April 2019

Annex A - Guidance and Specification – Regulation 28 Reports

This section details improvements that are being made to the submission process of Regulation 28 (Drinking Water Safety Plan) information.

1. Items in green will become requirements from October 2019 and should be introduced by the October 2019 submission, or when a company wishes to apply for a monitoring variation (MV) under regulation 9(4) of the Water Supply (Water Quality) Regulations 2016 (as amended) and the Water Supply (Water Quality) Regulations 2018 (Wales), whichever comes first.

2. Items in yellow will become requirements from October 2019 and should be introduced by the October 2019 submission.

3. Items in blue are requirements or changes to take effect from the October submission in 2018.

4. Items in grey are facilities or changes that will be available or will take effect from the October 2019 submission

5. Changes include:

   a) Provision of unique HazardID reference numbers in column AA (HazardID) of Risk Assessment reports, which was previously optional, will become mandatory. Universal use of unique references that identify a single specific row of WSP risk information data will facilitate better version control of the data, no matter how many times a row of data is updated and resubmitted, while also enabling companies and the Inspectorate, to identify a particular row of data in correspondence and for monitoring variation (MV) applications.

   b) The introduction of two new DWI categories.

      Category I is to be applied to future risks that have been identified, but which do not require mitigation at present.

      Category X can be applied to indicate that a line of previously submitted risk data (a Hazard ID) is no longer relevant.

   c) The introduction of a new parameter suite code, PSC999, to be applied in column T (ParameterSuiteCode) of Risk Assessment reports in instances when a parameter is not monitored at that asset point. Previous guidance suggested adding information to column W (Comments), but the introduction of PSC999 removes the need for that, and information should no longer be entered in the Comments column when PSC999 has been applied. This will make the comments box available for the new conditional requirements associated with the DWI category.

   d) Hazards that are associated with wholesomeness (parameters listed in tables A and B of Schedule 1) must feature in the consumer or distribution stage regulation 28 report, and at all upstream stages to the point they are potentially introduced to the supply system. This

includes each pesticide that is sampled for compliance purposes, with the sample results submitted to the Inspectorate within compliance data returns. These pesticides should feature at each stage from the point of introduction, and should not be part of 'total pesticides – B010' or 'Pesticides - H0220'. This applies to water supply licencees, with the bulk supply company responsible for complying with regulations 27, 28 and this specification for assets upstream of the water supply licencee's zones.

e) Micro-organisms, parasites or other substances sampled to comply with regulation 4(2)(a) and (b) of the Regulations must feature in the consumer or distribution stage regulation 28 report, and at all upstream stages to the point they are potentially introduced to the supply system.

f) Hazards that are associated with compliance (Schedule 2 of the Regulations), must feature in the regulation 28 report for the stage they are sampled for compliance purposes (consumer or supply point) and at each stage from the point they are potentially introduced to the supply system.

g) Hazards described in d), e) and f) must not be reported as part of the hazard groups in table A1 below in regulation 28 reports, unless they are being reported as part of a group, as well as individually.

Hazard groups may be used for companies' own purposes and within regulation 28 reports for all other scenarios that are not defined in d), e) and f) above, and where the risk is determined by a group analysis (i.e. where the analytical method used, detects more than one compound – GCMS for organics and PCR for viruses)

h) Where companies wish to submit a regulation 28 report to document risks specific to mains or pipework that are not already part of an exisiting report, or would benefit from their own report, they should submit two new annual information tables. Table F Mains Detail Table, will contain the asset reference, the asset name, and a comments field to accommodate relevant information if the company wishes to provide it. Table G MainsLink Table will detail the link between the assets contained in Table F and the nearest adjoining downstream and upstream company assets for which a report has been submitted to DWI. The specification of the new tables appears on pages 9 and 10 of this document. The mains and pipework asset reference number should also appear in the Asset table, which details the link between assets and supply systems. **Please note: Submission of regulations 28 reports for individual mains and pipework assets is entirely optional and non-mandatory**. The option is being introduced following requests from the industry, and **it is entirely at the discretion of companies if they wish to use this option**.

i) The field size for columns n, w and y has been increased to 2000 characters.

Table A1

H001 Chemical	H017 Lubricants	H033 Microbiological	H049 Halogentated Acetonitriles
H002 Industrial chemical	H018 Pharmaceuticals	H034 Parasites	H050 Haloforms
H003 Fuels	H019 Antibiotics	H035 Bacteria	H051 Haloform precursors

H004 Diesel Range Organics	H020 Anti inflammatories	H036 Viruses	H052 Chlorophenols
H005 Fuel oil	H021 Hormones	H037 Enteroviruses	H053 Halofurans
H006 Solvents	H022 Pesticides	H038 Radiological	H054 Bromohydrins
H007 Chlorinated solvents	H023 Insecticides	H039 Aesthetics	H055 Nutrients
H008 Surfactants	H024 Herbicides	H040 Particulates	H056 Aldehydes
H009 Detergents	H025 Fungicides	H041 Air	H057 Discolouration
H010 Waxes	H026 Endocrine disruptors	H042 Biofilm	H058 Bromomethanes
H011 Dyes	H027 Biological	H043 Disinfection by products	H059 Dichloramines
H012 Wood preservatives	H028 Macrobiological	H044 Physico-chemical	H060 Trichloramines
H013 Paints	H029 Vertebrates	H045 Organic	H061 Taste and Odour
H014 Fire/flame retardants	H030 Invertebrates	H046 Inorganic	H062 Contamination
H015 Metals	H031 Animalcules	H047 Chlorine	H063 No Supply
H016 Heavy metals	H032 Animals	H048 Chloramines	H064 Hydrocarbons

Submission Schedule

Annual InformationTable B (Assets) should be submitted by 28 February of the year to which it applies.

