



Water Environment (Controlled Activities) (Scotland) Regulations 2011

LICENCE APPLICANT GUIDANCE

GENERAL GUIDANCE NOTES

Guidance structure:

General Guidance notes (including Glossary)

Form A: Responsible person, other contacts and site details

Form B: Point source discharges to surface water and groundwater (**excluding fish farms and sheep dip disposal**)

Form C: Point source fish farm discharges to the water environment

Form D: Abstraction and Impoundment of waters

Form E: Building and engineering works within, or within the vicinity of, inland waters

Form F: Waste sheep dip and waste pesticide disposal to land

Form K: Deep Borehole Construction

The following forms are listed for information only – all relevant guidance is included in the form itself

Form G: Application for Variation (Administrative or Technical) to a Licence

Form H: Application to Transfer a Licence

Form I: Application to Surrender an Authorisation

GENERAL GUIDANCE NOTES**Help and advice**

If you need any advice on how to complete the form please contact your local area SEPA office. Licence applicants are encouraged to contact their local SEPA office to discuss the application process. Although SEPA cannot prejudge the outcome of an application, SEPA can offer advice and guidance.

Applications for multiple activities

Where you are making a licence application for a number of associated activities i.e. multiple abstractions, discharges, or engineering works in inland waters that are part of the same site or scheme, then the appropriate sections of each form should be completed. If your application includes both associated Registration and Licence level activities, these will be combined into a single licence (please note there are separate forms for Registration level activities available at www.sepa.org.uk/water/water_regulation/car_application_forms.aspx . If you are applying for a large number of activities please contact SEPA.

Associated documents

There are a number of other documents that you may need to send with your application, such as plans or copies of relevant existing authorisations. Each time a request for such a document is made you will need to mark the document(s) with a clear reference (question number or title) and give this reference on the application form. Poor quality documentation may result in your application being delayed.

Using continuation sheets

If you run out of space for any particular question, please use a continuation sheet. Make sure your continuation sheet is clearly marked with the same reference number as the question in the form and state on the application form that there is a continuation sheet.

Where to send you application

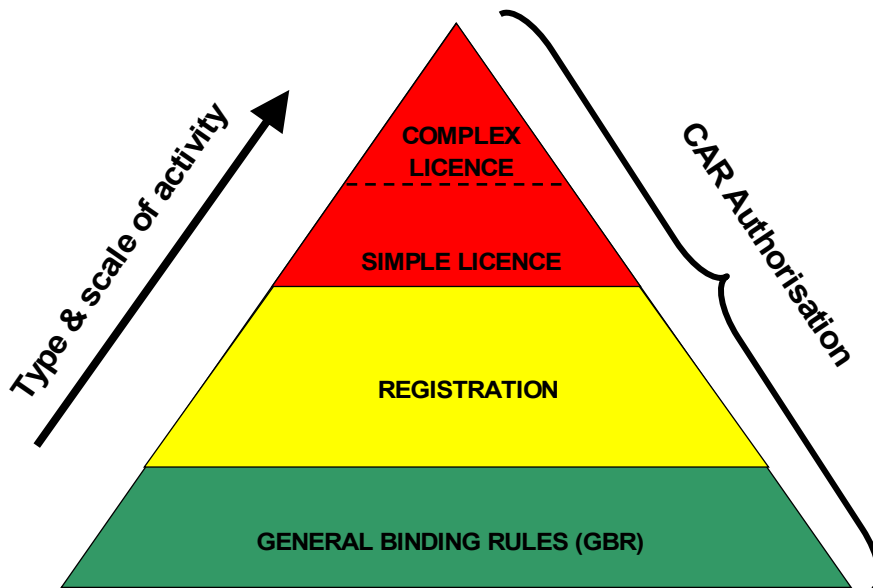
Please send your completed application form to your local registry office; addresses are given in the licence application Form A. If you are unsure of your local office you could call one of the most local numbers listed to check, prior to sending in your form, or contact SEPA via our website: www.sepa.org.uk.

