a waste pipe contaminated the excavation of a service pipe.	Provided bottled water on request. Sampled affected area. Issued a boil water notice.
				Company repaired service pipe and replaced boundary box. Lifted boil water notice on receipt of two clear sets of samples.
				DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken.
				Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
21 Apr 2017 For 24 hours (DWR)	Merthyr Tydfil, Aberdare, Tredegar and some parts of Rhondda Cynon Taff, Caerphilly and Blaenau Gwent.	330,000	Inadequate disinfection at Pontsticill works, caused by elevated turbidity in water presented for final disinfection.	Dŵr Cymru Welsh Water Action: • Shut down treatment works. • Sampled affected area. • Review of procedures. DWI Comments and Findings: • Inadequate treatment process - Filtration. The Inspectorate initiated enforcement action resulting in the installation of a run to waste facility at the works. Risk classification: Significant
23 Apr 2017 For 72 hours (NNE)	Morpeth and surrounding area, Northumberland.	169,969	Clarification failure due to dosing system failure at Fontburn works.	Northumbrian Water Ltd Action: Shut down treatment works. Rezoned area (brought in water from different source). Sampled affected area. Review of procedures. The company identified a number of actions to improve process control on site and long term asset upgrades, which will reduce the risk of recurrence. DWI Comments and Findings: Inadequate treatment process - Clarification. Lack of maintenance of equipment. There was a failure of the lime system and a fault on the coagulant dosing line, which caused a loss of treatment. The works was run to waste and the area was rezoned. There were difficulties bringing the plant back on line, with insufficient monitors and inter process sampling facilities on site. Risk classification: Significant
24 Apr 2017 For 7 hours (SEW)	Burham, Kent.	3,593	Brown discolouration – caused by planned maintenance work on a valve in the distribution system.	South East Water Pic Action: • Flushed mains. • Sampled affected area. Company serviced a malfunctioning pressure reduction valve whose erratic operation was thought to be the cause of the discolouration. DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
24 Apr 2017 For 2 weeks (SRN)	Woodingdean, near Brighton.	50	Report of gastroenteritis.	Southern Water Services Ltd Action: Sampled affected area. DWI Comments and Findings: Inadequate investigations into root cause. Inadequate number of samples taken. Inadequate risk assessment. Recommendations made to take samples from neighbouring properties when illness is reported, to review the risk assessment and address risks associated with an abandoned service reservoir and to carry out plumbing inspections as part of investigations. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
26 Apr 2017 For 18 hours (DWR)	Llandudno, Conwy.	21,250	Loss of supplies / poor pressure due to mains damage during planned work.	Dŵr Cymru Welsh Water Action: • Flushed mains. • Replaced faulty equipment. • Rezoned area (brought in water from different source). • Provided an alternative supply by tanker / bowser. • Provided bottled water on request. • Sampled affected area. The company's reaction to the event was very good, however the event was entirely their own fault and avoidable. DWI Comments and Findings: • Inadequate risk assessment. • Inadequate procedures. Risk classification: Significant
04 May 2017 For 53 hours (SEW)	Farnham, Surrey.	12,765	Brown discolouration due to planned work to recommission Bourne treatment works.	South East Water Pic Action: Flushed mains. Repaired main. Sampled affected area. Shut down treatment works. Result of poor planning, poor risk assessment, and management of contractors. DWI Comments and Findings: Inadequate contingency planning. Inadequate procedures. Inadequate risk assessment. There was a lack of risk assessment and planning prior to reintroducing Bourne works into supply. Reversed flows in the distribution system caused disturbance of mains deposits, with affected consumers experiencing discoloured water. The Inspectorate made recommendations to improve supervision of contractors, and to review and improve procedures for risk assessing planned work. Risk classification: Significant
10 May 2017 For 2 hours (UUT)	Cheshire and Merseyside.	656,000	Planned construction work damaged the contact tank inlet resulting in elevated turbidity.	United Utilities Water Plc Action: Rezoned area (brought in water from different source). Sampled affected area. Company took samples, all were satisfactory, Company has conducted a governance review. DWI Comments and Findings: Inadequate risk assessment. At Oswestry works, planned work to install a trench support fractured part of the contact tank inlet manifold causing turbidity in the disinfection process. The company's investigation identified the root cause as failure to follow a method of work, failure of governance and failure of supervision. The company conducted a review and a 'Plan of Actions and Recommendations' is in place to prevent reoccurrence. I have concluded that the emergency disinfection measures were not sufficient and ingress risk was inadequate. Recommendations made. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
13 May 2017 For 13 hours (NNE)	Murton, Berwick- upon-Tweed.	16,437	Treatment failure: Caustic tank emptied faster than the company anticipated.	Northumbrian Water Ltd Action: • Sampled affected area • Improved procedures
				DWI Comments and Findings: The Inspectorate served a Regulation 28(4) notice for this site and issued warning letters for use of unapproved products in the treatment process and for providing incorrect
				information in the company's reports to DWI. Risk classification: Significant
18 May 2017 For 10 hours (SRN)	Copythorne, Southampton.	5,060	Brown discolouration due to burst main.	Southern Water Services Ltd Action: • Flushed mains. • Retrained staff. • Review of procedures. • Sampled affected area. The zones have a protracted set of issues which are to be addressed by following the steps in the notice issued.
				DWI Comments and Findings: Inadequate contingency planning. Inadequate investigations into root cause. Inadequate risk assessment. Inadequate training / competence of staff. Lack of maintenance of equipment. Supplied unwholesome water in breach of regulations.
				The Inspectorate has initiated enforcement action, and issued a regulation 28 Notice requiring the company to implement measures to reduce discolouration in the Rownhams 01 water supply zone (Southampton).
				Risk classification: Significant
19 May 2017 For 18 hours (SEW)	Barcombe, East Sussex.	17,968	Loss of supplies / poor pressure due to burst main.	South East Water Plc Action: Repaired main. Rezoned area (brought in water from different source). Flushed mains. Sampled affected area. Need to take action to prevent a recurrence and improve risk assessment process.
				DWI Comments and Findings: Inadequate risk assessment. Inadequate procedures. Company to review its Drinking Water Safety Plan process and mechanisms for reviewing risk following events. Risk Assessment does not consider loss of supply events or
				hazardous events. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
20 May 2017 For 1 week (NNE)	Durham.	48,948	Brown discolouration due to burst main.	Northumbrian Water Ltd Action: Increased chlorine residuals at treatment works. Rezoned area (brought in water from different source). Sampled affected area. The company's actions were mostly satisfactory. DWI Comments and Findings: Inadequate investigations into root cause. Inadequate number of samples taken. Inadequate risk assessment. The company assumed much in the sampling response which the results did not bear out. Risk classification: Significant
23 May 2017 For 10 hours (ESK)	Malden, Southend and surrounding areas, Essex.	338,488	Coagulation failure due to planned work at Langford works.	Essex & Suffolk Water Action: Repaired faulty equipment. Retrained staff. Review of procedures. Sampled affected area. Final disinfection and treated water quality was unaffected. DWI Comments and Findings: Did not liaise with local / health authorities. Inadequate communication caused delay in response. Inadequate number of samples taken. Inadequate investigations into root cause. Inadequate investigations into root cause. Inadequate training / competence of staff. Recommendations made to make improvements to training of works operators, investigational sampling response and to ensure that Public Health England is notified of events, as required by the Regulations. Risk classification: Significant
23 May 2017 For 26 hours (UUT)	Ulverston.	16,792	Brown discolouration due to burst main.	United Utilities Water Plc Action: Repaired main. Review of procedures. Company has reviewed the internal sampling and analysis procedures. DWI Comments and Findings: Inadequate follow up sampling. Sampling was not timely enough. Two recommendations made: Review sampling and analysis during operational events procedures including response to microbiological samples. Submit revised risk assessment for Barrow Link Main. Required to provide findings from investigation into the integrity of the main and suggested remedial work. The best way forward on capturing risk assessments for trunk mains is being discussed at liaison meetings. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
24 May 2017 For 72 hours (TMS)	Single property, Aylesbury.	5	Report of gastroenteritis.	Thames Water Utilities Ltd Action: Issued a do not drink notice. Provided bottled water on request. Sampled affected area. Issued a boil water notice. The company disconnected a private spring fed supply which was also feeding the properties, and disinfected the pipework at both properties. Work was completed at Dorton sewage pumping station to rectify a water fittings infringement, and there is a review of similar assets to ensure there are no water fittings infringements. DWI Comments and Findings: Inadequate risk assessment. Recommendation that the company updates its risk assessments in the light of this event. Risk classification: Significant
27 May 2017 For 24 hours (SWT)	Camelford, Cornwall.	5,000	Loss of supplies / poor pressure due to failure of power and communications links.	South West Water Ltd Action: Flushed mains. Provided an alternative supply by tanker / bowser. Repaired faulty equipment. Rezoned area (brought in water from different source). Sampled affected area. Shut down treatment works. Company enacted repairs and alternative supplies. Flushed network in response to discolouration. Company confirm that the impact of this event is built into their flushing programme and that they have flushed a significant proportion of the DMA's in this supply area c50%, including those impacted by this event. DWI Comments and Findings: Supplied unwholesome water in breach of regulations. Company have been recommended to review the priority of work for network maintenance. Risk classification: Significant
28 May 2017 For 24 hours (UUT)	Dovecot, Liverpool.	5,904	Brown discolouration due to burst main.	United Utilities Water Plc Action: • Flushed mains. • Repaired main. The company flushed the mains to remove the discoloured water, and repaired the main. The PMV controller was cleaned and reset. DWI Comments and Findings: • Supplied unwholesome water in breach of regulations. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
01 Jun 2017 For 48 hours (TMS)	Burghfield and Tadley, near Reading.	28,150	Loss of supplies / poor pressure due pump failure.	Thames Water Utilities Ltd Action: • Flushed mains. • Provided an alternative supply by tanker / bowser. • Sampled affected area. • Reviewed procedures. DWI Comments and Findings: • Supplied unwholesome water in breach of regulations. • Investigation ongoing. • Inadequate risk assessment. Recommendations made regarding storage point cleaning and risk assessments.