Annual InformationTables A (Catchment) and E (Catchment Supply) should be submitted by 28 February of the year to which they apply if risks are being reported for catchments.

Updates to Table C (Parameter Suite Code) can be submitted whenever changes are made to previously submitted information.

Annual Information Tables F and G (Mains Details and Mains Link) would usually be submitted by 28 February of the year to which they apply, only if risks are being reported for mains/pipework assets. The annual submission in October 2019 should include these tables if mains/pipework asset risk assessments are being reported for the first time.

The annual submission of all risk records should be made by 21 October.

Submission of updated risk records should be made by the twenty-first day of the month.

1.0 Risk Assessment Template Specification

The filename should consist of the Company's designated 3 letter Company Code followed by the 'Risk' and the month and year of submission (see below) For example for an asset in Anglian Water:

Filename: ANG-Risk-[ID or AssetRef]-MM-YY.[csv][xls]
e.g: ANG-Risk-T001-01-15.csv

Col	Field name	Field description	Status	Content	Field size	Field example (For Illustration Only)
a.	Date	Date of the risk assessment or review (DD-MMM-YYYY)	Mandatory	Date	11	31-JAN-2014
b.	Company	DWI 3 letter acronym for company	Mandatory	Text	3	ANG
c.	AssetRef	i) Asset reference as defined in 'Details' tables submitted to the Inspectorate annually, type prefix - **Z** for supply zone **R** for service reservoir/water tower **T** for water treatment works **S** for supply point **A** for abstraction point - and identifier (as in raw or treated 'Details' tables) Where Asset is defined in **bulk supply table** of 'Details' tables use company determined code ii) Where Asset is defined as a catchment, a code is required in the format - **C** for catchment area and identifier - Company should also submit catchment code and details in **Table A** (see below) iii) Where the asset is defined as mains or pipework, the reference number should begin with the prefix **M,** as it appears in the MainsDetail Table.	Mandatory	Text	10	Z013 C123
d.	AssetName	Name of Site (as in raw or treated 'Details' tables, or, for mains or pipework assets, as it appears in the MainsDetail Table)	Optional	Text	150	Holby South
e.	SupplySystemRef	Supply system reference number – Company identifier (numerals) PREFIXED by 'Y' (If an asset is included in more than one supply system and the hazard and its control are the same then include the reference for each supply system separated by a semicolon (;)). See **Table B** below for specification	Optional	Alphanumeric	400	Y1234 Or Y1234;Y1235

Col	Field name	Field description	Status	Content	Field size	Field example (For Illustration Only)
f.	SupplySystemName	Company Name of supply system (If an asset is included in more than one supply system and the hazard and its control are the same then include the name for each supply system separated by a semicolon (;))	Optional	Free Text	2000	Northfield Supply System Northfield Supply System;Southfield Supply System
g.	Stage	Select one from controlled list of - Catchment, Abstraction, Treatment, Treatment, Bulk Supply, Distribution, Storage, Consumer. One Excel file can contain hazards for more than one type of 'stage'	Mandatory	Text	20	Catchment
h.	HazardRef	Select one from controlled list (For multiple hazards in an asset submit one record for each hazard)	Mandatory	Alphanumeric	5	C002 [as on published list]
i.	HazardousEvent	If table is submitted in comma separated variable (.csv) format Insert in double quotation marks. This will ensure correct loading of fields in DWI's database	Optional	Free Text	300	Valve failure
j.	PreLikelihood	Likelihood score [0 – 999999]	Optional	Integer	6	10
k.	PreConsequence	Consequence score [0 – 999999]	Optional	Integer	9	2
l.	Risk	Risk Score [0 – 999999999]	Mandatory	Integer	9	20
m.	ControlMeasureName	Name of Controls	Mandatory unless Control Measure Details (n.) or Control Group (o.) supplied	Free Text	600	Catchment management
n.	ControlMeasureDetails	[Description example – Free Text] If table is submitted in comma separated variable (.csv) format Insert in double quotation marks. This will ensure correct loading of fields in DWI's database	Mandatory unless Control Measure Name (m.) or Control Group (o.) supplied	Free Text	2000	Works shutdown until Raw water quality improves
o.	ControlMeasureGroup	[Description example – Free Text] If table is submitted in comma separated variable (.csv) format Insert in double quotation marks. This will ensure correct loading of fields in DWI's database	Mandatory unless Control Measure Name (m.) or Control Measure Details (n.)supplied	Free Text	80	Treatment
p.	PostLikelihood	Likelihood score [0 – 999999]	Optional	Integer	6	8
q.	PostConsequence	Consequence score [0 – 999999]	Optional	Integer	9	2
r.	ResidualRisk	Company Risk Score [0 – 999999999]	Mandatory	Integer	9	16

