



The Water Environment (Controlled Activities) (Scotland) Regulations 2011

Licence Application FORM B

Complete this form for point source discharges other than fish farm effluent

Contents

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The Data Protection Act 1998

"The Scottish Environment Protection Agency is responsible for maintaining and improving the environment and regulating environmental emissions. It has a duty to discharge its functions to protect and enhance the environment and to promote conservation and recreation.

The information provided will be processed by the Scottish Environment Protection Agency to deal with your application, to monitor compliance with the licence/permit/registration conditions, to process renewals, and for maintaining the relevant public register(s).

We may also process and/or disclose it in connection with the following:

- offering/providing you with our literature/services relating to environmental affairs
- consulting with the public, public bodies and other organisations (e.g. Health and Safety Executive, Local Authorities, Emergency Services, Scottish Executive) on environmental issues
- carrying out statistical analysis, research and development on environmental issues
- providing public register information to enquirers
- investigating possible breaches of environmental law and taking any resulting action
- preventing breaches of environmental law
- assessing customer service satisfaction and improving our service.

We may pass it on to our agents/representatives to do these things on our behalf.

You should ensure that any persons named on this form are informed of the contents of this Data Protection Notice.

FORM B Point Source Discharges other than fish farm effluent

SECTION 1: GENERAL DISCHARGE INFORMATION

1.1 If not already included on your 'Site Plan' (see Form A), please provide a "Drainage Plan" showing:

- The site drainage layout (if applicable)
- All discharge point(s) locations
- The location of any treatment facilities and sample chamber(s)
- Identify pollution risk areas/chemical and oil stores

Reference the Plan "Drainage Plan" and attach it to your application

1.2 Will the effluent come from (tick box)

an existing development or discharge	<input type="checkbox"/>	a new development or discharge?	<input checked="" type="checkbox"/>	an alteration to an existing development or discharge?	<input type="checkbox"/>
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1.3 About the outlet(s)

1.3.1 Please give the National Grid Reference for the discharge outlet (10 Character e.g. XY 1234 5678)	A- NN 2583 9376 (Simple Licence Discharge) B- NN 2546 9335 (Simple Licence Discharge)						
1.3.2 Will the discharge(s) be made through: (please tick)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; padding: 5px;">*a new outlet*?</td> <td style="width: 10%; text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="width: 25%; padding: 5px;">*an alteration to an existing outlet?</td> <td style="width: 10%; text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="width: 25%; padding: 5px;">an existing outlet?</td> <td style="width: 10%; text-align: center; padding: 5px;"><input type="checkbox"/></td> </tr> </table>	*a new outlet*?	<input checked="" type="checkbox"/>	*an alteration to an existing outlet?	<input type="checkbox"/>	an existing outlet?	<input type="checkbox"/>
a new outlet?	<input checked="" type="checkbox"/>	*an alteration to an existing outlet?	<input type="checkbox"/>	an existing outlet?	<input type="checkbox"/>		
<p>1.3.3 *If a new outlet or alteration to existing outlet: submit outlet design so that SEPA can agree your engineering proposals, prior to licensing.</p> <p>Where applicable, please provide a method statement detailing working practices and environmental protection during construction of the outlet.</p>							
What provision will be made for samples to be taken of the effluent discharged?(e.g. <i>sampling chamber, automatic sampler</i>) Please also show location of sampling point in the drainage plan detailed in section 1.1 above	Sampling chamber prior to discharge outfall.						

1.4 If you claim Environmental Service for any of your activities then your reasoning/justification must be set out on a separate sheet referenced "Environmental Service Claims". Information on Environmental Service is available from the Charging Scheme guidance found on the SEPA website: <http://www.sepa.org.uk/regulations/authorisations-and-permits/charging-schemes/charging-schemes-and-summary-charging-booklets/>

Licence Application

Form B

Point Source (non-Fish Farm)

1.5 Please indicate which of the following discharges you will be applying to undertake. For multiple discharges of the same type, please list within the appropriate boxes.