02 Jun 2017 For 72 hours (WSX)	Chippenham, Wiltshire.	2,500	Brown discolouration – caused by an unplanned shutdown of Rodbourne works, and emptying of Rodbourne Tower with disturbance of sediment leading to discolouration in the network.	Risk classification: Significant Wessex Water Services Ltd Action: • Flushed mains. • Sampled affected area. The company have planned to take the tower out of supply for cleaning, however the test was unsuccessful and further work is required. DWI Comments and Findings: • Samples not analysed for appropriate parameters. Samples taken have been unrepresentative of water stored in the tower for a considerable time.
05 Jun 2017 For 72 hours (DWR)	North Anglesey.	2,643	Discolouration: Brown due to mechanical failure of a valve on the inlet to Amlwch service reservoir, causing disturbance of deposits.	Risk classification: Significant Dŵr Cymru Welsh Water Action: Sampled affected area. Flushed mains. Replaced faulty equipment. Resamples were taken from properties which had elevated iron and manganese. These samples were satisfactory. DWI Comments and Findings: Supplied unwholesome water in breach of regulations.
06 Jun 2017 For 5 hours (YKS)	Doncaster, South Yorkshire.	3,750	Elevated turbidity at Austerfield works when a borehole was restarted during planned maintenance work.	Risk classification: Significant Yorkshire Water Services Ltd Action: Sampled affected area. Repaired faulty equipment. The company has carried out a thorough investigation and is putting in place measures to improve the operation and performance of the boreholes. DWI Comments and Findings: Sampling was not timely enough. Lack of maintenance of equipment. The company has been recommended to take a precautionary approach and action sample results at the provisional stage when they relate to a turbidity from a works final, rather than waiting for the confirmed result. There was a lack of maintenance at the site which contributed to the poor condition of the borehole well. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
08 Jun 2017 For 4 weeks (ESK)	Writtle, Chelmsford.	3	Issue of Do not drink notice due to ground contamination from hydrocarbon spillage.	Essex & Suffolk Water Action: • Sampled affected area. Company to provide updated procedures. DWI Comments and Findings: • Inadequate procedures.
				Significant delay in taking samples following a consumer complaint which is part of company procedures. Risk classification: Significant
08 Jun 2017 For 6 days (SVT)	Small Heath, Birmingham.	20,500	Brown discolouration due to burst main.	Severn Trent Water Ltd Action: Provided bottled water on request. Flushed mains. Repaired main. Review of procedures. Rezoned area (brought in water from different source). Sampled affected area. DWI Comments and Findings: Did not forewarn customers. Inadequate number of samples taken. Inadequate risk assessment. Inadequate procedures. Sampling was not timely enough. Supplied unwholesome water in breach of regulations. The Inspectorate concluded that due to the deficiencies in sampling during the event the Company did not fully investigate the extent of the event and water quality impact upon consumers, and made recommendations about this and in relation to risk assessments. Enforcement was considered. Risk classification: Significant
09 Jun 2017 For 24 hours (TMS)	Petts Wood and Orpington, Kent.	200,000	Elevated turbidity at Shortlands works due to treatment failure.	Thames Water Utilities Ltd Action: Shut down treatment works. Sampled affected area. The company completed on site investigations, but these did not identify a root cause and further investigations were required. The site was removed from supply. Additional investigations identified possible root causes and remedial measures were carried out, including repair and replacement of assets. DWI Comments and Findings: Inadequate investigations into root cause. Inadequate procedures. Inadequate risk assessment. There were potential breaches of Regulation 4 and 26 based on repeat exceedances of the turbidity standard at the final water compliance sampling point. The company did not implement an appropriate risk assessment or control measures prior to allowing a borehole into supply, had a number of monitoring issues and did not identify a root cause. The Inspectorate requested an additional report on investigations prior to return of the site to supply. Following receipt of this, the Inspectorate concluded adequate investigations and remedial measures had been completed, such that the exceedances were unlikely to recur. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
14 Jun 2017 For 6 hours (NNE)	Murton, works, Berwick upon Tweed.	16,437	Caustic dosing failure due to planned work.	Northumbrian Water Ltd Action: Sampled affected area. Improved procedures DWI Comments and Findings: The Inspectorate served a Regulation 28(4) notice for this site, and issued warning letters for use of unapproved products in the treatment process and for providing incorrect information in the company's reports to DWI. Risk classification: Significant
16 Jun 2017 For 24 hours (SEW)	Horam, East Sussex.	4,000	Brown discolouration due to burst main	South East Water Plc Action: Repaired main. Sampled affected area. DWI Comments and Findings: Lack of maintenance of equipment. Inadequate risk assessment. The company has addressed the root cause of this event. Risk classification: Significant
16 Jun 2017 For 72 hours (UUT)	Turton, Little Lever (Bolton).	59,600	MCPA (herbicide) detection above the regulatory limit at Wayoh works, due to raw water contamination.	United Utilities Water Plc Action: Sampled affected area. The company immediately turned on carbon dosing which recovered the situation. DWI Comments and Findings: Inadequate number of samples taken. Inadequate risk assessment. Inadequate procedures. Inadequate treatment process - Dosing. Sampling was not timely enough. Supplied unwholesome water in breach of regulations. The Inspectorate recommended that raw water sampling frequency is increased and improvements should be made to management of catchment risks. Risk classification: Significant
19 Jun 2017 For 4 days (SVT)	Kidderminster, Worcestershire.	12,500	Loss of supplies / poor pressure due to high demand in hot weather emptying Mount Pleasant service reservoir.	Severn Trent Water Ltd Action:

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
19 Jun 2017 For 30 hours (YKS)	Sheffield.	4,000	Brown discolouration – cause thought to be due to unauthorised operation of a hydrant by a third party	Yorkshire Water Services Ltd Action: • Flushed mains. • Repaired main. • Rezoned area (brought in water from different source). • Sampled affected area. DWI Comments and Findings: • Lack of maintenance of equipment. • Inadequate risk assessment. The company has set up a dedicated team to review discolouration in the city of Sheffield.
20 Jun 2017	Kirkby-in-Ashfield,	6,750	Loss of supplies / poor	Risk classification: Significant Severn Trent Water Ltd Action:
For 72 hours (SVT)	Nottinghamshire.	6,750	Loss of supplies / poor pressure due to Diamond Avenue service reservoir emptying following high demand.	 Rezoned area (brought in water from different source). Sampled affected area. Reviewed contingency plans and resilience measures
				DWI Comments and Findings: Inadequate contingency planning.
				The company was unprepared for the hot weather causing an increase in demand resulting in a rapid reduction of stored water 60 service reservoirs. The company has undertaken a detailed review of lessons learned, and taken action to improve resilience across its network.
				Risk classification: Significant
20 Jun 2017 For 48 hours (SWT)	Plymouth.	4,600	Media interest following mains burst.	South West Water Ltd Action: Rezoned area (brought in water from different source). Repaired main. Sampled affected area.
				Installed soft start pumps with the aim of avoiding transient pressure surges associated with pump start-up.
				DWI Comments and Findings: Inadequate risk assessment. Inadequate procedures.
				The company has implemented actions to prevent a recurrence.
20 Jun 2017	Pewsey, Wiltshire.	14,490	Enterococci detection in a	Risk classification: Significant Wessex Water Services Ltd Action:
For 73 hours (WSX)	i ewsey, wittsine.	14,400	treated water reservoir caused by a tanker used to supplement supplies.	Review of procedures. Retrained staff. Sampled affected area.
				The company have audited a the third party tanker company used and have amended procedures and refreshed training as a result.
				DWI Comments and Findings: Inadequate procedures. The Inspectorate has initiated enforcement action Inadequate risk assessment.
				Recommended company carry out or review risk assessments for alternative supplies.
				Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
20 Jun 2017 For 48 other (SRN)	Dibden Purlieu, Hampshire.	25,248	Brown discoloration – caused by flow changes in the distribution system due to variable demand.	Southern Water Services Ltd Action: • Flushed mains. • Review of procedures. • Sampled affected area. The company are to address the shortcomings in Rownhams zones by following the actions in the improvement notice issued. DWI Comments and Findings: • Inadequate contingency planning. • Inadequate investigations into root cause. • Inadequate risk assessment. • Inadequate training / competence of staff. • Supplied unwholesome water in breach of regulations. The Inspectorate initiated enforcement action and issued a regulation 28 Notice requiring the company to implement measures to reduce discolouration in the Rownhams 01 water supply zone (Southampton). Risk classification: Significant
21 Jun 2017 For 48 hours (YKS)	Sheffield.	70,718	Brown discolouration due to mains burst.	Yorkshire Water Services Ltd Action: Retrained staff. Repaired main. Flushed mains. Sampled affected area. The company response was satisfactory DWI Comments and Findings: Inadequate risk assessment. The company has set up a dedicated team to review all discolouration risk assessments for the city of Sheffield Risk classification: Significant
21 Jun 2017 For 11 hours (SRN)	Totton, Hampshire.	350	Brown discolouration due to mains burst.	Southern Water Services Ltd Action: • Flushed mains. • Review of procedures. • Sampled affected area. DWI Comments and Findings: • Inadequate contingency planning. • Inadequate procedures. • Inadequate risk assessment. • Inadequate training / competence of staff. • Lack of maintenance of equipment. • Supplied unwholesome water in breach of regulations. The Inspectorate initiated enforcement action, and issued a regulation 28 Notice requiring the company to implement measures to reduce discolouration in the Rownhams 01 water supply zone (Southampton). Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
23 Jun 2017	Birmingham.	1,300,000	Elevated iron in Frankley works treated water,	Severn Trent Water Ltd Action: • Sampled affected area.
For 4 hours (SVT)			resulting from treatment failure due to raw water deterioration.	The company continually monitored works performance and adjusted treatment processes as required.
				DWI Comments and Findings: • Inadequate contingency planning.
				Risk classification: Significant
23 Jun 2017 For 5 days (UUT)	Liverpool.	5	Media interest: Two separate social media reports of 'worms'.	United Utilities Water Plc Action: • Sampled affected area.
Tot 3 days (001)			reports of worms .	The company reviewed operational data and sampled the supplying treatment works (only) with a 75 micron filter.
				DWI Comments and Findings: Inadequate investigations into root cause. Inadequate risk assessment.
				The company did not conduct hydrant flushing/net sampling. Add a reference to animalcules to distribution system risk assessments.
				Risk classification: Significant
25 Jun 2017	Newton Abbot and	5,000	Brown discolouration due to	South West Water Ltd Action:
For 14 hours (SWT)	surrounding areas.		mains burst.	Flushed mains. Removed service reservoir from supply. Sampled affected area.
				DWI Comments and Findings: Inadequate investigation Recommendations made to keep consumer contacts and sampling under review and to
				update risk assessments.
26 Jun 2017	Westerham, Kent.	38,430	Elevated turbidity in final	Risk classification: Significant Thames Water Utilities Ltd Action:
	Troctomam, roma	30,100	water due to failure of the	Shut down treatment works.
For 24 hours (TMS)			disinfection system.	The company removed the treatment works from supply for the duration of the investigation.
				DWI Comments and Findings: • The company's response to this event as satisfactory and no further action to be taken.
				Risk classification: Significant
26 Jun 2017	Handsworth, SE of Sheffield.	4,150	Brown discolouration due to mains burst.	Yorkshire Water Services Ltd Action: • Sampled affected area.
For 48 hours (YKS)	Ciloniola.		ano barot.	• Flushed mains.
				Repaired main. The company's response was satisfactory.
				DWI Comments and Findings: Inadequate risk assessment.
				The company has set up a dedicated team to review the discoloured water risk assessment for the city of Sheffield.
				Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
28 Jun 2017 For 48 hours (UUT)	Southport.	21,463	Brown discolouration – caused by unauthorised operation of a valve by a third party.	United Utilities Water Plc Action: Sampled affected area. Flushed mains. DWI Comments and Findings: No further DWI action to be taken. Risk classification: Significant
28 Jun 2017 For 3 hours (SRN)	Totton, Hampshire.	160,000	Failure of clarification due to pump failure at Testwood works.	Southern Water Services Ltd Action: Replaced faulty equipment. Sampled affected area. The company manually switched over to the standby pump and ordered a replacement main dosing pump. Spares were also orders, to be kept on site. DWI Comments and Findings: Inadequate treatment process - Clarification. The Inspectorate carried out an audit of the works and has taken enforcement action in the form of a Regulation 28(4) Notice in order to secure delivery of an adequate programme of work to prevent recurrence. Risk classification: Significant
28 Jun 2017 For 48 hours (YKS)	Harrogate.	13,750	Brown discolouration due to mains burst.	Yorkshire Water Services Ltd Action: • Flushed mains. • Sampled affected area. The company is reviewing measures required to reduce discolouration events across its whole supply system. DWI Comments and Findings: • The source of the discolouration was found to be cast iron mains in distribution. The inspectorate is working with Yorkshire Water to understand the causes of discolouration across the company's supply network, and will ensure that appropriate measures are implemented. Risk classification: Significant
29 Jun 2017 For 2 weeks (WSX)	Oake, Taunton, Somerset.	3	Report of gastroenteritis	Wessex Water Services Ltd Action: Issued a boil water notice. Sampled affected area. Issued a section 75 Notice DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
30 Jun 2017 For 12 weeks (UUT)	Copeland, Cumbria.	66,760	Consumer concern: hardness, taste and odour, reports of illness and popping kettles caused by a planned change to the blend of waters supplied from Ennerdale works.	United Utilities Water Plc Action: • Review of procedures. The company reduced the proportion of Egremont borehole water in water supplied from Ennerdale works. DWI Comments and Findings: • Did not forewarn customers. • Did not keep customers informed. • Did not notify Inspectorate. • Inadequate procedures. • Inadequate risk assessment. • Inadequate training / competence of staff. • Supplied unwholesome water in breach of regulations. Nine recommendations made.
30 Jun 2017 For 6 hours (WSX)	Chippenham, Wiltshire.	3,180	Brown discolouration due to mains burst.	Risk classification: Serious Wessex Water Services Ltd Action: Repaired main. Rezoned area (brought in water from different source). The company repaired the main and bought the tower back in to supply. DWI Comments and Findings: Inadequate contingency planning. The company failed to execute the plan in full, which resulted in the event. Risk classification: Significant
03 Jul 2017 For 6 hours (SWT)	Dawlish, East Devon.	2,250	Brown discolouration due to mains burst.	South West Water Ltd Action: Flushed mains. Sampled affected area. A risk assessment was undertaken prior network activities. DWI Comments and Findings: No further DWI action to be taken. Risk classification: Significant
05 Jul 2017 For 5 weeks (CAM)	North Cambridge.	3	Consumer concern: Consumer concern about the risk from leaking Petrol station diesel tank. No contamination of consumer's supply was detected.	Cambridge Water Company Plc Action: Sampled affected area. The company investigated mains materials. DWI Comments and Findings: Samples not analysed for appropriate parameters. The company provided inappropriate advice to the consumer. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
05 Jul 2017 For 24 hours (AFW)	Hitchin, Hertfordshire.	41,300	Evidence of microbiological contamination (<i>E.coli</i>) at Jack's Hill service reservoir attributed to condition of sampling tap	Affinity Water Ltd Action: Removed service reservoir from supply. Sampled affected area. The company's investigation indicated that the most likely cause was the sampling facility. DWI Comments and Findings: No further DWI action to be taken. Risk classification: Significant
07 Jul 2017 For 2 hours (SVT)	North Staffordshire.	66,000	Elevated turbidity at Pool End works caused by flow changes during works start- up.	Severn Trent Water Ltd Action: Retrained staff. Sampled affected area. Red Alert Bulletin issued to operators regarding importance of regulation 26 monitors and escalation. DWI Comments and Findings: Did not liaise with local / health authorities. Inadequate investigations into root cause. Inadequate procedures. Inadequate risk assessment. Inadequate training / competence of staff. Inadequate treatment process - Disinfection. Unacceptable delay in notifying Inspectorate. There was failure to adequately recognise, investigate and risk assess a regulation 26 event. Recommendations were made that the company takes steps to address all these issues and make improvements to its internal procedures accordingly. Risk classification: Serious
07 Jul 2017 For 1 week (SVT)	Birmingham.	92,500	Brown discolouration due to mains burst.	Severn Trent Water Ltd Action: Repaired main. Rezoned area (brought in water from different source). Sampled affected area. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
07 Jul 2017 For 48 hours (TMS)	Farnborough, South London.	20,000	Brown discolouration due to mains burst.	Thames Water Utilities Ltd Action: Replaced main. Rezones and tankers used. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
08 Jul 2017 For 72 hours (SRN)	Company-wide.	1	Loss of telemetry due to failure of hardware in telemetry centre.	Southern Water Services Ltd Action: Replaced faulty equipment. Retrained staff. Review of procedures. Work to improve resilience is ongoing as part of final enforcement order. DWI Comments and Findings: Lack of maintenance of equipment. The failure of equipment is being considered under final enforcement order. Risk classification: Significant
09 Jul 2017 For 48 hours (TMS)	Westerham and North Downs, Kent.	16,500	Loss of supplies / poor pressure. due to high demand during period of hot weather	Thames Water Utilities Ltd Action: Repaired main. Rezoned area (brought in water from different source). Sampled affected area. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
10 Jul 2017 For 1 hour (TMS)	East London.	1,000,000	Treatment failure at Coppermills works: caused by inappropriate operation of a slow sand filter	Thames Water Utilities Ltd Action: Review of procedures. Sampled affected area. DWI Comments and Findings: Inadequate treatment process - Filtration. Inadequate training / competence of staff. Inadequate procedures. Inadequate communication caused delay in response. Lack of maintenance of equipment. Sampling was not timely enough. Investigation ongoing. Risk classification: Significant
10 Jul 2017 For 29 hours (NNE)	Barnard Castle, County Durham.	49,979	Brown discolouration due to mains burst.	Northumbrian Water Ltd Action: Sampled affected area. Rezoned area (brought in water from different source). The company is installing a new pressure reducing valve at the District Meter Area boundary and is permanently rezoning some areas to reduce the likelihood and impact of future busts. DWI Comments and Findings: Supplied unwholesome water in breach of regulations. Recommended that the company reviews its flushing programme and considers carrying out targeted flushing in high risk areas, to remove historic mains deposits. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
13 Jul 2017 For 73 days (SEW)	Wadhurst, East Sussex.	5,000	Coliforms and <i>E.coli</i> detected in a service reservoir.	South East Water Pic Action: Removed service reservoir from supply. Sampled affected area. Flood test confirmed ingress route - to be assessed as compliance report. DWI Comments and Findings: No further DWI action to be taken. Risk classification: Significant
14 Jul 2017 For 12 hours (SRN)	Winchester.	123,548	Loss of supplies / poor pressure due to burst main.	Southern Water Services Ltd Action: Provided an alternative supply by tanker / bowser. Provided bottled water on request. Repaired main. Sampled affected area. The burst was a split along a 15 inch cast iron main, and the section of main was replaced. DWI Comments and Findings: No further DWI action to be taken.