Col	Field name	Field description	Status	Content	Field size	Field example (For Illustration Only)
s.	ParametersMonitored	List parameters monitored add DWI Parameter names (IL 6/2003, Annex C - add codes separated by semicolons (;))	Mandatory unless Parameter Monitoring Suite Code (s.) supplied	Alphanumeric	1000	A006;P002;B006A
t.	ParameterSuiteCode	Where a routine set of parameters are regularly monitored, the Company may designate a Parameter Suite Code. The format for this code should be PSC001, PSC002, etc (see Field Example). The relationship between the Parameter Suite Code and the parameters contained within it should be submitted on an annual basis. Add codes separated by semicolons (;). See **Table C** below for specification.	Mandatory unless individual Parameters Monitored (r.) supplied	Alphanumeric	120	PSC001;PSC021;PSC321
u.	MonitoringRecords	[Description example – Free Text] If table is submitted in comma separated variable (.csv) format Insert in double quotation marks. This will ensure correct loading of fields in DWI's database	Optional	Free Text	800	Operational monitoring programme
v.	OngoingValidationProcedures	[Description example – Free Text] If table is submitted in comma separated variable (.csv) format Insert in double quotation marks. This will ensure correct loading of fields in DWI's database	Optional	Free Text	800	Enhanced filter sampling and reporting programme
w.	Comments	Additional Information For Category D – detail information which indicates mitigation is or will become insufficient AND/OR the information which indicates there has been or is likely to be a failure of a standard/s. Do not detail any additional control measures here. For Category E - Provide details of the investigation being undertaken For Category I include details of when the risk will become critical.	Optional only if not Category E, D, or I	Free Text	2000	Risk is seasonal
x.	DWICategory	Select one category from controlled list (see **Table D** below)	Mandatory	Text	1	G

Col	Field name	Field description	Status	Content	Field size	Field example (For Illustration Only)
y.	AdditionalControlMeasureDetails	For Category B Provide details of the additional or enhanced control measures delivered For Category C Provide details of the additional or enhanced control measures being delivered For Category D Detail any additional control measures or enhancements identified for delivery	Optional only if not Category B C or D, or if a legal instrument reference has been provided in column z.	Free Text	2000	Installation of UV planned for 2016
z.	LegalInstrumentReference	Reference allocated by DWI Improvement Programme database	Optional	Text	100	ANG1234;ANG5678;ANG9101
aa.	HazardID	Unique identifier for this hazard entry within this RAR template Unique to the row of a hazard reference and a site reference combination, for the whole of its life. It can be used only once. If a second line for the same hazard at the same site is required, a new hazard ID must be used. Concept is similar to a person's national insurance number.	Mandatory	Text	50	HID11111111

Catchments Table Template

Table A – Details of Assets defined as a catchment. Filename must follow format XXX-Catchment-MM-YY.xls/csv where XXX is the three letter Company code, MM is the month number and YY is the year e.g. 01-15 for January 2015

Col	Field name	Field description	Status	Content	Field size	Field example (For Illustration Only)
a.	Year	Year of return	Mandatory	Integer	4	2014
b.	AssetRef	Where Asset is defined as a catchment and prefixed with a 'C' (as in column c. of Risk Assessment Report specification)	Mandatory	Text	10	C123
c.	CatchmentName	Company name of Catchment	Mandatory	Free Text	80	Holby South Catchment Area
d.	CatchmentDescription	Description of Catchment area If table is submitted in comma separated variable (.csv) format Insert in double quotation marks. This will ensure correct loading of fields in DWI's database	Optional	Free Text	800	

Assets Table Template

Table B – Details of the links between Asset and Supply System. Filename must follow format XXX-Asset-MM-YY.xls/csv where XXX is the three letter Company code, MM is the month number and YY is the year e.g. 01-15 for January 2015.

Col	Field name	Field description	Status	Content	Field size	Field example (For Illustration Only)
a.	Year	Year of Return	Mandatory	Integer	4	2014
b.	AssetRef	As in column c. of Risk Assessment Report specification	Mandatory	Text	10	Z013
c.	SupplySystemRef	As in column e. of Risk Assessment Report specification	Mandatory	Text	12	Y1234
d.	SupplySystemName	Company Name of supply system	Mandatory	Text	80	Holby South
e.	Comment	[Description example – Free Text] If table is submitted in comma separated variable (.csv) format Insert in double quotation marks. This will ensure correct loading of fields in DWI's database	Optional	Free Text	800	

The relationship between assets and supply systems should be reported on a one-to-one basis i.e. if an asset is linked to two supply systems, there should be two rows in Table B to illustrate those links:

Year	AssetRef	SupplySystemRef	SupplySystemName	Comment
2017	R001	YONE	SupSys1	
2017	R001	YTWO	Supsys2	

Parameter Suite Code Table Template

Table C – Filename must follow the format XXX-PSC-MM-YY.xls/csv where XXX is the three letter Company code, MM is the month number and YY is the year e.g. 01-15 for January 2015

Col	Field name	Field description	Status	Content	Field size	Field example (For Illustration Only)
a.	Date	Valid from date (DD-MMM-YYYY)	Mandatory	Date	11	31-JAN-2014
b.	ParameterSuiteCode	Parameter Suite Code as in column t. of Risk Assessment Report Specification	Mandatory	Alphanumeric	30	PSC1
c.	ParameterCode	Parameter code (IL 6/2003, Annex C) included in Parameter Suite in column b. above	Mandatory	Free Text	6	A006

Table D – DWI Categories and descriptions, select one category letter and place in column x of the Risk Assessment Report template.

