

# Risk Assessment – Getting Information Out

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DWQR Risk Assessment Training  
2018



# Risk Assessment – Getting Stuff Out

Test Local Authority > Training Site T1

## Training Site

Risk assessment

Risk assessment due date: 30/08/2023 | Status of risk assessment: Closed | Version: 1

Sources | Centralised treatment | Tanks | Distribution and management | Properties

	Easting (X)	Northing (Y)	Source type
Woodhall Burn	368635	673625	Watercourse
Brunt Spring	369852	674250	Spring

Export

- Risk assessment data
- Risks and mitigations
- Simple Drinking Water Safety Plan
- Full Drinking Water Safety Plan

Once RA is closed it can be exported (not before)

# Risk Assessment – Getting Stuff Out

Risk assessment data
Risks and mitigations
Simple Drinking Water Safety Plan
Full Drinking Water Safety Plan

Label	Report date
<b>Asset Name</b>	Woodhall Burn
<b>Risk Question No.</b>	SG4
Risk Question	Is there risk of chemical contamination from manmade activities in catchment (use or storage of chemicals including landfill sites, mining)?
Hazard Type	Chemical
Location	
Answer	Yes
Severity	4
Likelihood	4
Risk Score	16
Comments on risk	Small active quarry upstream
Control Measures (Mitigations)	Relationship in place with users in catchment, Regular testing / monitoring takes place, Comprehensive treatment is in place
Control Measures (Mitigations) - Additional Information	
Validation	Thrid Party Confirmation, Records, Other
Validation - Additional Information	Comprehensive specifications for treatment provided - confirmed adequate for raw water quality
Verification	Sampling and testing data
Verification - Additional Information	
Likelihood with mitigations in place	2
Mitigated Risk Score	8
<b>Asset Name</b>	Woodhall Burn
<b>Risk Question No.</b>	SG5
Risk Question	Is there a risk of chemical contamination from natural sources (local geology)?
Hazard Type	Chemical
Location	
Answer	No
Severity	4
Likelihood	0
Risk Score	0
Comments on risk	
Control Measures (Mitigations)	
Control Measures (Mitigations) - Additional Information	
Validation	
Validation - Additional Information	
Verification	
Verification - Additional Information	
Likelihood with mitigations in place	0
Mitigated Risk Score	0
<b>Asset Name</b>	Woodhall Burn
<b>Risk Question No.</b>	SG6
Risk Question	Is there a risk of the supply running dry or being over-abstracted?
Hazard Type	Management and Resilience