Discharge	Detail	Registration (R) State Number	Simple Licence (SL) State Number	Complex Licence (CL) State Number	National reference for each outlet (i.e. 10 characters XY 1234 5678)	Grid for each 10 X Y	Outlet Diameter mm and type (material) of pipe	Receiving environment for each discharge <ul style="list-style-type: none"> • River • Freshwater Loch • Coastal/Estuary • Land no soakaway • Land via soakaway • groundwater 	Partial Soakaway (Y or N) If yes please state size in square metres	Name of receiving environment (if unknown please state "tributary of" name of major water)
Sewage (public)¹	CSO									
	EO									
	Untreated									
	Primary (includes septic tank)									
	Secondary									
	Tertiary									
Sewage (private)	CSO									
	EO									
	Untreated									
	Primary									
	Secondary									
	Tertiary									
Other Effluent²	Potable water supply									
	Other organic effluent									
	Cooling Water									
	Other effluent		2		NN 2583 9376 NN 2546 9335		150mm 150mm	Freshwater Loch Freshwater Loch	N N	Loch Lochy Loch Lochy
Surface Water (Public)	Housing									
	Commercial, Industrial & other									
Surface Water (Private)	Motorways & major roads									

FORM B SPECIFIC DISCHARGES Please complete relevant sections only

For foul only separate sewage systems serving domestic premises, complete only **section 2.1** and **section 2.6** (if an Emergency Overflow is provided) along with **section 4** (if discharge is to groundwater).

SECTION 2: SEWAGE EFFLUENT (>15 pe)**2.1 FOUL ONLY SEPARATE SEWAGE SYSTEMS SERVING DOMESTIC PREMISES**

2.1.1 What is the maximum population equivalent that the sewage system will serve?

Design pe

2.1.2 For new private sewage treatment plants please give reasons that connection to sewer for sewage effluent is not practicable.

2.1.3 What is the anticipated maximum flow of domestic sewage (in cubic metres per day)?

m³/d

Note: The maximum flow should be derived using Section 5 of the latest Flows and Loads document - Sizing Criteria, Treatment Capacity for Small Wastewater Treatment Systems (package plants) [available on British Water website: www.britishwater.co.uk/]

2.2 SEWAGE EFFLUENT GENERAL QUESTIONS

2.2.1 How many people will the sewage system serve?
(both current population and projected design population)

Total current pe

Design pe

2.2.2 For new private sewage treatment plants please give reasons that connection to sewer for sewage effluent is not practicable.

2.2.3 What is the anticipated flow of domestic sewage or mean flow of effluent?
(in cubic metres per day)

m³/d

Note: Please explain how the flows have been derived. In particular you should specify the details of any flow monitoring programmes.

2.2.4 What is the anticipated flow of trade effluent?
(in cubic metres per day)

m³/d

Note: Please explain how the flows have been derived. In particular you should specify the details of any flow monitoring programmes.

2.2.5 What is the average infiltration rate?
(in cubic metres per day)

m³/d

Note: Please explain how the flows have been derived. In particular specify the details of any flow monitoring programmes carried out to estimate the infiltration rate. Details of seasonal variations in infiltration flow should be provided if possible.

2.2.6 What is the current and design dry weather flow?
(in cubic metres per day)

Current

m³/d

Design

m³/d

Note: Please explain how the flows have been derived.

2.2.7 Please provide a description of any significant trade discharges to the sewer.

2.3 SEWAGE TREATMENT WORKS

2.3.1. What will be the mean daily flow of effluent?
(in cubic metres per day)

m³/d

Note: Please explain how the flows provided have been derived. In particular you should specify the details of any flow monitoring programmes.