Category	Description
A	Target risk mitigation achieved, verified and maintained.
B	Additional or enhanced control measures which will reduce risk are being validated
C	Additional or enhanced control measures which will reduce risk are being delivered
D	Additional or enhanced control measures are required to materially reduce risk
E	Risk under investigation
F	Partial mitigation
G	No mitigation in place : control point downstream
H	No mitigation in place and none required
I	Future risk not requiring mitigation at present
X	Line is no longer relevant

Catchment Supply Table Template

Table E – specification for Catchment Supply table. Filename must follow format XXX-CatchSup-MM-YY.xls/csv where XXX is the three letter Company code, MM is the month number and YY is the year e.g. 01-15 for January 2015 Table should display a record for every Abstraction Point within a Catchment

Col	Field name	Field description	Status	Content	Field size	Field example (For Illustration Only)
a.	Year	Year of Return	Mandatory	Integer	4	2014
b.	AssetRef	Where Asset is defined as a catchment and prefixed with a C (as in column c. of Risk Assessment Report specification)	Mandatory	Text	10	C123
c.	AbstractionRef	Where Asset is defined as an abstraction point and prefixed with a A (as in column c. of Risk Assessment Report specification)	Mandatory	Text	10	A1234
d.	Comment	[Description example – Free Text] If table is submitted in comma separated variable (.csv) format Insert in double quotation marks. This will ensure correct loading of fields in DWI's database	Optional	Free Text	800	

Mains Detail Table Template

Table F – Specification for the Mains Details table. Filename must follow format XXX-MainsDetail-MM-YY.xls/csv where XXX is the three letter Company code, MM is the month number and YY is the year e.g. 01-18 for January 2018. The table should contain the following information:

Col	Field name	Field description	Status	Content	Field size	Field example (For Illustration Only)
a.	Year	Year of return	Mandatory	Integer	4	2019
b.	AssetRef	Where Asset is defined as mains/pipework and prefixed with the letter **M** (as in column c. of Risk Assessment Report specification)	Mandatory	Text	10	M1234DS1
c.	AssetName	Company name for the asset	Mandatory	Text	100	Southlands Trunk Main (New) 01
d.	Comment	Free text containing information relevant to the company asset. If the table is submitted in comma separated variable (.csv) format, please use double quotation marks (“) at the start and end of the text. This will ensure correct loading of fields in DWI’s database (i.e. it will not read commas within the text as column breaks).	Optional	Free Text	800	Free text

MainsLink Table Template

Table G – The MainsLink table documents the position of the Mains Asset in the supply chain by detailing whether the two nearest adjoining company assets for which a risk record has been submitted to DWI are upstream or downstream of it.

Specification for the MainsLink table: Filename must follow format XXX-MainsLink-MM-YY.xls/csv where XXX is the three letter Company code, MM is the month number and YY is the year e.g. 01-18 for January 2018. The table should contain the following information:

Col	Field name	Field description	Status	Content	Field size	Field example (For Illustration Only)
a.	Year	Year of return	Mandatory	Integer	4	2019
b.	MainsAssetRef	Prefixed with the letter M (as in column c. of Risk Assessment Report specification).	Mandatory	Text	10	M1234DS1
c.	LinkedAssetRef	The reference number of the nearest adjoining upstream and downstream company assets for which a risk record has been submitted, (as in column c. of Risk Assessment Report specification)	Mandatory	Text	10	T10456
d.	LinkedAssetPosition	The relative position of the linked asset in relation to the Mains asset in b. above in the supply chain. The position will be indicated with a letter **U** for upstream or letter **D** for downstream. **Example:** If Mains asset M001 lies between service reservoir R005 and zone Z068, the LinkedAssetPosition for R005 would be **U**, as it is upstream of M001 in the supply chain; the LinkedAssetPosition for Z068 would be **D**, because it is downstream of M001 in the supply chain.	Mandatory	Text	1	**U** or **D**
e.	Comment	Free text containing information that the company feels is relevant/significant. This information is optional. If the table is submitted in comma separated variable (.csv) format, please use double quotation marks (“) at the start and end of the text. This will ensure correct loading of fields in DWI’s database (i.e. it will not read commas within the text as column breaks).	Optional	Free Text	800	Free text

2.0 Guidance on populating the Risk Assessment Template

Col	Instructions and examples
a	**Date** (i) The date the risk assessment was completed or reviewed (even if no other change is made to the record). This date should be relevant to the line of the spreadsheet it is entered against.
b	**Company** (i) Current company (Ofwat) three letter codes.
c	**AssetRef** (i) Only codes with the following prefixes C, A, T, S, R, Z, M (ii) The asset reference used must match companies' annual 'Details' tables submission. See Table A for instructions on Catchment codes.
d	**AssetName** (i) Include the names of catchments, raw water monitoring points, treatment works, supply points, service reservoirs~~,~~ zones, bulk supplies and mains (pipes). (ii) The names used for assets must be identical to those supplied in companies' annual 'Details' tables submission, or in the case of Mains assets, in the MainsDetails table (Table F on page 9 of this document). (iii) A company in receipt of a bulk supply may provide an Excel file covering the supply (SiteRef from table 5 of Annex B to IL 09/2012) and an Excel file covering the downstream zone (using the zone reference) or a single spreadsheet covering the zone but utilising both the 'bulk supply' and 'distribution' stages accordingly. (iv) In table 5 of Annex B to IL 09/2012, the DonorDWIRef must be the donor company's nearest upstream asset. Annex B to IL 09/2012 will be updated to reflect this. (v) Optional to fill in; the column must still appear.