15 Jul 2017 For 1 hour (YKS)	Bradford.	250,000	Elevated turbidity at Chellow Heights works caused by failure of treatment process.	Risk classification: Significant Yorkshire Water Services Ltd Action: Sampled affected area. Improperly disinfected water was supplied to consumers with no discussion with health agencies about risk to public health. The company retrospectively sampled the affected water. DWI Comments and Findings: Did not notify local / health authorities. Inadequate treatment process - Disinfection. The company did not liaise effectively with Public Health England. Recommendations were made to implement improvements to the treatment process at Chellow Heights and to review its procedures for liaising with health agencies. Risk classification: Significant
16 Jul 2017 For 52 hours (UUT)	Lytham St Annes, Lancashire.	34,373	Loss of supplies / poor pressure due to a burst main.	United Utilities Water Pic Action: Repaired main. Provided an alternative supply by tanker / bowser. Rezoned area (brought in water from different source). DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
18 Jul 2017 For 29 hours (WSX)	Yeovil, Somerset.	12,500	Discolouration due to mains burst.	Wessex Water Services Ltd Action: Flushed mains. Repaired main. Burst isolated. mains repaired DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
19 Jul 2017 For 3 hours (UUT)	Crewe, Cheshire.	18,229	Brown discolouration due to mains burst.	United Utilities Water Plc Action: Repaired main. Sampled affected area. Flushed mains. The company repaired the two mains bursts, which proved to be unconnected and carried out flushing to alleviate the discolouration of supplies. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
19 Jul 2017 For 37 hours (BRL)	Bristol.	87,785	Loss of supplies / poor pressure due burst main.	Bristol Water Plc Action: • Flushed mains. • Provided an alternative supply by tanker / bowser. • Provided bottled water on request. • Repaired main. • Rezoned area (brought in water from different source). • Sampled affected area. The company set up bowser stations as temporary alternative supplies while the repair was completed. The burst was large and required the Bristol ring main to be isolated for repair, which led to additional customers losing supplies. DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
19 Jul 2017 For 73 hours (SVT)	Machynlleth, Powys, Wales.	3	Taste or Odour: Chemical thought to be associated with a new main.	Severn Trent Water Ltd Action: • Flushed mains. • Issued a do not drink notice. • Rezoned area (brought in water from different source). • Sampled affected area. The company issued do not drink advice while investigations were carried out and transferred the property back to the original main to restore wholesome supplies. DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
21 Jul 2017 For 48 hours (NNE)	Barnard Castle, County Durham.	49,979	Brown discolouration due to mains burst.	Northumbrian Water Ltd Action: Sampled affected area. Rezoned area (brought in water from different source). The company is installing a new pressure reducing valve at the District Meter Area boundary and is permanently rezoning some areas to reduce the likelihood and impact of future busts. DWI Comments and Findings: Supplied unwholesome water in breach of regulations. In the event of a sudden flow change in the network due to a bust or other event, it is likely that discolouration would result leading to the supply of water in breach of Regulation 4 (wholesome water), therefore it is recommended that the company reviews its flushing programme in the light of this event, and considers carrying out targeted flushing in high risk areas, to remove historic mains deposits.
21 Jul 2017 For 48 hours (YKS)	Sheffield, South Yorkshire.	27,500	Brown discolouration due to mains burst.	Yorkshire Water Services Ltd Action: • Sampled affected area. • Flushed mains. The company is reviewing its risk assessment for the city of Sheffield. DWI Comments and Findings: • Inadequate risk assessment. The company has taken action to address the discolouration risk in the city of Sheffield. Risk classification: Significant
24 Jul 2017 For 48 hours (SWT)	Luxulyan, Cornwall.	5,000	Brown discolouration due to mains burst. – Burst	South West Water Ltd Action: Repaired main. By-passed service reservoir. Flushed mains. Sampled affected area. Provided an alternative supply by tanker / bowser. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
27 Jul 2017 For 4 days (TMS)	Hendon, London.	8	Issue of Boil Notice due to potential sewage contamination of the trench during repair to a burst main.	Thames Water Utilities Ltd Action: Issued a boil water notice. Provided bottled water on request. Sampled affected area. DWI Comments and Findings: Inadequate communication caused delay in response. Made a recommendation to ensure that protective advice is issued in a timely manner. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
27 Jul 2017 For 24 hours (UUT)	Eden.	2,200	E.coli detected in Springfield service reservoir.	United Utilities Water Plc Action: Sampled affected area. Removed service reservoir from supply. Repaired faulty equipment. Rezoned area (brought in water from different source). DWI Comments and Findings:
				No further DWI action to be taken. Risk classification: Significant
28 Jul 2017	Nottingham.	32,511	E.coli detected in Mapperley	Severn Trent Water Ltd Action:
For 2 weeks (SVT)			service reservoir due to ingress following structural damage caused when the	Increased chlorine residuals at service reservoir. Sampled affected area.
			reservoir was allowed to overfill.	DWI Comments and Findings: • Investigation ongoing.
				Risk classification: Serious
28 Jul 2017	Slaggyford, Northumberland.	531	Evidence of microbiological contamination (<i>E.coli</i>) in	Northumbrian Water Ltd Action: Removed service reservoir from supply.
For 72 hours (NNE)			Slaggyford service reservoir, caused by ingress due to	Sampled affected area.
			structural defects.	Reservoir to be abandoned.
				DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken.
				Risk classification: Significant
31 Jul 2017 For 48 hours (AFW)	Baldock and Letchworth – Hertfordshire.	57,500	Loss of supplies / poor pressure due to burst main.	Affinity Water Ltd Action: Removed service reservoir from supply. Repaired main.
				Flushed mains. Sampled affected area.
				DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken.
				Risk classification: Significant
31 Jul 2017	Stockport, Cheshire.	23,308	Brown discolouration due to burst main.	United Utilities Water Plc Action: Provided an alternative supply by tanker / bowser.
For 48 hours (UUT)	2			• Repaired main.
				Briefings to staff on PMV bypass
				DWI Comments and Findings: • Lack of maintenance of equipment.
				Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
01 Aug 2017 For 5 days (ANH)	Ancaster, Lincolnshire.	37,479	Brown discolouration and white water due to emergency work	Anglian Water Services Ltd Action: Rezoned area (brought in water from different source). Repaired main.
				DWI Comments and Findings: No further DWI action to be taken.
				Risk classification: Significant
01 Aug 2017 For 72 hours (DWR)	Two properties in Crosshands near Llanelli.	5	Petrol taste or odour due to ground contamination from hydrocarbon spillage.	Dŵr Cymru Welsh Water Action: Issued a do not drink notice. Replaced communication pipe with barrier pipe.
				DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
02 Aug 2017 For 5 days (TMS)	Wandsworth.	305	Hydrocarbon/solvent odour caused by contamination of property's cold water feed tank.	Thames Water Utilities Ltd Action: Issued a do not drink notice. Provided bottled water on request. Took samples from the premises and carried out a plumbing inspection. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken.
				Risk classification: Significant
02 Aug 2017 For 48 hours (UUT)	Bolton.	30,485	Brown discolouration due to damage by unknown third party.	United Utilities Water Plc Action: Repaired main. Rezoned area (brought in water from different source). Mains repaired and water quality sample survey undertaken.
				DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
03 Aug 2017 For 24 hours (YKS)	Sheffield.	20,725	Brown discolouration due to burst main.	Yorkshire Water Services Ltd Action: • Flushed mains. • Sampled affected area. • Review of procedures.
				DWI Comments and Findings: Inadequate risk assessment. The company has taken action to address shortcomings with the risk assessment in place for Sheffield. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
04 Aug 2017 For 72 hours (SEW)	Folkington, East Sussex.	8,150	Brown discolouration due to burst mains.	South East Water Plc Action: Flushed mains. Repaired main. Sampled affected area.