2.3.2. What will be the maximum flow rate to full treatment?

(in litres per second and as a multiple of DWF)	l/s	DWF
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2.3.3. How will the sewage be treated before it is discharged and what is the anticipated quality of the discharge?	
Primary treatment details: Secondary Treatment details: Tertiary Treatment details: Other treatment: Anticipated effluent quality: (Specify whether 95%ile etc. For discharges <200 p.e. use Mean standard)	Note: Please enclose supporting documents as necessary which should include detailed plans, design criteria, process description and quality information

2.3.4. How will mechanical failures of the treatment facilities be detected (e.g. telemetry, alarms)? 2.3.5. Describe the maintenance arrangements for the system e.g. contracted to whom, regularity of checks and availability of spare parts etc	
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2.4 COMBINED SEWER OVERFLOWS (CSOs)

2.4.1. At what rate of flow will the overflow start operating? (litres per second and as a multiple of DWF)	l/s	x DWF
Note: Please explain the choice of overflow setting		

2.4.2. What will the maximum rate of discharge be? (litres per second and as a multiple of DWF)	l/s	x DWF
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2.4.3. What treatment will be provided?	
Note: Please enclose supporting documentation covering detailed plans and design criteria	

2.4.4 What storage volume in excess of DWF will be provided within the sewerage system which will delay the operation of the overflow (in cubic metres)	m ³
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2.4.5 What is the predicted spill frequency per year? (number and duration)	Number of spills per year Duration of spills per year/per event?
Note: Please provide an explanation of how the predicted spill frequency of the overflow was derived.	

2.4.6 CSO ASSESSMENT DETAILS

The following information is required to assist SEPA in reaching licence decisions for intermittent discharges. Groups of CSOs discharging into bodies of water where there is likely to be a degree of interaction should be considered together. The form should be completed by the Water Authority or their agent after consultation with the relevant SEPA officers.

2.4.7 CSO location for <u>each</u> outfall (further detail required for CSOs)	
10 character Grid Reference(s) of CSO(s) - - - - - -	10 character Grid Reference(s) of outfall point(s) - - - - - -

2.4.8 DRIVERS – Known or potential impacts					
Bathing Waters...	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Flooding upstream...	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Shellfish Waters	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Visual or aesthetic impact...	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Urban Wastewater...	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Justified public complaint...	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Recreational water...	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Deterioration in river class...	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Dangerous Substances	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Operates in dry weather...	Yes <input type="checkbox"/>	No <input type="checkbox"/>

2.4.9 CONTRIBUTING AREA(S) Enter data where available/ appropriate	
Existing Catchment area (Ha)* Percentage catchment on combined sewer Existing Population P Infiltration I Trade Flow E Measured dry weather flow Calculated dry weather flow	Future Design [from L.A. structure plans] Catchment area (Ha)* Percentage catchment on combined sewer Future Design pop P Infiltration I Trade Flow E Dry weather flow at inlet(s) Continuation flow(s)

2.4.10 INDUSTRIAL EFFLUENT INFORMATION - List main trades contributing > 20% of DWF loading for any of the chemicals listed in the Annex to this form. For organic discharges please give p.e.

Name	Sector	Chemical	Peak Conc.	Annual Ave. Conc.	% of DWF	P.E. (if applicable)?

* from Drainage Area Studies

2.4.11 PROPOSED DISCHARGE		
Formula A flow		(l/d)
Spill rate with one year return period		(l/s)
Spill volume with one year return period		(m ³)
Duration of spills per year		(h)
Number of spills per bathing season and per year		
Screen aperture		(mm)
Spill/weir setting		(l/s)
Volume of storage		(m ³)
Largest inlet pipe diameter		(mm)

2.4.12 SEWERAGE MODELLING	
Modelling software used including version	Location of key pumping installations
Specification for model assembled, give an indication of degree of simplification.	
MODEL INPUTS	
Rainfall events used for verification. SEPA is particularly concerned to ensure that the most valid model inputs available are used in the modelling exercises.	
Time series rainfall used	Location of series
Software used to produce time series	Recorded data used (location, date)
	Last revision of time series
MODEL OUTPUTS This information is to assist SEPA with evaluation of model verification	
Graphs Give details of graphical information supporting the application.	Summary tables Give details of tabular information supporting the application.