Col	Instructions and examples
e	**SupplySystemRef** (i) Determined by the company but given a set prefix Y. (ii) Optional to fill in; the column must still appear.
f	**SupplySystemName** (i) Determined by the company. (ii) Optional to fill in; the column must still appear.
g	**Stage** (i) A stage must be selected from the list in the specification for each line of the spreadsheet. (ii) It is not a requirement to use all stages. For example, the stage 'distribution' might be used for all types of storage within distribution. In this case, the company would not use the stage 'storage'. (iii) It is expected that at a minimum; catchment, treatment, distribution or consumer will be used. (iv) The 'bulk supply' stage must be used for a bulk supply asset (SiteRef from table 5 of Annex B to IL 09/2012). (v) One Excel file can contain hazards for more than one type of 'stage'.

Col	Instructions and examples
h	**HazardRef** (i) A list controlled by the Inspectorate - Annex C of IL 02/2014. (ii) Any item from this list can be used as a hazard. (iii) Only items from this list can be used within this cell. (iv) One hazard per line. (v) Additions to this list can be made using an application process administered by the Inspectorate. Any enquiries regarding current entries in this list, or requests for additional entries, should be sent to the Inspectorate's Data Unit 'Monthly Data' Mailbox dwimonthlydata@defra.gsi.gov.uk (vi) Definition of "Hazard": Physical, biological, chemical or radiological agents that can cause harm to public health (WHO/IWA 2009) (vii) Hazards that are associated with wholesomeness (parameters listed in tables A and B of Schedule 1) must feature in the consumer stage regulation 28, and at all upstream stages to the point they are potentially introduced to the supply system (viii) Micro-organisms, parasites or other substances sampled to comply with regulation 4(2)(a) and (b) of the Regulations must feature in the regulation 28 report for the stage they are sampled, and at all upstream stages to the point they are potentially introduced to the supply system. (ix) Hazards that are associated with compliance (Schedule 2 of the Regulations), must feature in the regulation 28 report for the stage they are sampled for compliance purposes (consumer or supply point) and at each stage from the point they are potentially introduced to the supply system. (x) Hazards described in d), e) and f) must not be reported as part of the hazard groups in table A1 above in regulation 28 reports, unless they are being reported as part of a group, as well as individually. Hazard groups may be used for companies' own purposes and within regulation 28 reports for all other scenarios that are not defined in d), e) and f) above, and where the risk is determined by a group analysis (i.e. where the analysitical method used, detects more than one compound – GCMS for organics and PCR for viruses). (xi) Companies should provide risk assessment reports for pesticides, when they are monitored for compliance purposes. These pesticides should feature at each stage (Catchment to consumer) and should not be part of 'total pesticides – B010' or 'Pesticides - H0220'. (xii)

Col	Instructions and examples
h	**HazardRef** (xiii) Companies may report all assessed hazards (xiv) Hazards should be carried forward through the supply system from the stage they are introduced, regardless of the level of residual risk.
i	**HazardousEvent** (i) This should be a description of the relevant hazardous event. (ii) A hazardous event is defined by WHO as “An event that introduces hazards to, or fails to remove them from, the water supply”. (iii) If the same hazard appears twice in a file, the hazardous events must be different
j	**PreLikelihood** (i) The likelihood from the previous stage before the impact of control measures within the current stage are taken into account. (ii) Entered if available.
k	**PreConsequence** (i) The consequence related to the hazard. (ii) Entered if available.
l	**Risk** (i) The risk before the impact of control measures within the current stage are taken into account. (ii) If this is not an integer, it should be converted to one. For example if using red, amber, green this could be 1,2,3 – explanation to be entered into the comments field or the company’s methodology. (iii) Definition ”risk” : The likelihood of a hazard causing harm in exposed populations in a specified time frame, including the magnitude of that harm (WHO 2006)

Col	Instructions and examples
m	**ControlMeasureName** (i) Mandatory if column **n** or **o** not populated. (ii) For simple, self-descriptive control measure names. (iii) Multiple names should be listed for a single instance of a hazard.
n	**ControlMeasureDetails** (i) Mandatory if column **m** or **o** not populated. (ii) For prose descriptions of control measures. (iii) For any other details relating to the control measures.
o	**ControlMeasureGroup** (i) Mandatory if column **m** or **n** not populated. (ii) For entering the name of a group of control measures.
m n o	**Control – general comments** (i) More than one column can be populated (ii) Definition “control” :Any action and activity that can be used to prevent or eliminate a water safety hazard or reduce it to an acceptable level (WHO/IWA 2009)
p	**PostLikelihood** (i) The likelihood from the previous stage after the impact of control measures within the current stage are taken into account. (ii) Entered if available.