Changes to licensed activities or the responsible person

Following completion and submission of the application form SEPA may grant a licence which will be based on the details provided. Where there are proposed changes to the activities authorised in the licence or where there is a change in the responsible person, these must be notified to SEPA and where appropriate an application made to vary, transfer or surrender the licence.

LEVELS OF REGULATION UNDER WATER ENVIRONMENT (CONTROLLED ACTIVITIES) (SCOTLAND) REGULATIONS 2011 (CAR)

This section provides guidance on the level of regulation for different types and scales of activity. The 2011 Regulations (CAR) provide for three types of authorisation: General Binding Rules, Registrations and Licences (Figure 1).



General Binding Rules are low risk activities that do not need to be notified to SEPA. There are a series of generic conditions contained in the CAR that must be complied with.

Registrations notify SEPA of medium risk activities and enables SEPA to monitor cumulative impacts. A registration authorises the activity as described in the application and so will specify the scale of the activity, its location and SEPA may set additional conditions.

Licence (Simple and Complex) is required for higher risk activities and will contain site specific conditions relating to that activity. A licence requires the identification of a responsible person who is responsible for ensuring compliance with the conditions of the licence.

We expect that most applicants will be applying for a licence. However to ensure you understand what level of activity requires a licence (and licenses can be simple licenses or complex licenses depending upon their environmental risk) please use the tables in the CAR Practical Guide to identify the type of authorisation you require.

Where there are registration scale activities being carried out which are associated with a licence, registration forms should be completed for these activities and these forms attached to the licence application. The licence that you are subsequently issued with will cover all those activities applied for. Registration level activities which are not associated with a licensable activity can be applied for separately and the form is available at www.sepa.org.uk/water/water_regulation/car_application_forms.aspx

Activities that are covered by General Binding Rules (GBRs) do not need to be included in the licence application and will not form part of the licence. There are a series of 'rules' applicable to GBRs (within the Regulations) and this will be the mechanism through which they are controlled. To determine the correct level of authorisation for a controlled activity, consult the CAR Practical Guide available via the above web page.

CONTROLLED ACTIVITIES REGULATION AND THE WATER USE LICENCE

If your application is granted, SEPA will issue you with a single 'Water Use Licence' covering all associated controlled activities. Associated activities that would be covered by a single water use licence are defined as follows:

- Multiple **abstractions** can be covered by a single licence if they are operated as a single scheme and have a degree of inter-dependency. This is likely to be the case if they are linked by common pipe or distribution networks, or if they feed a single factory, treatment works or power station. If the activities are widely spread geographically and are not part of a single scheme, SEPA will not permit such activities under a single licence.
- Multiple **impoundments** if they are operated as a single scheme. This is the case if they impound the same watercourse or tributaries within the same catchment.
- Multiple **engineering activities** where the activities are part of the same project or body of work.
- Multiple **point source discharges** where they are from a single treatment plant or industrial premises or are linked by a common pipe or collection system.

It is advised that applications involving associated activities are discussed with SEPA prior to submitting an application.

THE APPLICATION FORMS

There are separate application forms available for Licence level activities and Registration level activities. Registration forms are not discussed in this document, but can be accessed at www.sepa.org.uk/water/water_regulation/car_application_forms.aspx or by contacting your local SEPA Office. There are also separate application forms available for Variation, Transfer or Surrender of a Licence.

The application forms (from A to I) have been designed so that you need only be supplied with the forms applicable to your circumstances.