2.4.13 WATER QUALITY MODELLING

Provide details of any associated river or marine model

95%ile river flow/initial dilution at discharge point(s)

2.4.14 PAST OR PROPOSED MONITORING

Historical monitoring information is particularly important where existing discharge locations are to be maintained, include details of proposed monitoring facilities

2.5 STORM TANKS

2.5.1. What storm tank volume will be available?
(in cubic metres) Please show by calculation how this size is justified as a means of preventing polluting releases to the environment

m³

2.5.2. How will the return of storm tank contents be achieved?
(describe whether manual/automatic return, and pump rates)

2.6 EMERGENCY OVERFLOWS

2.6.1 Please state the justification for the emergency overflow

2.6.2. Describe the pump rates

Number of pumps in pumping station:		Pump rate(s) (specify units)		l/s m ³ /d
Pumping regime: (select orspecify)	Duty/standby	Duty/assist	Duty/assist/standby	Other:

2.6.3. What sort of warning system will you use to identify pump failure/operation of overflow?
(e.g. alarms, telemetry connections)

2.6.4. How will you deal with power failures?

2.6.5. What storage capacity will be provided which will delay the operation of the overflow?(in cubic metres)

m³

SECTION 3: DISCHARGES OF OTHER EFFLUENTS INCLUDING TRADE EFFLUENT

3.1 About the Effluent Please describe the type of process you plan to carry out on the site. E.g. type of operations giving rise to each effluent to be discharged.

Drill and blast operations for an exploratory tunnel to inform design of large pump hydro scheme.

The likely composition is unknown, and in any case will change with the varying influence of the different components. It is the experience of the Strabag team that the presence of cementitious materials and ground rock will result in water which is likely to be of very high pH and extreme turbidity. Although minimized, accidental spillages of e.g. hydraulic oils or drilling additives, will further contaminate the water. The ideal of separating 'clean' influent groundwater from sources of contamination in the tunnel is very optimistic.

The water arising from the tunnel is unlikely to be of sufficient quality that it could be used for dust suppression, wheel washing or general cleaning without endangering the Health and Safety of our team. Some treatment is very likely to be required before the water arising in the tunnel can be either reused or discharged to the water environment.

3.2 What will each effluent be composed of? Please list the content of the effluent. Also check the Annex to this form and complete the table for any Annex substances within your treated effluent, giving the maximum and mean annual concentrations. *You should include information on the daily, weekly and/or seasonal patterns, if these are likely to be significant.*

For discharges to groundwater with a high loading factor (see associated guidance notes) please detail Maximum, Minimum and Mean Annual concentrations within the treated effluent to be discharged.

TREATED EFFLUENT COMPOSITION (INC. ANNEX SUBSTANCES)

Tunnel Discharge:

Substance:	Concentration	Units
Suspended solids – Range from (flow at 0.1 l·s ⁻¹) to (flow at 10 l·s ⁻¹).	Maximum: 80 Min: 0 Mean annual:	mg·l ⁻¹
pH	Maximum: 9 Min: 5 Mean annual:	
Chromium (dissolved)	Maximum: <10 Min: 0 Mean annual:	µg·l ⁻¹
Copper	Maximum: <10 Min: 0 Mean annual:	µg·l ⁻¹
Zinc	Maximum: 60 Min: 0 Mean annual:	µg·l ⁻¹
Cadmium	Maximum: 0.5 Min: 0 Mean annual:	µg·l ⁻¹
Mercury	Maximum: 0.1 Min: 0 Mean annual:	µg·l ⁻¹
Ammoniacal Nitrogen	Maximum: <1 Min: 0 Mean annual:	mg·l ⁻¹
Nitrate Nitrogen	Maximum: <2 Min: 0 Mean annual:	mg·l ⁻¹
Chlorine	Maximum: <2 Min: 0 Mean annual:	µg·l ⁻¹
Magnesium	Maximum: <2 Min: 0 Mean annual:	µg·l ⁻¹
Iron	Maximum: <1000 Min: 0	µg·l ⁻¹

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Point Source (non-Fish Farm)

[Empty grey box for licence application details]