Col	Instructions and examples
q	**PostConsequence** (i) The consequence related to the hazard. (ii) Entered if available. (iii) It would be unusual for this entry to be different to that of column **k**.
r	**ResidualRisk** (i) The subsequent risk after the impact of control measures within the current stage are taken into account. (ii) If this is not an integer, it should be converted to one. For example if using red, amber, green this could be 1,2,3 – explanation to be entered into the comments field or detailed in the methodology.
s	**ParametersMonitored** (i) For a list of single parameters. *(ii) Moved to t*
t	**ParameterSuiteCode** (i) A code which specifies a suite of parameters provided by the company in a separate table (see specification and associated table). (ii) There is a requirement to populate at least one of columns **s** or **t** describing the monitoring in place for the hazard. It is recognised, for some hazards, that the monitoring is something other than measurement of a parameter or suite of parameters (appended to IL 06/2003 and 09/2012) for example the hazard of 'no supply' may be monitored by contacts to the company. In such instances, a code **PSC000** has been created which should be entered in Column 't' for hazards where there is no monitoring of any parameters or parameter suites at any of the upstream or downstream assets. (iii) For instances when the parameter is not monitored at that asset point, use parameter suite code PSC999.
s t	**Monitoring – general comments** (i) Both columns can be used to describe a full set of parameters monitored (i.e. a parameter suite code can be used in conjunction with a list of individual parameters)

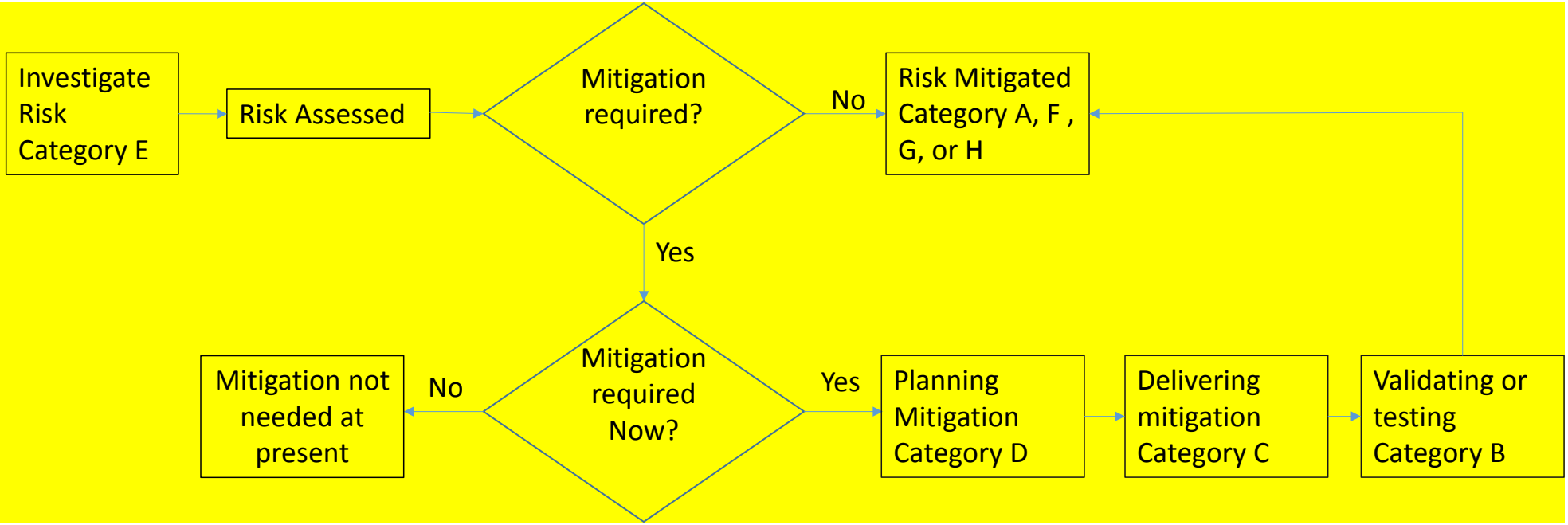
Col	Instructions and examples
u	**MonitoringRecords** (i) A description of monitoring records kept. (ii) To include parameters and other monitoring if not detailed in columns **s** or **t**.
v	**OngoingValidationProcedures** (i) A description of how the control measure(s) are continuously validated. (ii) Processes by which the reliability and relevance of a control measure is continuously evaluated. (iii) Ongoing validation is different to commissioning. (iv) Reference to short term and long term programmes may be appropriate. (v) WHO definition: ”Obtaining evidence that the elements of the Water Safety Plan can effectively meet the water quality targets. Process by which the reliability and relevance of a particular approach, method, process, or assessment is established for a defined purpose. Testing of a system and its individual components to prove that it is capable of meeting the specified targets (i.e. microbial reduction targets). Should take place when a new system is developed or new processes are added”. Examples Monitoring of maintenance schedules Assessment against performance measures
w	**Comments** (i) For any other commentary. (ii) Mandatory for Categories E, D and I.
x	**DWICategory** (i) Appropriate letter to be selected by companies from a list defined by the Inspectorate (see table below).