# Risk Assessment – Getting Stuff Out

Risk assessment data

Risks and mitigations

Simple Drinking Water Safety Plan

Full Drinking Water Safety Plan

	Type	Location	Risk Question No.	Risk Question	Severity	Likelihood	Risk Score	Comments on risk	
			SG4	Is there risk of chemical contamination from manmade activities in catchment (use or storage of chemicals including landfill sites, mining)?	4	4	16	Small active quarry	
			SG5	Is there a risk of chemical contamination from natural sources (local geology)?	4	0	0		
	Management and Resilience		SG6	Is there a risk of the supply running dry or being over-abstracted?	4	0	0		
	Management and Resilience		SG7	Is the source at risk from vandalism (deliberate contamination of source and unauthorised access)?	4	0	0		
	Management and Resilience		SG8	Is there a risk that inappropriate materials are used in the construction of the supply?	4	4	16	Non standard materials	
	Management and Resilience		SG9	Is the source difficult to access in order to undertake monitoring & improvements?	4	1	4	access Ok except in winter	
	Management and Resilience		SG10	Are there any planned future activities that may affect the supply?	4	4	16	unlikely, but present	
	Management and Resilience		SG1	Is there a lack of knowledge and understanding about the source of the supply?	5	0	0		
	Microbiological		SG2	Is there a risk of faecal contamination of the source from activities in the catchment?	5	5	25	Grazing upstream	
	Microbiological		SG3	Is there a risk of faecal contamination of the source from storage or distribution of sewage/waste?	5	2	10	very occasional spr	
		Source	SSW1	Is there a noticeable change in the quality of the water due to meteorological conditions (colour, cloudiness/turbidity)?	4	2	8		
		Source	SSW2	Is freshwater aquaculture practised upstream, causing contamination (feed, pesticides etc.)?	4	0	0		
		Source	SSW3	Is the source water used for recreational purposes?	4	0	0		
		Source	SSW4	Is the source water subject to seasonal algal blooms?	3	0	0		
5	Woodhall Burn	Chemical	Source	SSW5	Could activities such as forestry, quarrying or construction create a risk to quality?	3	4	12	
7	Woodhall Burn	Installation and Operation	Source	SSW6	If the source is a spring, could surface water or spillages of contaminated material enter the supply because the headworks isn't fully sealed ?	5	0	0	
3	Woodhall Burn	Chemical	Source	SSW7	Is there a risk of debris or particulate matter entering the supply?	3	4	12	overhanging trees
9	Woodhall Burn	Management and Resilience	Source	SSW8	Is there a risk of the intake becoming clogged?	3	3	9	rare but possible
0	Woodhall Burn	Microbiological	Source	SGW1	Are there any abandoned wells or observation boreholes in the vicinity of the source that could present a risk of aquifer contamination?	4	0	0	
1	Woodhall Burn	Microbiological	Source	SGW2	Could livestock have access to the well head area?	5	0	0	
2	Woodhall Burn	Microbiological	Source	SGW3	Is there a risk of standing water/ponding within 50m of the headworks?	4	0	0	
3	Woodhall Burn	Installation and Operation	Source	SGW4	Is there a risk of ingress due to poor headworks design, construction or condition? E.g. lack of grouting, diversion ditches, concrete aprons,.....	5	0	0	
4	Woodhall Burn	Management and Resilience	Source	SGW5	Is there a risk of failure of the borehole pump due to lack of regular maintenance?	4	0	0	
5	Woodhall Burn	Management and Resilience	Source	SGW6	Is the ability to sample the water from each specific borehole inadequate?	3	0	0	
5	Woodhall Burn	Chemical	Source	SGW7	Is there a risk of chemical contamination (e.g. hydrocarbons, pesticides, nitrates) either directly to the headworks or to the local groundwater?	4	0	0	
7	Brunt Spring	Chemical		SG4	Is there risk of chemical contamination from manmade activities in catchment (use or storage of chemicals including landfill sites, mining)?	4	0	0	
3	Brunt Spring	Chemical		SG5	Is there a risk of chemical contamination from natural sources (local geology)?	4	0	0	
9	Brunt Spring	Management and Resilience		SG6	Is there a risk of the supply running dry or being over-abstracted?	4	0	0	
0	Brunt Spring	Management and Resilience		SG7	Is the source at risk from vandalism (deliberate contamination of source and unauthorised access)?	4	0	0	
1	Brunt Spring	Management and Resilience		SG8	Is there a risk that inappropriate materials are used in the construction of the supply?	4	0	0	
2	Brunt Spring	Management and Resilience		SG9	Is the source difficult to access in order to undertake monitoring & improvements?	4	0	0	
3	Brunt Spring	Management and Resilience		SG10	Are there any planned future activities that may affect the supply?	4	0	0	
4	Brunt Spring	Management and Resilience		SG1	Is there a lack of knowledge and understanding about the source of the supply?	5	0	0	
5	Brunt Spring	Microbiological		SG2	Is there a risk of faecal contamination of the source from activities in the catchment?	5	0	0	
5	Brunt Spring	Microbiological		SG3	Is there a risk of faecal contamination of the source from storage or distribution of sewage/waste?	5	0	0	
7	Brunt Spring	Chemical	Source	SSW1	Is there a noticeable change in the quality of the water due to meteorological conditions (colour, cloudiness/turbidity)?	4	0	0	
3	Brunt Spring	Chemical	Source	SSW2	Is freshwater aquaculture practised upstream, causing contamination (feed, pesticides etc.)?	4	0	0	
9	Brunt Spring	Chemical	Source	SSW3	Is the source water used for recreational purposes?	4	0	0	
0	Brunt Spring	Chemical	Source	SSW4	Is the source water subject to seasonal algal blooms?	3	0	0	
1	Brunt Spring	Chemical	Source	SSW5	Could activities such as forestry, quarrying or construction create a risk to quality?	3	0	0	
2	Brunt Spring	Installation and Operation	Source	SSW6	If the source is a spring, could surface water or spillages of contaminated material enter the supply because the headworks isn't fully sealed ?	5	0	0	
3	Brunt Spring	Chemical	Source	SSW7	Is there a risk of debris or particulate matter entering the supply?	3	0	0	
4	Brunt Spring	Management and Resilience	Source	SSW8	Is there a risk of the intake becoming clogged?	3	0	0	
5	Brunt Spring	Microbiological	Source	SGW1	Are there any abandoned wells or observation boreholes in the vicinity of the source that could present a risk of aquifer contamination?	4	0	0	
5	Brunt Spring	Microbiological	Source	SGW2	Could livestock have access to the well head area?	5	0	0	