FORM		ISSUES COVERED
A	All applications (except Transfer and Surrender applications – see Forms H and I below)	Form A is for all licence applicants to complete regardless of the regime involved. It supplies SEPA with the generic information applicable to your site (such as contacts and responsible person, the location of the site, signatures etc.)
B	Point Source discharges	Form B is for point source discharges to surface or groundwaters (excluding fish farms). The form includes the construction of new outfalls.
C	Point Source fish farms	Form C is for fish farm point source discharges and includes the construction of new outfalls
D	Abstraction and/or impoundment	Form D is for abstraction and/or impoundment activities and includes construction of new intakes and deep (>200m) borehole construction
E	Engineering	Form E is for all river engineering controlled activities excluding the construction of outfalls and intakes
F	Waste Sheep Dip and/or Waste Pesticide Disposal to land	Form F is for waste sheep dip or waste pesticide discharges to land.
G	Variation	Form G is for any application for an administrative or technical variation to a licence.
H	Transfer	Form H is for any application to transfer a licence in whole or in part to a different responsible person. No other forms need to be completed.
I	Surrender	Form I is for any application to surrender an authorisation in whole or in part. No other forms need to be completed.

To help you choose the correct sections, here are some example activities;

Activities	Forms required
<i>A new sewage treatment works or a new factory with an effluent discharge to a river (with a newly built outfall)</i>	Form A <i>plus</i> Form B (point source discharges)
<i>A new tank fish farm discharge with water abstraction >50 m³/day, and a newly constructed weir</i>	Form A <i>plus</i> Form C (Fish Farms) Form E (Engineering) Form D (Abstraction & Impoundment)
<i>A new hydro-electric impoundment (e.g. 2m height) and >100 m³/day water use.</i>	Form A <i>plus</i> Form D (Abstraction & Impoundment)
<i>Diversion of a river, or major erosion control works for a housing development</i>	Form A <i>plus</i> Form E (Engineering)

GLOSSARY FOR APPLICANTS

TERM	DEFINITION
Abstraction	An abstraction means removing water from the natural environment (e.g. river, loch, estuary, borehole, spring, wetland or the sea) by mechanical means, pipe or any engineering structure or works. This applies whether the water is removed or diverted permanently or temporarily or for the purposes of transferring to another part of the natural environment. N.B. water taken from a mains supply from Scottish Water is not included.
Active Channel Width	The active channel width of a river is defined as the portion of the river channel characterised by open water and if present, bare (unvegetated) river sediments. The width should be measured in the vicinity of the proposed works.
Active Floodplain	The active floodplain is the area of regular inundation by flood flows (inundated at least once every 5 to 10 years). The 10m contour lines on OS 1:25,000 scale maps (available on the GIS intranet site) give a good indication of the topography of land adjacent to rivers and can be used as a guide to determine if an area is likely to be frequently inundated. If you are in doubt about whether or not the activity falls within the active floodplain – please consult the local hydrology team who should be able to provide further guidance.
Aquifer	A permeable geological stratum or formation that is capable of both storing and transmitting water. A confined aquifer is where an upper layer of low permeability confines groundwater in the aquifer under greater than atmospheric pressure. An unconfined aquifer is where the upper surface of a saturated zone forms a water table within the water-bearing stratum. See " <i>Groundwater System</i> ".
Attenuation	A decrease in contaminant concentration or flux through biological, chemical and physical processes, individually or in combination (e.g. dilution, adsorption, precipitation, ion exchange, biodegradation, oxidation, reduction). See also " <i>Natural Attenuation</i> ".
Authorisation	In order to ensure proportionate controls over activities, the CAR Regulations set out provisions for three tiers of control: General Binding Rules (GBRs), Registrations and Water Use Licenses. Collectively the three forms of regulation are known as authorisations. Applicants may be covered by a GBR or issued with either a registration or a licence in accordance with Regulation 15(5) (a) or (b) of the Regulations.
Available Groundwater Resource	Defined by the Water Framework Directive as "the long term annual average rate of overall recharge of the body of groundwater less the long term natural rate of flow required to achieve the ecological objectives for associated surface waters specified under Article 4, to avoid any significant diminution in the ecological status of such waters and to avoid any significant damage to terrestrial ecosystems".
Bank	Permanent side of river, the top marked by first major break in slope, above which cultivation or development is possible.
Bankfull	Maximum point on banks at which floods are held within the channel before spilling over onto the floodplain.
Baseflow	That part of the flow in a watercourse made up of groundwater and discharges. It sustains the watercourse in dry weather.
Baseline	Measurements that characterise physical, chemical or other distinctive properties of groundwater and surface water unaffected by contamination.
Borehole	A hole sunk into the ground by drilling for abstraction of water or leachate or for observation purposes. A borehole may be lined with suitable casing and screened at appropriate depths.
CAR (Controlled Activities Regulations)	The Water Environment (Controlled Activities) (Scotland) Regulations 2011.