Col	Instructions and examples

Category	Description	Guidance
A	Target risk mitigation achieved, verified and maintained	1. The identified risk mitigation has been verified and is subject to continuous validation 2. The company do not require any additional control measures to reduce the residual risk at the time of the assessment 3. The company conclude that the mitigation measures and residual risk can be maintained until the next review is completed
B	Additional or enhanced control measures which will reduce risk are being validated	1. New or enhanced control measures have been delivered, but are in a testing/commissioning phase 2. Validation data is being gathered 3. When related to a Legal Instrument, the category should remain B until revoked
C	Additional or enhanced control measures which will reduce risk are being delivered	1. New or enhanced control measures that have been designed to reduce the residual risk are being delivered 2. Physical works have commenced
D	Additional or enhanced control measures are required to materially reduce risk	1. The company has information which indicates the control measures are insufficient or will become insufficient within a time frame (includes breaching an internal trigger level) 2. Additional or enhanced control measures are being determined, designed or awaiting funding
E	Risk under investigation	1. Risk is being investigated to determine if additional or enhanced control measures may be required
F	Partial mitigation	1. Partial mitigation occurs at this stage and further mitigation occurs at assets downstream or 2. Mitigation is partial as not fully in the company's control
G	No mitigation in place : control point downstream	1. There is no mitigation at this asset and there is mitigation at a downstream asset
H	No mitigation in place and none required	1. There is no mitigation at this asset and there is no mitigation at an upstream or downstream asset
I	Future risk not requiring mitigation at present	1. The company has information which indicates that there is likely to be a failure of the standards within the Regulations within a time frame. 2. Immediate mitigation is not required 3. The company has future plans to carry out work to mitigate the risk
X	Line no longer relevant	1. Line no longer relevant, either asset or risk no longer present or line previously submitted in error (please add comment). The line need not be submitted again or annually once it has been closed by a Cat X submission. 2. The line can be reactivated by resubmitting it with a DWI category other than X

(ii) The category selected must be relevant to the stage selected (i.e. if there is a risk introduced within the water treatment works stage which is not controlled until distribution, the category G should be selected).

(iii) Definition "mitigation" : All actions taken to reduce or eliminate long term risk to environment health or social structures from hazards and their effect (WHO

Col	Instructions and examples
	2009) (iv) Simplified flow chart of risk identification and mitigation 
y	**AdditionalControlMeasureDetails** (i) Populated when the implementation of any additional or enhanced control measure/s will change the risk score. (ii) Control measures refers to any type of measure (activity or process). (iii) Satisfies regulation 28(3)(b)(ii) and replaces 'actions plans' submitted previously. (iv) Mandatory for DWI category B, C and D unless a legal instrument reference is provided in column z.

Col	Instructions and examples
z	**LegalInstrumentReference** (i) Mandatory where a DWI legal instruments exists for the hazard(s). (ii) A legal instrument reference may be used more than once (against more than one HazardID) and should be when the legal instrument is associated with more than one hazard or hazardous event. (iii) The list should contain no spaces. Multiple references should be separated with a semi colon e.g. **xxx3951;xxx7288;xxx2204**, where 'xxx' is the three-letter company acronym.

Col	Instructions and examples
aa	HazardID The purpose of the unique identifiers is to be meaningful to both the company that submits the data and DWI by identifying a single specific row of DWSP risk information data within the company's dataset. The ID reference numbers should: • Be the data equivalent of a human national insurance number, unique to a single row of hazard information data within a company's DWSP dataset, and never be applied to more than one row of data within that dataset. The reason for this is to facilitate version control of every individual row of data, no matter how many times that row of data is updated and resubmitted. • Be retained by the same specific, unique row of risk information data in perpetuity, as long as the site reference number or the hazard code (e.g. C002, A023, etc) do not change. • Not be re-used in the event that an existing row of risk information data is given an 'X' category to signify that it is no longer 'live'. • Not appear more than once in a complete drinking water safety plan for a site. • Not be applied to different combinations of site references and hazard codes (e.g. C002, A023, etc) in successive years. • Not be shared between the standard site reference number and the supply point reference number for the same site. • Not be duplicated in cases where there are multiple site references being used to report data from the same main site e.g. multiple sample taps at the same reservoir/WTW, each with its own site reference for reporting purposes. Even if the three sample taps are reporting the same hazard e.g. H033, the possession of three distinct site references qualifies them as three separate, distinct reporting entities, and the rows of data they submit should not share the same hazard ID reference numbers. • Not be retained by a row of data if a generic hazard code, such as H033 (Microbiological) is subsequently refined to be C002 (E coli (faecal coliforms Confirmed)). If the hazard code changes, a new row of risk information data should be submitted that incorporates the new hazard code, with a new unique ID reference number. • Not be inherited by new incarnations of a site or zone if the site reference changes. If the site reference changes, then the site has taken on a new identity for reporting purposes. As such, the DWSP relating to the new site reference should feature new hazard ID reference numbers. Site reference numbers have been found to change after restructuring / refurbishment at an asset like a works or reservoir, or after alterations to zonal boundaries have occurred. • Not be applied retrospectively to old data. Our focus is very much on introducing changes and improvements moving forwards, not on triggering resubmissions of existing data. Currently, our database is able to operate if the same HazardID is used by more than one company

3.0 General Requirements

Terminology

i. The Inspectorate and all water suppliers will use definitions from the WHO lexicon http://apps.who.int/thelexicon/entry.php for Water Safety Planning terms. The Lexicon is no longer published by WHO – definitions included within the specification.