# Information Export

## Simple Water Safety Plan



- Exports static information based on risks identified at specific locations on PWS system
- Broken down by hazard type
- Aimed at domestic premises
- Provides simple, easily understood advice on one sheet for those with limited technical background
- Exported as Excel doc to enable editing and pasting into preferred LA format

# Risk Assessment – Getting Stuff Out

Risk assessment data		Hazard Type	Source General	Source Surface Water	Treatment Plant Design	Treatment Process Resilience	Treatment Cartridge Filters	Treatment UV Disinfection
<p>Risks and mitigations</p> <p>Simple Drinking Water Safety Plan</p> <p>Full Drinking Water Safety Plan</p>	Installation and Operation				Water treatment can only be effective if it is installed correctly and in the correct location. Failure to do this can mean it doesn't work effectively, or at all. Always use a competent installer and follow manufacturers' instructions.	Any treatment process needs to be monitored to check it is working. This doesn't have to be complicated, but an alarm might be worth considering if it isn't obvious that things aren't working.	Cartridge filters need to be correctly sized to ensure that they are effective but don't block too frequently. Several filters may be needed, with the largest filtration size installed first.	Ultra violet disinfection units should be installed in accordance with manufacturers' instructions. Most will need some sort of pre-filtration to prepare the water - coloured water is a particular problem as it can stop the UV from properly disinfecting the water.
	Management and Resilience	It is important to understand exactly where the water comes from and the characteristics of the source so that you can deal with the risks.			Any water treatment process needs to be designed to be capable of dealing with the challenges with which it is presented - this means being sized correctly and properly understood, with no opportunities to bypass it.	The treatment needs to be protected from things such as weather and flooding as well as mistakes such as adding the wrong chemical.	Cartridge filters need to be replaced when they are dirty. It's a good idea to keep spares of the correct size so that you don't run out.	UV units should have alarms to warn of failure or poor water quality (transmissivity). Up lamps need maintenance, including cleaning of the quartz sleeve and replacement of the lamp before it fails. (few last more than a year). It's important to keep records and hold spare parts. Also, remember that UV does have a lasting disinfecting effect, so water can become re-contaminated after the unit.
	Microbiological	The source should be protected from contamination with faecal matter, such as animals and farming activities.						
	Chemical	It's important to understand whether there could be chemicals in the supply, either naturally occurring due to geology or from activities in the catchment.		Activities in the catchment such as recreation, forestry and farming could enable chemicals to enter the supply. If the supply runs coloured or cloudy after rainfall, this may prevent any disinfection treatment you have from working properly.				

# Information Export


## Full Water Safety Plan



- Exports full DWSP template with main risks and controls documented
- Can be tailored by user to individual property
- Aimed at more complex, regulated supplies who *should* have some technical knowledge
- LA can set risk minimum score to be exported
- Includes blank templates to be completed – Summary of actions, responsibilities, and emergency
- Exported as Excel doc to enable editing and pasting into preferred LA format

# Information Export

## Full Water Safety Plan

 Private Water Supply Risk Assessment riskassessor@stormid.com ▾

Test Local Authority > Graham's Dairy Farm 1 AFR46253

### Graham's Dairy Farm 1

Risk assessment Export ▾

Risk assessment due date	Status of risk assessment	Version
28/08/2023	Closed	3

#### Full Drinking Water Safety Plan

Please select the assets to export

**Properties** i

127 Station Road, Edinburgh, EH1 1AA  18 Archer Lane, Edinburgh, EH1 1AA x ▾

**Sources** i

Hill Top Spring x ▾

**Tanks** i

Main Tank  Secondary Tank  Third Tank x ▾

**Risk Score Lower Limit** i

**Include Centralised treatment?**  Yes  No

Downloading, please wait



# Information Export

## Full Water Safety Plan



### Control Measures (Mitigations)

Control Measures (Mitigations)
Operators have a good understanding of the process
Regular maintenance reduces risk
Training of operators
Other
Clear labelling
Stock control of spare filters
Documented instructions
Stock control system
Evidence that UV is effective
Point of Use Treatment

### Control Measures (Mitigations) - Additional Information

Sizing of filters is documented and spare stock kept, plus good labelling

### Mitigated Risk Score

Highest mitigated risk score:

25 (Excessive)