Catchment	The area from which water drains to a specified point (e.g. to a reservoir, river, lake, borehole).
Coastal Water	Water (other than groundwater) within the area extending landward from the 3 mile limit up to the limit of the highest tide or, where appropriate, the seaward limits of any bodies of transitional water, but does not include any water beyond the seaward limits of the territorial sea of the United Kingdom adjacent to Scotland.
Composite Sample	A sample taken over a range of locations or time intervals. For example a sample taken over an extended depth range in a borehole or surface water or a sample formed by combining a number of "discrete samples".
Conceptual Model	A conceptual understanding of the interrelationships occurring within a system. The conceptual model graphically describes how experts believe the system behaves. Once developed the model is continuously refined as scientists obtain an improved understanding of the water bodies concerned and their vulnerability to pressures.
Contamination / Contaminants	The introduction of any substances to water at a concentration exceeding the baseline concentration. A contaminant is any such substance.
CSOs	Combined Sewer Overflows.
Derogation	Term used for loss of water resources or deterioration in water quality (usually relating to a particular source).
Dilution	Reduction in concentration brought about by the addition of water.
Direct Discharge	The introduction into groundwater of any substance in List 1 or 2 without percolation through the ground or subsoil.
Discharge^[1]	The release of polluting substances from individual or diffuse sources in the installation through effluent directly or indirectly into water bodies as defined under Article 2 (1) of Directive 2000/60/EC.
Dry Weather Flow	Usually the expected flow in a sewer following 7 days without rain. However, a sewer system may be designed to cope with a greater dry weather flow – if so please state the design dry weather flow (m ³ /d)
DWPA	Drinking Water Protected Area.
Effluent	Any liquid, including particles of matter and other substances in suspension in liquid usually derived from sewage or a trade process.
Embankment (dyke, levee)	Artificial bank built to raise the natural bank level to reduce frequency of flooding of adjacent land.
Environmental costs	Represent the costs of damage that water uses impose on the environment and ecosystems and those who use the environment (e.g. a reduction in the ecological quality of aquatic ecosystems or the salinisation and degradation of productive soils).
Environmental Objectives	Target status for a water body. WEWS Act 2003: The objectives required to comply with Article 4 of the Water Framework Directive together with any objectives required to comply Article 7 of the Water Framework Directive.
Environmental Service	'Environmental service' means the carrying out, operation or maintenance of any activity which is, in the view of SEPA, solely for the benefit of the environment, not being for commercial purposes or in implementation of a statutory duty. <i>SEPA Guidance, updated from time to time, is available via the website or on request.</i>
EOs	Emergency Overflows.
EQS	Environmental Quality Standard.