Risk Assessment Report

xiii. Submissions comprise one Excel file per asset reference.

xiv. There should be one Excel file for each bulk supply as defined in the Bulk Supply table within the annual 'Details' tables. Ensure bulk supply assets feature in Table B which defines the supply system.

xv. Each Excel file should only contain one Spreadsheet

xvi. If using a .csv format, avoid using speech marks within text (e.g. to signify inches)

xvii. Each spreadsheet will have 27 columns – A to AA which meet the specification outlined above. The column headings must appear and exactly match the specification

xviii. Where an asset features in more than one supply system, these can be listed in the optional columns **e** (SupplySystemRef) and column **f** (SupplySystemName) as described in Annex B, the specification.

xix. Companies may report all assessed hazards

xx. Hazards should be carried forward through the supply system from the stage they are introduced, regardless of the level of residual risk.

Tables A, B and E

i. Table A must be populated by all companies with catchment risk assessments

ii. Table B must be populated by all companies

iii. Table E must be populated by all companies with catchment risk assessments

iv. The 'return year' for submissions made during 2018 is **2018**

v. These tables will be incorporated into the annual 'Details' tables as appended to IL 06/2003 and 09/2012 to be submitted annually, once only on or before 28 February each year

Table C

i. This table should only be submitted if parameter suite codes other than PSC000 are used. PSC000 should not be included in this table

ii. This table can be submitted at any time. Ensure the review date reflects the date from which the parameter suites code is valid from.

Table F

i. This table should only be submitted if a company wishes to attribute risks to mains and pipework. A nil return is not required where risk records will not be submitted for such assets.

ii. This table can be submitted at any time, to establish assets in the DWI database prior to submission of the first risk record for those assets, and can be resubmitted to incorporate changes/updates as necessary.

Table G

i. This table should be only submitted in conjunction with Table F, in cases where a company wishes to attribute risks to mains and pipework. A nil return is not required where risk records will not be submitted for such assets.

ii. This table can be submitted at any time, to incorporate changes/updates as necessary.

iii. If submitted, the table must contain linking information for all assets that appear in Table F.

Submission of RAR spreadsheets

i. A full consolidated submission will take place once a year on 21 October accurate to the end of the previous July regardless of when the first submission was made.

General good practice

i. Excel files should not contain 'blank lines' which increase the file size unnecessarily

ii. Excel files should not contain hidden formulas or any other functions such as drop downs

iii. Character limits should not be exceeded as the file will not be loaded

iv. The maximum file size the DWI can accept via email is 15MB

v. Do not leave a trailing semicolon in columns **s** or **t**

Monthly Submissions

i. Updates must be provided when a line is reviewed and the residual risk score or DWI category has changed. It is expected that the date in column **a** will have changed to reflect the review date.

ii. Each line will be checked for a HazardID. If one exists, the database will be checked for any existing instances that have been previously been loaded. If the HazardID already exists in the database, the new line will only load if it has a newer date

iii. Where there is no HazardID, lines submitted that have the same **Date, AssetRef, Stage, HazardRef** and **HazardousEvent** entries as previously submitted lines will not be loaded – To be removed when all companies are using HazardID (until October 2019 only)

iv. Submissions made each month should contain only those lines changed as per (i)

General Requirements

i. Each company will continue to be required to submit any update to the risk assessment and management methodology adopted.

ii. Each company will be required to submit their risk review procedure when updated.

iii. Board level Director sign-off will remain a requirement. Each company must determine the appropriate stage for Director sign off for a supply system depending on their particular governance arrangements, particularly in relation to monthly and regulation 28 notice submissions, if no sign off currently exists. In light of the new Risk Assessment and Management Scheme operated with Lloyd's Register, companies are encouraged to review the suitability of the front sheet of IL 7/2004 for Director sign off. Further guidance will be provided as part of the Scheme.

iv. Board level Director sign-off is a requirement for all risk assessment reports submitted in order to comply with the steps in a regulation 28 Notice

v. If a revised regulation 28 report is requested by the DWI (e.g. as part of an event assessment), the submission should be made as soon as reasonably practicable, or by the deadline given, even if there no change to the report (the data should change to reflect the review).

4.0 Submission Process

1 Submissions are to be made electronically to DWI_risk_assessments@defra.gsi.gov.uk

2 Risk Assessment Report plus tables A, B, C, E, F and G should be sent electronically in emails not exceeding 15MB

3 Submissions will be loaded into the DWI database

4 Errors in filenames will result in the file not being loaded. A record of this failure will be kept and will be included in an email summarising all loading failures once per day covering the loads for that day.

5 If the filename is correct, the load routine will continue to check the contents of the files. If there is an error in the header line, the file will not load. If the header line is correct, but there is an error in any of the subsequent lines, the file will not load. However, the load routine will continue to check each subsequent line, keeping a record of all errors. These errors again will be included in an email that will be sent to companies once per day, covering the loads for that day.

6 Risks are considered unique based on either their HazardID or the combination of assessment date, hazard ref, site, stage and hazardous event. If more than one record is provided where these are all the same only the first will load and the remaining ones will be skipped as duplicates.

7 Upon receipt of an error email, the company should endeavour to rectify the errors and resubmit the file as soon as possible.