				DWI Comments and Findings: • Supplied unwholesome water in breach of regulations. Recommendation made to review causes of discolouration in Folkington zone, especially in light of previous event in August 2015 involving multiple burst mains in the Folkington
				zone. Risk classification: Significant
08 Aug 2017 For 12 hours (NNE)	Sunderland.	301,786	Failure of clarification at Wear Valley works.	Northumbrian Water Ltd Action:
				DWI Comments and Findings: • Final water quality was unaffected. The company's response to this event was satisfactory and no further action to be taken.
				Risk classification: Significant
08 Aug 2017 For 48 hours (UUT)	Crewe, Cheshire.	14,274	Brown discolouration due to mains burst.	United Utilities Water Plc Action: Repaired main. Sampled affected area.
101 40 110013 (001)				DWI Comments and Findings: Company advised of breach of regulation 4.
				Risk classification: Significant
09 Aug 2017 For 5 days (SEW)	Crowborough, East Sussex.	10,790	Coliforms and <i>E.coli</i> detection at Cottage Hill service reservoir due to	South East Water Plc Action: Removed service reservoir from supply. Sampled affected area.
			ingress.	DWI Comments and Findings: No further DWI action to be taken.
				Risk classification: Significant
10 Aug 2017 For 24 hours (SVT)	Heanor, Derbyshire.	20,696	Brown discolouration due to mains burst.	Severn Trent Water Ltd Action: Repaired main. Rezoned area (brought in water from different source).
				DWI Comments and Findings: • Lack of maintenance of equipment.
				Made a recommendation to review and improve approach to maintaining valves in the network.
				Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
15 Aug 2017 For 73 hours (UUT)	Single property in Cheadle, Stockport.	3	Taste/odour and white discolouration attributed to defects in the private domestic system.	United Utilities Water Plc Action: Issued a do not drink notice. Carried out a plumbing inspection. DWI Comments and Findings: No further DWI action to be taken.
				Risk classification: Significant
16 Aug 2017 For 48 hours (TMS)	Lee Valley and Enfield.	133,000	Microbiological contamination (coliform bacteria) of Sewardstone service reservoir.	Thames Water Utilities Ltd Action: • Removed service reservoir from supply. DWI Comments and Findings: • No further DWI action to be taken. Risk classification: Significant
17 Aug 2017	Bolton.	55,846	Brown discolouration due to	United Utilities Water Plc Action:
For 48 hours (UUT)			mains damage caused by unknown third party.	Rezoned area (brought in water from different source). Retrained staff. Repaired main. Shut down treatment works. Satisfactory remedial action were taken to address shortcomings in training. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
18 Aug 2017	Alwen.	8,750	Loss of supplies / poor	Dŵr Cymru Welsh Water Action:
For 72 hours (DWR)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5,166	pressure due burst main.	Flushed mains. Provided an alternative supply by tanker / bowser. Provided bottled water on request. Repaired main. Sampled affected area. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
22 Aug 2017 For 24 hours (WSX)	Single property in Bridport, Dorset.	50	Blue water caused by back siphonage after a burst main in the distribution system.	Wessex Water Services Ltd Action: Flushed mains. Issued a do not drink notice. Provided bottled water on request. Sampled affected area. Water fittings identified a defective fitting in a toilet cistern as root cause. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
23 Aug 2017 For 14 hours (DVW)	Wrexham.	7,500	Brown discolouration due to mains burst.	Dee Valley Water Plc Action: • Review of procedures. • Sampled affected area.
				DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken.
				Risk classification: Significant
23 Aug 2017 For 0.5 hours (YKS)	Hull and Holderness.	189,797	Elevated turbidity due to failure of the disinfection system.	Yorkshire Water Services Ltd Action: Repaired faulty equipment. Shut down treatment works. The treatment works was shut down for investigation and the faulty equipment repaired
				before restarting.
				DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken.
				Risk classification: Significant
27 Aug 2017 For 73 hours (SVT)	Codsall in Wolverhampton.	25	Issue of Do not drink notice due to potential ingress to the joint supply feeding 10	Severn Trent Water Ltd Action: Issued a do not drink notice. Provided bottled water on request.
			properties.	The company provided bottled water for the duration of the event.
				DWI Comments and Findings: Inadequate procedures.
				Suggestion for company to review procedures.
				Risk classification: Significant
30 Aug 2017 For 5 hours (ESK)	Malden, Southend and surrounding areas, Essex.	338,448	Treatment failure: Loss of clarification (polyelectrolyte dosing) at Langford works	Essex and Suffolk Water Ltd Action: • Sampled affected area. • Reviewed procedures.
			due to maintenance error during planned work.	There were four events at this site in 2017. The company have a long term plan to refurbish the affected part of the clarification system, which will be formalised in a regulation 28(4) notice.
				.DWI Comments and Findings: • Procedures were inadequate. • Enforcement action under consideration.
				Following maintenance of the poly dosing pumps, the maintainer forgot to return a valve to the open position.
				Risk classification: Significant
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Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
31 Aug 2017 For 0.25 hours (YKS)	North Yorkshire.	64,000	Elevated turbidity at Thornton Steward works due to planned work.	Yorkshire Water Services Ltd Action: Repaired faulty equipment. Retrained staff. Sampled affected area. DWI Comments and Findings: Inadequate follow up sampling. Lack of maintenance of equipment. Risk classification: Significant
01 Sep 2017 For 24 hours (BRL)	Bristol.	1,815	E.coli detected at Compton Road service reservoir attributed to the condition of the sampling facilities.	Bristol Water Plc Action: Removed service reservoir from supply. Sampled affected area. One compartment removed from supply for inspection and flood test carried out. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
02 Sep 2017 For 48 hours (YKS)	Halifax, Yorkshire.	9,528	Brown discolouration due to mains burst.	Yorkshire Water Services Ltd Action: • Flushed mains. • Provided bottled water on request. • Repaired main. • Sampled affected area. DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
02 Sep 2017 For 24 hours (DWR)	Anglesey, North Wales.	25,000	Microbiological contamination (Enterococci) at Alaw treatment works due to structural condition of pump house.	Dŵr Cymru Welsh Water Action: Repaired faulty equipment. Sampled affected area. DWI Comments and Findings: Lack of maintenance of equipment. Recommended that the company takes steps to complete the actions identified in the risk assessment for Alaw works. Risk classification: Significant
03 Sep 2017 For 24 hours (BRL)	Bristol.	414,000	Elevated bromate in final water sample due to overdosing ozone on works startup.	Bristol Water Plc Action: Sampled affected area. Review of procedures. Cause attributed to extended residence time in ozone contactors whilst works was being restarted. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
04 Sep 2017 For 4 days (SVT)	Nuneaton.	100	Issue of Do not drink notice due to back siphonage.	Severn Trent Water Ltd Action: • Flushed mains. • Issued a do not drink notice. • Sampled affected area. • Provided bottled water on request. Cause attributed to cross connection with private supply. Cross connection has been removed and a non-return valve installed on the boundary of the offending property. Local Authority has been notified of the Private Supply. DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
05 Sep 2017 For 48 hours (SWT)	Helston, Cornwall.	15,000	Loss of supplies / poor pressure due to burst main.	South West Water Ltd Action: Repaired main. Flushed mains. Provided bottled water on request. Issued a boil water notice. Sampled affected area. The BWN was precautionary; all samples satisfactory DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
07 Sep 2017 For 72 hours (BRL)	Single property in Bristol.	3	Coliforms and E. coli detected at customers property. Most likely cause is condition of the consumer's tap.	Bristol Water Plc Action:
07 Sep 2017 For 3 days (DWR)	Tirdderwen, Crosshands, Llanelli, Carmarthenshire.	3	Issue of Do not drink notice due to ground contamination from hydrocarbon spillage.	Dŵr Cymru Welsh Water Action: Replaced main. Sampled affected area. Provided bottled water on request. Issued a do not drink notice. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
07 Sep 2017 For 37 hours (UUT)	Millbrook, Macclesfield.	55	E.coli detection at Ginclough service reservoir attributed to poor turnover.	United Utilities Water Plc Action: By-passed service reservoir. Review of procedures. Rezoned area (brought in water from different source). Sampled affected area. Reservoir has been permanently removed from supply. DWI Comments and Findings: Inadequate procedures. Risk classification: Significant
08 Sep 2017 For 72 hours (SWT)	North Devon, Bideford, Westward Ho, Northam, Appledore.	7,500	E. coli detected in Buckleigh service reservoir due to ingress.	South West Water Ltd Action: • By-passed service reservoir. • Sampled affected area. • Flushed mains. DWI Comments and Findings: • Recommendation made to review the condition of the asset and carry out necessary remedial works. Risk classification: Significant
08 Sep 2017 For 8 days (TMS)	Reading, Berkshire.	47,000	Loss of supplies / poor pressure due to burst main and unplanned emptying of Tilehurst service reservoir.	Thames Water Utilities Ltd Action: Rezoned area (brought in water from different source). Sampled affected area. Provided an alternative supply by tanker / bowser. DWI Comments and Findings: Inadequate contingency planning. Inadequate risk assessment. The event was caused by a combination of factors, exacerbated by a lack of understanding of the established contingency plan and the configuration of an outlet main of Tilehurst service reservoir. The Inspectorate recommended that the company takes steps to improve its contingency plans for the supply system, to prevent a similar event recurring. Risk classification: Significant
11 Sep 2017 For 24 hours (YKS)	Harrogate.	48,000	E.coli detection in Eagle Hall service reservoir. Definitive cause unknown.	Yorkshire Water Services Ltd Action: Sampled affected area. The company removed the reservoir from supply and carried out an internal inspection. No definitive cause was identified. DWI Comments and Findings: No further DWI action to be taken. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
15 Sep 2017 For 72 hours (NNE)	Single property in Lesbury, Alnwick.	6	Issue of Do not use notice due to pink water, caused by a defect in the private domestic system.	Northumbrian Water Ltd Action: Issued a do not use notice. The cause was attributed to the private domestic system and the consumer was advised to replace the service pipe with barrier pipe. DWI Comments and Findings: No further DWI action to be taken. Risk classification: Significant
19 Sep 2017 For 2 weeks (UUT)	Commercial Units, Birkenhead.	5	Issue of Do not drink notice due to detection of naphthalene.	United Utilities Water Plc Action: Flushed mains. Issued a do not drink notice. Replaced communication pipe The most probable cause of the contamination was attributed to permeation through the wall of the communication pipe, from contaminated ground. Pipework was replaced with barrier pipe. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