Floodplain	The valley floor adjacent to a river that is (or was historically) inundated periodically by flood waters.
Fresh water	Naturally occurring water having a low concentration of salts, or generally accepted as suitable for abstraction and treatment to produce potable water (UN).
General Binding Rules (GBRs)	Activities covered by GBRs do not need to be notified to SEPA. There are a series of generic conditions contained in the Controlled Activities Regulations that must be complied with.
Green Bank Protection	Bank protection works using materials such as rip-rap restricted to the bank toe, bio-degradable geotextiles, and untreated log revetments.
Grey Bank Protection	Bank protection works using materials such as rip-rap over the full height of the bank, gabion baskets, concrete, grouted stone, brick or block stone work, sheet piling, wood piling and non bio-degradable geotextiles.
Groundwater	Water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.
Groundwater Body	Defined by the Water Framework Directive as "a distinctive volume of groundwater within an aquifer or aquifers".
Groundwater Vulnerability	The concept of describing how vulnerable groundwater is to pollution from certain activities. It can depend on the:- <ul style="list-style-type: none"> • presence and nature of overlying soil • presence and nature of superficial or drift deposits • nature of strata and associated hydrogeological characteristics • depth of unsaturated zone
Habitats Directive	Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.
Height	The height of an impoundment is the height as measured from the downstream toe of the impoundment structure to the crest, or top of the spillway.
Hydrology	The study of water at ground surface.
Hydromorphology	The physical characteristics of the shape, the boundaries and the content of a water body. The hydromorphological quality elements for classification of ecological status are listed in Annex V.1.1 and are further defined in Annex V.1.2 of the Water Framework Directive.
Hydromorphology High Status	The morphological quality elements show only minimal alteration from an undisturbed condition. No major and obvious alterations to the bed and banks (including bank protection works and embankments). No evidence of channelisation, straightening or dredging. Complex and continuous riparian vegetation present (mixture of trees, shrubs, grasses etc.). No major structures present.
Impact	The environmental effect of a pressure (e.g. fish killed, ecosystem modified).
Impoundment	An impoundment means:- a) any dam, weir, or other works by which surface water may be impounded or b) any works diverting surface waters in connection with the construction or alteration of any dam, weir or other works falling within a). Raising the level of an existing natural loch is also considered an impoundment. N.B. a pond or lake created by excavation below the pre existing ground level (e.g. a dug pond or flooded quarry) is not included. Tank, lagoons or other artificial treatment systems (e.g. ponds that are part of a SUDS system) are not included.
Indirect Discharge	The introduction into groundwater of a substance after percolation through the ground or subsoil.
Infiltration	The entry of water, usually as rain or melted snow, into soil, rock or other media.

Inland Water	All standing or flowing water on the surface of the land (other than transitional water), and all groundwater, within the landward limits of coastal water.
Inorganic	Any substance that is not organic.
Instream River Structures	All structures that occupy a portion of the channel.
Lade	A gravity fed and predominantly open, continuous artificial channel or stream leaving a watercourse and re-entering the water environment at a downstream location.
Land drainage	A series of subsoil pipes or ditches, which are designed to drain an area of land to allow development or for agricultural use.
Licence	A licence is required for higher risk activities and will contain site specific conditions relating to that activity. A licence requires the identification of a "responsible person" who is responsible for ensuring compliance with the conditions of the licence. A licence is therefore a person-specific authorisation.
List I and II Substances	Dangerous substances defined by EC Groundwater Directive.
Loch	An inland body of water formed in a depression on the land surface. Usually a loch is greater than 1 hectare in area and has a discernable inlet and outlet and has no detectable flow of water.
Loch Structure	Any structure built on the bed, shore or in the vicinity of a loch.
Managed weir	An impoundment across a watercourse that is associated with water abstraction or where the upstream water level can be raised or lowered due to operation of sluice gates, valves, etc.
Offline impoundments	Offline impoundments are built to store water but do not hold back flows in wetlands, rivers, lochs or estuaries and consequently do not affect downstream water flows, sediment transport or migration of fish.
Organic (compound)	Any substance containing carbon-carbon bonds, or methane or its derivatives.
Passive weir	An impoundment across a watercourse that is not associated with an abstraction of water and where the water level cannot be varied. Typically the sole purpose is to raise the water level upstream of the structure.
Pathogen	Any disease-causing agent, such as a virus or bacterium.
P.E. (Population Equivalent)	Population Equivalent. A measure of the organic bio-degradable load of an effluent prior to treatment. One population equivalent (1 p.e.) has a five day biochemical oxygen demand (BOD5) of 60 grammes of oxygen per day. The load is calculated on the basis of the maximum average weekly load entering the treatment plant during the year, excluding unusual situations such as those due to heavy rain.
Percolation	The passage of a liquid through a filtering medium.
Permeability	A measure of the rate at which a fluid will move through a medium.
Pipeline and Cable Crossings	Pipeline or cable crossings which require a trench to be excavated across the bed of the watercourse.
Point Source pollution	Pollution arising from a discrete source , e.g. the discharge from a sewage treatment works, petrol station, septic tank, landfill, etc.