	Mean annual:	
Lead	Maximum: 0.09 Min:0 Mean annual:	µg-l-1
Sulphate as SO4	Maximum: 400000 Min:0 Mean annual:	µg-l-1
Phosphate	Maximum: 0.5 Min:0 Mean annual:	µg-l-1

Concrete Batching Discharge

Substance:	Concentration	Units
Suspended solids-	Maximum: 80 Min: 0 Mean annual:	mg-l ⁻¹
pH	Maximum: 9 Min: 5 Mean annual:	
Iron	Maximum: <1000 Min: 0 Mean annual:	µg-l-1
Chlorine	Maximum: <2 Min: 0 Mean annual:	µg-l-1

3.3 Does the untreated effluent (i.e. pre treated influent) contain any compound listed in the Annex to this form? If so, please give the mean annual and maximum concentration of each substance in the influent flow, ensuring that the maximum concentration and mean annual concentration in the treated effluent is given above. You should include information on the daily, weekly and/or seasonal patterns, if these are likely to be significant.

ANNEX SUBSTANCES IN INFLUENT

Substance:	Concentration	Units
	Maximum: Mean annual:	
	Maximum: Mean annual:	
	Maximum: Mean annual:	
	Maximum: Mean annual:	
	Maximum: Mean annual:	
	Maximum: Mean annual:	
	Maximum: Mean annual:	

3.4 List bulk and hazardous chemicals and wastes held on site and explain how these will be contained.

Onsite there will be a range of chemicals which would constitute COSHH and these will be stored away from watercourses/sources of water in a secure double bunded unit which is regularly monitored. Fuels will be banded and stored securely onsite at a central location from where refueling activities will take place. The site will also store bulk explosives which will be heavily monitored and have all relevant acceptance from Police Scotland.

The materials currently expected are:

- AQUATREAT 2104
- Ferric Chloride
- DIESEL
- Ad Blue
- CONCRETE (Cem I 52.5)
- Sika Accelerator
- Sika Viscocrete
- Sika Fibremesh 150
- EXPLOSIVES (Senetel Powerfrag)

3.5 How will the effluent be treated before it is discharged?

Primary treatment details: Screening
 Secondary treatment details: pH correction
 Tertiary treatment details: chemical (Flocculent and Coagulant)
 Other treatment:

Note: Please enclose supporting documents which should include detailed plans, design criteria, and treatment process description

3.6 What will be the mean and maximum daily volume of treated effluent discharged?
(in cubic metres per day)

Tunnel Discharge:
Mean: 23.3m³/d
Maximum: 864m³/d

Concrete Batching Area Discharge:
Mean: 15m³/d
Maximum: 20m³/d
*see section 5.2. and 5.3 in supporting information

Note: You should include information on the weekly and/or seasonal patterns, if these are likely to be significant.

*see section 5.2. and 5.3 in supporting information

3.7 Please provide the maximum rate of flow of the treated effluent
(in litres per second)

Range from 0.1 l·s⁻¹ to 10 l·s⁻¹ (mean 1 l·s⁻¹).

3.8 If the discharge temperature is changed by heating or cooling please provide the mean and expected temperature range of the discharge.
(in degrees centigrade)

Mean: °C

Range: °C

3.9 How will mechanical failures of the treatment facilities be detected (e.g. telemetry, alarms)?

The manufacturer of the Water Treatment Plant will incorporate monitoring equipment and the plant will be managed by a trained operative who will be responsible for maintenance and scheduling engineer visits (monthly).

3.10 Describe the maintenance arrangements for the treatment system e.g. contracted to whom, regularity of checks and availability of spare parts etc.

Daily checks and associated maintenance of plant is undertaken as part of standard working practices for the site. Safeguards include continual monitoring of the outflow and dosing parameters for the package treatment plant. The discharge outlet is designed with a return line and divert back to the cuttings lagoon. When in operation the package treatment unit is to be constantly manned and monitored. The site includes emergency sluice valves to stop any out of spec water that evades the primary controls, water is then pumped back into the lagoon as containment. Regular calibrations to supplier specifications are to be made to all dosing and monitoring equipment. The WTP will have monthly engineer visits from supplier to service the unit.