20 Sep 2017 For 4 days (SVT)	Chapel-en-le-Frith.	15,000	Loss of supplies / poor pressure due to burst main.	Severn Trent Water Ltd Action: Provided an alternative supply by tanker / bowser. Repaired main. Rezoned area (brought in water from different source). Sampled affected area. The company's response was satisfactory with the exception of the late sampling. DWI Comments and Findings: Inadequate follow up sampling. A recommendation for timelier sampling was made. Risk classification: Significant
20 Sep 2017 For 2 hours (SVT)	Derby.	379,877	Elevated pH due to failure of pH correction at Little Eaton works.	Severn Trent Water Ltd Action: • Repaired faulty flow meter. DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
21 Sep 2017 For 26 hours (NNE)	Hazlerigg, Newcastle.	6,715	Brown discolouration due to planned work.	Northumbrian Water Ltd Action: Repaired leaking valve. Sampled affected area. DWI Comments and Findings: Sampling was not timely enough. Sampling was initiated very late in the event, therefore all water quality samples passed. The company failed to follow its own procedures for managing risk of discolouration during planned work. Recommendations made to improve procedures. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
22 Sep 2017 For 72 hours (SVT)	Ladbroke, Warwickshire.	5,645	Evidence of microbiological contamination (Enterococci) in compartment No.1 of Ladbroke service reservoir.	Severn Trent Water Ltd Action: Removed compartment 1 from supply. Implemented enhanced sampling on one of the reservoir compartments, until it can be removed from supply for inspection. DWI Comments and Findings: Inadequate procedures. Inadequate risk assessment. Recommendation made to revise the Regulation 27 Risk Assessment for the reservoir and its associated supply system. Made suggestion regarding the suitability of dip sampling. Risk classification: Significant
23 Sep 2017 For 48 hours (SEW)	Charing, near Ashford, Kent.	3,750	Brown discolouration due to burst main.	South East Water Plc Action: Flushed mains. Provided bottled water on request. Repaired main. Retrained staff. Sampled affected area. Demonstration of some learning. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
24 Sep 2017 For 4 days (SVT)	Telford.	50,000	Loss of supplies / poor pressure due to burst main.	Severn Trent Water Ltd Action: • Blended supply with another source. • Provided an alternative supply by tanker / bowser. • Provided bottled water on request. • Repaired main. • Rezoned area (brought in water from different source). • Sampled affected area. DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
25 Sep 2017 Intermittent For 8760 days (UUT)	Three properties in Lancaster.	3	Issue of Do not drink notice due to ground contamination from hydrocarbon spillage.	. United Utilities Water Plc Action: • Flushed main. • Sampled affected area. • Issued a DND notice. DWI Comments and Findings: • Inadequate investigations into root cause. • Supplied unwholesome water in breach of regulations. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
27 Sep 2017 For 72 hours (SVT)	15 properties in Dorrington.	38	Issue of Do not drink notice due to ground contamination from hydrocarbon spillage.	Severn Trent Water Ltd Action: Issued a do not drink notice. Provided bottled water on request. Sampled affected area.
				DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
29 Sep 2017	Tenbury Wells.	4,461	Issue of: Boil Notice due to	Severn Trent Water Ltd Action:
For 72 hours (SVT)			burst main at the inlet of Burford service reservoir.	Removed service reservoir from supply. Sampled affected area. Issued a boil water notice.
				DWI Comments and Findings: • Inadequate risk assessment.
				Risk classification: Significant
30 Sep 2017 For 5 days (UUT)	Blackburn.	138	Brown discolouration – caused by improperly managed mains cleaning	United Utilities Water Plc Action: • Flushed main. • Retrained staff.
			(swabbing) following planned work.	DWI Comments and Findings: No further DWI action to be taken.
				Risk classification: Significant
03 Oct 2017	Single property, Cold Norton,	3	Issue of Do not drink notice –following complaint of	Essex and Suffolk Water action: Carried out plumbing inspection.
For 72 hours (ESK)	Essex.		hydrocarbon odour, associated with the private supply pipe.	Provided advice to the consumer. The consumers' supply pipe has been replaced.
				DWI Comments and Findings: No further DWI action to be taken.
03 Oct 2017	Cowes, Isle of	39,426	Ingress into Broadfield	Risk classification: Significant Southern Water Services Ltd Action:
	Wight.	39,420	service reservoir identified	By-passed service reservoir.
For 24 hours (SRN)			during planned maintenance work.	Flushed mains. Sampled affected area.
				The service reservoir remains out of supply and is to be permanently abandoned.
				DWI Comments and Findings: Inadequate risk assessment. Inadequate maintenance.
				The Inspectorate raised concerns about the company's strategy for inspection and maintenance of service reservoirs. Sampling points at this site were not suitably located.
				The Inspectorate initiated enforcement action through a company-wide regulation 28 notice, requiring the Southern Water to address risks associated with the operation and condition of all of its service reservoirs.
				Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
05 Oct 2017 For 15 days (ANH)	Belstead, Capel St Mary, Copdock.	2,673	Brown discolouration – caused by mains burst and flow changes associated with planned work at Alton works.	Anglian Water Services Ltd Action: • Flushed mains. • Retrained staff. • Review of procedures. • Rezoned area (brought in water from different source). • Sampled affected area. DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
08 Oct 2017 For 24 hours (SVT)	Birmingham.	1,367,614	E. coli detected at Frankley treatment works – cause not definitively identified.	Severn Trent Water Ltd Action: Sampled affected area. Replaced sampling tap. Removed one of the Contact Tanks from supply to conduct improvement work. DWI Comments and Findings: A regulation 28 notice is in place for Frankley works, requiring the company to implement actions to address risks at the works. Following a change application received in November 2017, this notice will be revised and reissued to take account of changes to proposed actions and timescales for completion. Risk classification: Significant
12 Oct 2017 For 24 hours (WSX)	Chard, Somerset.	2,192	Loss of supplies / poor pressure due planned work.	Wessex Water Services Ltd Action: By-passed service reservoir. Flushed mains. Removed service reservoir from supply. Repaired main. Retrained staff. Review of procedures. Sampled affected area. DWI Comments and Findings: Inadequate communication caused delay in response. Inadequate contingency planning. Inadequate risk assessment. Inadequate training / competence of staff. This event was avoidable and foreseeable. The company showed poor governance of its contractors and poor record keeping/risk assessment of the planned works. Risk classification: Significant
13 Oct 2017 For 28 days (SVT)	Oxcroft, Derbyshire.	33	Media interest following burst main.	Severn Trent Water Ltd Action: Retrained staff. Review of procedures. DWI Comments and Findings: Inadequate follow up sampling. Inadequate number of samples taken. Inadequate procedures. One consumer contact was incorrectly logged. Recommendations made to improve procedures. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
16 Oct 2017 For 24 hours (SWT)	Launceston and surrounding area.	5,000	Brown discolouration due to failure of inlet valve to reservoir.	South West Water Ltd Action: By-passed service reservoir. Flushed mains. Removed service reservoir from supply. Sampled affected area. Company identified the cause to a control valve and have subsequently revised the code to prevent a reoccurrence. Similar control valves are being checked and upgraded if required. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
17 Oct 2017 For 24 hours (WSX)	Langport.	8,140	Brown discolouration due to planned work.	Wessex Water Services Ltd Action:
19 Oct 2017 For 48 hours (SRN)	Hastings.	7,250	Loss of supplies / poor pressure due to burst main.	Southern Water Services Ltd Action: Provided an alternative supply by tanker / bowser. Provided bottled water on request. Removed service reservoir from supply. Repaired main. Sampled affected area. Company distributed bottled water whilst repairs were on going. A downstream reservoir was shut in causing further loss of supply - this could have been predicted. Reservoir had high turbidity which delayed reintroduction, but once it was below 3.5 NTU the reservoir was reintroduced to supply. DWI Comments and Findings: Inadequate contingency planning. Inadequate risk assessment. Risk assessment for reservoir reintroduction and contingency plan for Rye tower were inadequate. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
20 Oct 2017 For 24 hours (TMS)	Reading and Tilehurst.	130,000	Cryptosporidium detection at Pangbourne works, caused by deterioration of raw water quality.	Thames Water Utilities Ltd Action: • Review of procedures. The company is considering installing additional treatment at Pangbourne to remove or inactivate oocysts. Enhanced monitoring (including continuous monitoring for the presence of <i>Cryptosporidium</i>) will be required as part of the return to supply criteria for borehole 5. DWI Comments and Findings: The company identified a risk of surface water ingress into the boreholes when the River Pang is in high flow. The Inspectorate has initiated enforcement action requiring appropriate treatment to be installed by March 2019. Risk classification: Significant
21 Oct 2017 For 24 hours (NNE)	Warkworth.	154,000	Sub-optimal treatment – cause unknown.	Northumbrian Water Ltd Action: • Sampled affected area. • Increased chlorine residuals at treatment works. Coagulants and flocculants adjusted . DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
22 Oct 2017 For 72 hours (SRN)	Public building in Rye, East Sussex.	50	Boil water notice issued following detection of Coliform bacteria in a sample taken from a café, caused by the condition of the private distribution system.	Southern Water Services Ltd Action: Issued a boil water notice. Sampled affected area. The company carried out a plumbing inspection and a number of contraventions were found and corrected. DWI Comments and Findings: Inadequate procedures. The Inspectorate recommended that the company should use its powers under Section 75 of The Water Industry Act to ensure that necessary works, in this case disinfection of the internal plumbing system, are completed. The company carried out the work without serving a notice. Risk classification: Significant
25 Oct 2017 For 2 weeks (UUT)	Two properties in Nantwich, Cheshire.	5	Petrol taste/odour – caused by leakage from fuel tank and permeation of plastic supply pipe.	United Utilities Water Plc Action: Issued a do not drink notice. Sampled affected area. Replaced consumers' supply pipes with barrier pipe. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
25 Oct 2017 For 26 hours (SWT)	Salt Ash, near Plymouth.	3,750	Brown discolouration due to planned work.	South West Water Ltd Action: • Flushed mains. • Sampled affected area.