3.11 If sewage is included in this discharge, how many people will the system serve? (or give population equivalent)

No. Residents:
No. day workers :
Total p.e.:

3.12 What impermeable surface area will drain rainfall to the treatment system? (in square metres)

765 m²

Note: Uncontaminated surface water should be excluded from the effluent treatment plant where possible.

3.13 How will any remaining surface water be treated?
Note: If you will be making a separate discharge of surface water, you should discuss with SEPA whether it will be necessary to fill in Section 4 of this form

Any remaining surface water would be drained to a sump and discharged via suitable mitigation (checkdams/silt fencing) over land into a watercourse before entering Loch Lochy. If such water was contaminated then this water would be pumped to water

	treatment plant. Due to volume this would be covered under GBR 10D.
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SECTION 4: DISCHARGE OF LICENSABLE SURFACE WATER INCLUDING SUDS (see applicant guide for thresholds of when a licence is required for surface water discharges)

4.1. Please describe the area to be drained (e.g. a 1000 house development or industrial estate areas) and state the previous land use (e.g. industry type, housing, greenfield etc.)

Note: Your plans should include: (1) the area draining to the discharge - detailing the drainage system proposed, as well as existing natural drainage features; (2) planned development features including roads, parking areas and buildings.

4.2. Will there be any high pollution risk areas? (This refers to areas such as re-fuelling/ wash bays, material storage or unloading areas)

Note: Your plans should detail the relevant areas and a description of the preventative measures taken (e.g. oil interceptor, diversion to foul sewer, bunding)

4.3 What will be the total impervious area which will drain rainfall to the outfall? (in square metres and as a proportion of the total drainage area)

m²
%

4.4. Please provide a brief description of the surface water management train (e.g. prevention, source control, site control, regional control)

4.4.1 What provision will be made for source control SUDS measures including those which direct rainfall to land?

4.4.2. If infiltration systems are to be installed please provide information on soil type and porosity (include percolation test results). Note: This refers to the use of permeable surfaces, swales, filter drains, infiltration trenches, soakaways etc which limit the direct access of rainfall to surface water drains. Please provide drawings of the structure used and documentation covering the design.

4.4.3. Please detail any additional SUDS treatment measures after the source control measures.

Note: This refers to structures such as ponds, basins and wetlands. Please provide drawings of the structure used and documentation covering the design (including treatment volume Vt (m3)).

4.5. Please demonstrate (by providing calculations) how the SUDS measures will provide attenuation and restrict flow to the pre-development (i.e. greenfield) run off rates?

(This question is inserted to cover the sustainable flood management duties in WEWS and to protect ecological status by maintaining natural river flows.)

4.6. Please provide details of the SUDS adoption and maintenance agreements.

SECTION 5: DISCHARGE OF EFFLUENT TO AN INFILTRATION SYSTEM, ONTO/INTO LAND OR DIRECTLY TO GROUNDWATER

The Prior Investigation Information

Part 1 of the form is to be completed for all discharges. Part 2 of the form is only to be filled out for trade effluent discharges with a high loading classification (see guidance notes), sewage effluent discharges of >50pe, or discharges of <50pe where there is a sensitive receptor close by SEPA may also request some of this information – where this is the case please discuss with SEPA. See Guidance Notes for information relating to the numbering.