				DWI Comments and Findings: Inadequate contingency planning.
				The company has revised its asset plan to take account of the smaller diameter meter which was at the route of this event.
				Risk classification: Significant
27 Oct 2017 For 1 week (UUT)	Blackpool.	50	Health authority report of gastroenteritis in a school.	United Utilities Water Plc Action: • Sampled affected area.
				DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken.
				Risk classification: Significant
28 Oct 2017 For 4 days (SVT)	Gloucestershire.	109,000	Enterococci detected in Mitcheldean works final water, attributed to ingress	Severn Trent Water Ltd Action: Repaired fault. Sampled affected area.
			into contact tank at treatment works.	The company's response was satisfactory
				DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken.
				Risk classification: Significant
30 Oct 2017 For 24 hours (SVT)	Cheltenham.	19,000	Loss of supplies / poor pressure due to burst main.	Severn Trent Water Ltd Action: • Provided an alternative supply by tanker / bowser. • Provided bottled water on request. • Replaced main. • Rezoned area (brought in water from different source).
				Company provided alternative supplies and instigated rezones whilst the main was being repaired. a discolouration issue occurred which led to samples failing their PCV, flushing in the network was undertaken to clear out the out of spec water.
				DWI Comments and Findings: Inadequate risk assessment.
				Company have been recommended to carry out a risk assessment into the condition of the main in order to prevent a recurrence.
				Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
30 Oct 2017 For 30 hours (SRN)	Brighton.	2,947	Brown discolouration due to accidental action by company employee.	Southern Water Services Ltd Action: • Flushed mains. • Sampled affected area. Booster pump has been isolated to further control use. DWI Comments and Findings: • Supplied unwholesome water in breach of regulations. The Inspectorate recommended that the company reviewed the operation and maintenance procedures for standby booster sets and associated pipework. Risk classification: Significant
31 Oct 2017 For 72 hours (SVT)	Chesterfield.	23,000	Brown discolouration due to planned work to isolate Wingerworth service reservoir from supply.	Severn Trent Water Ltd Action: By-passed service reservoir. Review of procedures. Sampled affected area. DWI Comments and Findings: Inadequate procedures. Inadequate risk assessment. Inadequate training / competence of staff. The company did not identify a buried valve whilst reconfiguring the network to prepare for the planned isolation of the service reservoir, and pump settings were found to be incorrect due to a previous maintenance error. A recommendation was made for improvements to be made to company procedures. Risk classification: Significant
02 Nov 2017 For 24 hours (SRN)	Romsey, Hampshire.	30,000	E.coli detection in Michelmarsh service reservoir.	Southern Water Services Ltd Action: • By-passed service reservoir. • Sampled affected area. Assessed as a compliance breach. DWI Comments and Findings: • No further DWI action to be taken. Risk classification: Significant
03 Nov 2017 For 36 days (UUT)	Manchester.	50	Petrol taste/odour due to ground contamination from hydrocarbon spillage.	United Utilities Water Plc Action: Issued a do not drink notice. Replaced pipework in contaminated ground with barrier pipe. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
04 Nov 2017 For 10 days (SVT)	Higham, Derbyshire.	10	Issue of Boil Notice due to microbiological contamination of distribution system following repair to burst main.	Severn Trent Water Ltd Action: Issued a boil water notice. Provided bottled water on request. Sampled affected area. Chlorinated and flushed the main DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
07 Nov 2017 For 72 hours (ESK)	llford.	3	Issue of Boil Notice due to microbiological contamination of distribution.	Essex & Suffolk Water Action: Increased chlorine residuals in the distribution system. Issued a boil water notice. Provided bottled water on request. Sampled affected area. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
15 Nov 2017 For 24 hours (SVT)	Parts of Worcestershire, Warwickshire and Coventry.	795,342	E.coli detected at Strensham works final water, caused by ingress into contact tank.	Severn Trent Water Ltd Action: •Sampled the affected area. The roof membrane has been replaced. DWI Comments and Findings: • The Inspectorate concluded that the replacement of the contact tank roof membrane should be sufficient to prevent a recurrence. Other improvements to the treatment process at Strensham are ongoing under the terms of a regulation 28 Notice, due for completion by March 2019. Risk classification: Significant
16 Nov 2017 For 48 hours (ESK)	Burnham on Crouch, Essex.	11,043	Loss of supplies / poor pressure due to third party damage to main.	Essex & Suffolk Water Action: Provided bottled water on request. Repaired main. Rezoned area (brought in water from different source). Sampled affected area. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
16 Nov 2017 For 5 days (SRN)	Rownhams (Southampton).	161,676	Ingress into Rownhams service reservoir identified during an internal inspection.	Southern Water Services Ltd Action: • Sampled affected area. • Service reservoir cannot be taken out of supply. DWI Comments and Findings: • Inadequate contingency planning. • Inadequate risk assessment. • Supplied unwholesome water in breach of regulations. Enforcement has been initiated requiring the company to review risks and implement necessary at all of its service reservoirs. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
17 Nov 2017 For 8 days (SVT)	Leisure centre in Bedworth, Warwickshire.	100	Do not drink advice issued following report of solvent taste/odour.	Severn Trent Water Ltd Action: Issued do not drink advice Sampled the affected area Carried out internal plumbing inspection No plumbing defects were identified and the cause of the odour has not been demonstrated. DWI Comments and Findings: Inadequate investigations into root cause. Inadequate risk assessment. Samples not analysed for appropriate parameters. Recommendations made to improve investigational sampling response. Risk classification: Significant
24 Nov 2017 For 4 days (YKS)	Halifax.	20,710	Brown discolouration due to structural failure in distribution.	Yorkshire Water Services Ltd Action: • Flushed mains. • Sampled affected area. • Repaired main. DWI Comments and Findings: • The company has been reminded not inform consumers that water is 'safe to drink' when there is no evidence to corroborate this statement. Risk classification: Significant
24 Nov 2017 For 72 hours (SWT)	Single commercial property in Dolton Beacon, Devon.	30	Petrol taste/odour due to ground contamination from hydrocarbon spillage.	South West Water Ltd Action: Issued a do not drink notice. Provided bottled water on request. Sampled affected area. Company carried out a water fittings inspection and provided advice to the consumer. The root cause was hydrocarbon contamination of the supply to the property. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
26 Nov 2017 For 72 hours (SST)	Tipton.	31,193	Media interest: Road flooding, and loss of supplies, discoloured water due to burst main.	South Staffordshire Water Plc Action: • Flushed mains. • Repaired main. DWI Comments and Findings: • Inadequate risk assessment. Recommendation made to review the risk assessment for the supply zone. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
28 Nov 2017 For 24 hours (SRN)	Brighton.	65,836	Treatment failure: loss of disinfection at Falmer works for 2 to 4 minutes due to Unknown as yet	Southern Water Services Ltd Action: • Review of procedures DWI Comments and Findings: • Inadequate risk assessment. • Lack of maintenance of equipment. Risk classification: Significant
29 Nov 2017 For 4 days (NNE)	Washington.	83,305	Brown discolouration: Brown due to burst main.	Northumbrian Water Ltd Action: • Flushed mains. • Repaired main. • Rezoned area (brought in water from different source). • Sampled affected area. The company's actions caused this event. DWI Comments and Findings: • Inadequate training / competence of staff. Staff to be retrained on the consequences of differential hydrostatic head between DMAs and its potential impact on mains velocities when altering valve status. Risk classification: Significant
30 Nov 2017 For 72 hours (SRN)	Sussex.	1	Sampling issue due to sampler not following correct procedures	Southern Water Services Ltd Action: Retrained staff. The company has retrained the member of staff concerned. DWI Comments and Findings: No further action to be taken, action being taken to comply with final enforcement order should help to prevent a reoccurrence. Risk classification: Significant
01 Dec 2017 For 72 hours (SRN)	Company-wide.	1	Incorrect maintenance of ultra violet treatment equipment due to procedural failures.	Southern Water Services Ltd Action: Replaced faulty equipment. Retrained staff. Review of procedures. The company replaced all of the out of date UV sensors, updated procedures and retrained staff. DWI Comments and Findings: Inadequate procedures. The Inspectorate has taken enforcement action and issued a regulation 28 notice which includes a review of maintenance tasks at all treatment works. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