THE PRIOR INVESTIGATION FORM

PART 1 (to be completed for all discharges)						
a) Nature of discharge point	Direct to groundwater (e.g. down a borehole) ¹ <input type="checkbox"/>	Infiltration system (e.g. soakaway) <input type="checkbox"/>		Land (e.g. spreading on soil surface) <input type="checkbox"/>		
b) Loading Classification ² (This is required for trade effluent discharges only)	Low-Medium <input type="checkbox"/> Provide calculations and justification	High <input type="checkbox"/> Provide calculations and justification				
c) Depth to groundwater ³	metres below ground level Date (s) measured					
d) Location of groundwater abstractions within 500m ⁴	Location Description (e.g. Bog Farm)	NGR (e.g. NO1234 5678)	Type of supply (e.g. well used for drinking)			
	1.					
	2.					
	3.					
e) Location of nearby surface waters e.g. rivers, ditches, wetlands etc within 200m. ⁵	Description (e.g. The Blue River)	NGR (NO 1234 5678)	Type (e.g. burn/river/ditch)			
	1.					
	2.					
	3.					
f) Distance to field drains within 10m ⁶	metres					
g) Slope ⁷	Steep (>1:5) <input type="checkbox"/>	Shallow (1:5-1:20) <input type="checkbox"/>	Relatively Flat (<1:20) <input type="checkbox"/>			
h) Vp Values (seconds/mm) ⁸	1.	2.	3.			
i) Subsoil type ⁹ (trial pit logs should be provided)	Sands and gravels	<input type="checkbox"/>				
	SAND	<input type="checkbox"/>				
	Silty, SAND or silty clayey SAND	<input type="checkbox"/>				
	Sandy SILT	<input type="checkbox"/>				
	Peat	<input type="checkbox"/>				
	Clay	<input type="checkbox"/>				
	Other	Please specify				

j) Thickness of superficial deposits ¹⁰	metres from ground surface		
k) Area of Infiltration system ¹¹	square metres (m ²)		
l) Length of Soakaway ¹²	metres (m)		
m) Type of treatment proposed (if applicable)			
n) Depth of base of discharge pipes from ground surface (m) ¹³	metres (m)		
PART 2¹⁴ (to be completed for trade effluent discharges which have a high loading classification and for sewage effluent discharges >50pe, also note that for all discharges of <50pe where there is a sensitive receptor close by SEPA may also request some of this information – where this is the case please discuss this with SEPA.			
o) Groundwater Flow Direction e.g. NNW ¹⁵			
p) Hydraulic gradient ¹⁶			
q) Permeability ¹⁷	metres/day		
r) Background Groundwater Quality ¹⁸	Contaminant	Concentration	Units
	1.	Max: Min: Mean:	
	2.	Max: Min: Mean:	
	3.	Max: Min: Mean:	
	4.	Max: Min: Mean:	
	5.	Max: Min: Mean:	
s) Ongoing monitoring ¹⁹			
t) Has a quantitative risk assessment been carried out? (attach assessment) ²⁰			

MAP

A scale map of the site should be provided and include the following information:

- Location and layout of the infiltration system
- The location of the trial pits, boreholes/peizometres & percolation test holes
- The location of any well, springs or boreholes (mark with 'W', 'S' or 'B' for **W**ell, **S**pring, or **B**orehole) within 500m of the discharge
- The location of surface water features within 200m of the discharge.
- The location of any field drains
- The boundary of the plot
- North point should be indicated by an arrow labelled 'N'.
- A scale bar.

TRIAL PIT DETAILS

The Hole should be at least 1.5m deep below the bottom of the proposed depth of the discharge pipe.

Depth of Trial Hole (m):		Date and time of excavation:	Date and time of examination:
Depth from ground surface to bedrock (m):			
Depth from ground surface to water table (m):			
	Subsoil description	Colour*	Preferential flow paths
0.1m			
0.2m			
0.3m			
0.4m			
0.5m			
0.6m			
0.7m			
0.8m			
0.9m			
1.0m			
1.1m			
1.2m			
1.3m			
1.4m			
1.5m			
1.6m			
1.7m			
1.8m			
1.9m			
2.0m			
2.1m			
2.2m			
2.3m			
2.4m			
2.5m			

*All signs of mottling should be recorded

Additional Document submitted with application

X ADDITIONAL INFORMATION SUBMITTED		
<p>Please reference additional supporting documents submitted as part of this application</p>	<p>Document name:</p>	<p>Coire Glas Exploratory Abstraction and Discharge Licence Supporting Document</p>
	<p>Document reference:</p>	<p>783.HCZU.STR.GN.EN.CJ.02</p>
	<p>Document name:</p>	<p>Coire Glas Pumped Storage Scheme Exploratory Works</p>
	<p>Document reference:</p>	<p>Water Quality Monitoring: proposed scope (construction phase)</p>
	<p>Document name:</p>	
	<p>Document reference:</p>	
	<p>Document name:</p>	
	<p>Document reference:</p>	

ANNEX – Substances

Table 1 below details substances which must be highlighted within your application if they are contained within your discharge.