04 Dec 2017 For 4 days (CAM)	Cambridge.	10	E.coli detection in pre work survey sample for planned work.	Cambridge Water Company Plc Action: Issued a boil water notice. Provided bottled water on request. Flushed mains. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
04 Dec 2017 For 48 hours (SST)	Barr Beacon.	44,335	Media interest: burst main.	South Staffordshire Water Plc Action: • Repaired main. DWI Comments and Findings: • The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
05 Dec 2017 For 4 days (SWT)	Lifton and Lewdown, Devon.	1,250	Brown discolouration due to emergency work.	South West Water Ltd Action: • Flushed mains. • Review of procedures. • Rezoned area (brought in water from different source). • Sampled affected area. The company's own actions caused the event. DWI Comments and Findings: • Inadequate risk assessment. • Inadequate training / competence of staff. Risk classification: Significant
06 Dec 2017 For 72 hours (SVT)	Three properties in Market Drayton, Shropshire.	8	Elevated lead due to lead pipes.	Severn Trent Water Ltd Action: Issued a do not drink notice. Provided bottled water on request. Sampled affected area. Consumer advice issued (The property was under renovation). DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
07 Dec 2017 For 296 days (WSX)	Whole company.	3	Sampling irregularities.	Wessex Water Services Ltd Action: Retrained staff. Review of procedures. Company undertook an extensive investigation following allegations that samplers were failing to follow correct procedures. A number of lessons learned have been identified and actions have been implemented. DWI Comments and Findings: The Inspectorate will monitor progress with actions implemented through routine engagement with the company. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
08 Dec 2017 For 72 hours (SVT)	Single property in Warwick.	3	Do not drink notice issued following detection of high levels of lead. The consumer had complained about a metallic taste.	Severn Trent Water Ltd Action: Issued a do not drink notice. Sampled affected area. Carried out a plumbing inspection The company's investigation did not conclusively identify a cause of the metallic taste. Lead solder (which is illegal) was discovered throughout the plumbing system of the property. The Local Authority is conducting a formal investigation into the contractor who worked on the plumbing system at these premises. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
12 Dec 2017 For 5 days (UUT)	Preston.	153	Petrol taste/odour due to consumer's distribution system.	United Utilities Water Plc Action: Issued a do not drink notice. Provided bottled water on request. The company carried out a plumbing inspection of the property. No contraventions were found, but an upgrade to the heating system was being carried out which caused the taste and odour and discolouration. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
12 Dec 2017 For 72 hours (SEW)	Kent.	40,957	Treatment failure: Manganese leaching from a GAC contactor at Burham works - a bulk import from SRN	South East Water Ltd Action: Sampled affected area. DWI Comments and Findings: No further action to be taken. Related to event below. Risk classification: Significant
12 Dec 2017 For 73 hours (SRN)	Kent.	384,723	Treatment failure: leaching of manganese from GAC contactor at Burham works due to inappropriate recommissioning procedures	Southern Water Ltd Action: • Sampled affected area. • Review of procedures. DWI Comments and Findings: Investigation ongoing. An audit has been carried out. Risk classification: Significant
15 Dec 2017 For 10 days (SVT)	Derby.	57,000	E.coli detection in High service reservoir.	Severn Trent Water Ltd Action: DWI Comments and Findings: Investigation ongoing. Risk classification: Serious

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
15 Dec 2017 For 73hrs (ESK)	Malden, Southend and surrounding areas, Essex.	338,456	Cryptosporidium detected in water supplied from Langford works	Essex & Suffolk Water Action: Shut down treatment works. Sampled affected area. Reviewed procedures. DWI Comments and Findings: Inadequate procedures Enforcement under consideration. Risk classification: Serious
15 Dec 2017 For 5 days (SVT)	Tewkesbury.	24,073	Loss of supplies / poor pressure due to burst main.	Severn Trent Water Ltd Action: Provided an alternative supply by tanker / bowser. Provided bottled water on request. Repaired main. Rezoned area (brought in water from different source). Sampled affected area. Shut down treatment works. The company repaired the main in difficult ground situations and supplied alternative supplies. The sampling campaign indicated that there was no contamination associated with the event. DWI Comments and Findings: Inadequate communication caused delay in response. Inadequate risk assessment. Supplied unwholesome water in breach of regulations. The Company GIS system was inaccurate which contributed to a delay in restoring supplies, and a risk of a much larger population being affected. There was inadequate communication of risks to the Inspectorate. Recommendations made to review the risk assessment for the supply system and implements steps to enable Sarn Hill service reservoir to be removed from supply for inspection and maintenance. Risk classification: Serious
15 Dec 2017 For 46 weeks (SVT)	Derby.	57,000	Regulatory sample shortfall at High service reservoir due to human error.	Severn Trent Water Ltd Action: *The service reservoir was removed from supply because of an identified risk of ingress, and regulatory sampling will recommence when it has been returned to supply. DWI Comments and Findings: *Inadequate risk assessment. *Supplied unwholesome water in breach of regulations. The company failed to comply with the requirements of regulation 14, to sample the reservoir each week it is in sue. Samples were missed for 46 weeks. Recommendations have been made to review and strengthen internal communications and management of regulatory sampling. Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
17 Dec 2017 For 5 days (SEW)	Barcombe zone.	76,363	Blue, green and yellow water due to elevated manganese.	South East Water Plc Action: Sampled affected area. Review of procedures.
				DWI Comments and Findings Investigation ongoing.
				Risk classification: Serious
17 Dec 2017 For 48 hours (DVW)	Wrexham.	28,000	Brown discolouration due to planned work.	Dee Valley Water Plc Action: Repaired faulty equipment. Review of procedures.
				Sampled affected area.
				The company has identified the root cause of this event and has amended procedures to prevent a recurrence. The event was foreseeable and avoidable
				DWI Comments and Findings: Inadequate contingency planning.
				Risk classification: Significant
22 Dec 2017	East London.	728,670	Cryptosporidium detected in	Thames Water Utilities Ltd Action:
For 6 days (TMS)			water supplied from Coppermills works	Sampled affected area. Retrained staff.
				Repaired faulty equipment. Reviewed procedures.
				DWI Comments and Findings:
				Investigation ongoing.
_				Risk classification: Serious
22 Dec 2017	Single property in Leicester.	5	Blue water due to back siphonage.	Severn Trent Water Ltd Action: • Issued a do not drink notice.
For 72 hours (SVT)			- Copromage:	Provided bottled water on request. Sampled affected area.
				A plumbing inspection identified an unapproved fitting on a lavatory cistern which was causing backsiphonage. Written advices was given but the company did not exercise its powers under the Act to prevent contamination.
				DWI Comments and Findings: • The Inspectorate has therefore recommended that the company exercises its powers under section 75 of the WIA to ensure that the plumbing defect is corrected.
				Risk classification: Significant
29 Dec 2017	Kent.	384,723	Detection of pesticides at levels above the PCV at	Southern Water Ltd Action: • Sampled affected area.
For 30 days (SRN)			Burham works, due to raw	Repaired faulty equipment.
			water deterioration.	DWI Comments and Findings:
				Investigation ongoing. An audit has been carried out.
				Risk classification: Significant

Date and Duration	Area	Estimate of Population Affected	Nature and Cause of the Incident	Main Actions and Findings from the Inspectorate Investigation
29 Dec 2017 For 0.5 hours (NNE)	Consett, County Durham.	184,000	Loss of coagulation due to incorrect dose set point in control system.	Northumbrian Water Ltd Action: Increased chlorine residuals at treatment works. Sampled affected area. The company have altered the minimum set point is the controller to prevent reoccurrence. DWI Comments and Findings: The company's response to this event was satisfactory and no further action to be taken. Risk classification: Significant
30 Dec 2017 For 12 hours (NNE)	Hexham, Northumberland.	30,000	Treatment failure at Gunnerton works: Loss of telemetry signals caused interruption to polyelectrolyte dosing and pH correction.	Northumbrian Water Ltd Action: Increased chlorine residuals at treatment works. Repaired faulty equipment. Sampled affected area. Final disinfection and treated water quality was unaffected DWI Comments and Findings: Recommendation made to take site recordings to ensure compliance with regulation 26 (2)(b) in the event of loss of continuous online monitoring - particularly in the absence of automated shut-downs and chart recorders. Risk classification: Significant
31 Dec 2017 For 4 days (TMS)	London.	1,353,454	Cryptosporidium detected in water supplied from Ashford Common works	Thames Water Utilities Ltd Action: • Sampled affected area. • Retrained staff. • Reviewed procedures. DWI Comments and Findings: Investigation ongoing. Risk classification: Significant