Table 1 Substances

Substance		Substance	
Alachlor	PS	Fluoranthene	PS
Aldrin	LIST I	Hexachlorobenzene	PHS, LIST I
Aluminium	SP	Hexachlorobutadiene	PHS, LIST I
Anthracene	PSR	Hexachlorocyclohexane (Lindane)	PHS, LIST I
Arsenic	SP, LIST II	Iron	SP, LIST II
Atrazine	PSR, LIST II	Isodrin	LIST I
Azinphos-methyl	LIST II	Isoproturon	PSR
Bentazone	LIST II	Lead and its compounds	PSR, LIST II
Benzene	PS, LIST II	Linuron	LIST II
Biphenyl	LIST II	Malathion	LIST II
Boron	LIST II	Manganese	SP
Brominated diphenylether (only)	PHS	Mecoprop	LIST II
Cadmium	PHS, LIST I	Mercury and its compounds	PHS, LIST I
Carbon tetrachloride	LIST I	Mevinphos	LIST II
Chlorfenvinphos	PS	Naphthalene	PSR, LIST II
Chlorine	SP	Nickel and its compounds	PS, LIST II
Chloroalkanes, (C10-13)	PHS	Nonylphenols	PHS
Chloroform	LIST I	Octylphenols	PSR
Chloronitrotoluenes	LIST II	Omethoate	LIST II
2-Chlorophenol	LIST II	PCSDS	LIST II
4-Chloro-3-methylphenol	LIST II	pentabromodiphenylether (PBDE))	PHS
Chlorpyrifos	PSR	Pentachlorobenzene	PHS
Chromium	SP, LIST II	Pentachlorophenol	PSR, LIST I
Copper	SP, LIST II	Perchloroethylene	LIST I
Cyanide	SP	Permethrin	SP, LIST II
Cyfluthrin	LIST II	Phenol	SP
2,4 -D (ester)	LIST II	Poly Aromatic Hydrocarbons	PHS
2,4-D (non-ester)	LIST II	pp-DDT	LIST I
DDT	LIST I	Simazine	PSR, LIST II
Demeton	LIST II	Sulcofuron	LIST II
Di(2-ethylhexyl)phthalate (DEHP)	PSR	Tetrachloroethane	SP
Diazinon	SP	Toluene	SP, LIST II
1, 2 Dichloroethane	PS, LIST I	Triazophos	LIST II
Dichloromethane	PS	Tributyltin compounds	PHS, LIST II
2,4-Dichlorophenol	LIST II	Trichlorobenzene	PSR, LIST I
Dichlorvos	LIST II	1,1,1-Trichloroethane	LIST II
Dieldrin	LIST I	1,1,2-Trichloroethane	LIST II
Dimethoate	LIST II	Trichloroethylene	LIST I
Diuron	PSR	Trichloromethane	PS
Endosulphan	PSR, LIST II	Trifluralin	PSR, LIST II
Endrin	LIST I	Triphenyltins	LIST II
Fenitrothion	LIST II	Vanadium	LIST II
Fluocifuron	LIST II	Xylene	LIST II

KEY: PHS – Annex X priority hazardous substance
 PS – Annex X priority substance
 PSR – Priority Substance Review
 SP - Annex VIII substance covered by points 1 to 9 - termed as Specific Pollutant
 List I - Dangerous Substances Directive List I substance, also listed in annex IX of WFD
 List II - Dangerous Substances Directive List II substance (as agreed by UK, statutory EQS applies)