Pollution	Water Environment and Water Services (Scotland) Act 2003 definition: "Pollution", in relation to the water environment means, the direct or indirect introduction, as a result of human activity, of substances or heat into the water environment, or any part of it, which may give rise to any harm; and "harm" means:- a) Harm to health of human beings or other living organisms, b) Harm to the quality of the water environment, including: ...i) Harm to the quality of the water environment taken as a whole, ...ii) Other impairment of, or interference with, the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems, c) Offence to the senses of human beings, d) Damage to property, or e) Impairment of, or interference with amenities of other legitimate uses of the water environment.
Pore Space	The void between grains or crystals which make up geological materials.
Porosity	Ratio of volume of void space to the total volume of the rock.
Porous	Having microscopic pores between the rock grains (not necessarily interconnected).
Potable Water	Water of suitable quality for drinking.
Pressure <u>[1]</u>	The direct effect of the driver (for example, an effect that causes a change in flow or a change in the water chemistry of surface and groundwater bodies).
Prior Investigation	An investigation to assess whether an activity is likely to result in groundwater pollution. Used in relation to activities subject to the requirements of the Groundwater Directive.
Priority Substance	The WFD requires Member States to adopt measures to eliminate pollution of surface water by the priority substances. A list of 33 priority substances or group of substances have been established, which have been shown to be of major concern for European Waters. Within this list, 11 substances have been identified as priority hazardous substances which are of particular concern for the inland, transitional, coastal and territorial waters. These priority hazardous substances will be subject to cessation or phasing out of discharges, emissions and losses within an appropriate timetable that shall not exceed 20 years.
Protected Area	Areas designated under WEWS designation orders and through a number of other European Directives because they require special protection, for example bathing waters, drinking waters and areas identified for the protection of water dependent species and habitats.
Raised loch	A loch where the surface water level has been increased above its natural level. This is typically due to the installation of a physical structure, such as a small dam or an embankment, which raises the level of the outflow from the loch.
RBD	River Basin District.
RBMP	River Basin Management Plan.
Receptor	A groundwater or surface water, amenity or abstraction point.
Registration	A registration notifies SEPA of medium risk activities and enables SEPA to monitor cumulative impacts. A registration authorizes the activity as described in the application and so will specify the scale of the activity, its location and SEPA may set additional conditions. A registration authorizes an activity and any person can then carry out that activity.
Reservoir	Reservoirs are artificial storage places for water, such as ponds, impoundments and raised lochs, from which the water may be withdrawn for such purposes as electricity generation, irrigation or water supply.
Revetment	Facing built to reinforce and support a bank.

Riparian zone	The area of land adjoining a river channel (including the river bank) capable of exerting physical, hydrological and ecological impacts on the aquatic ecosystem (e.g. shading, leaf litter input). In this standard, the term 'riparian zone' does not include the wider floodplain.
Risk Assessment	a) Within CAR, the risk to the water environment posed by the carrying on of a particular activity must be assessed; b) Within Characterisation, an assessment of the risk of water bodies failing their environmental objectives must be carried out.
River Basin Management Plan	A plan that must be produced for each River Basin District within a Member State in accordance with Article 13. The plan shall include the information detailed in Annex VIII.
Run-Off	Rain or melted snow that drains from the land surface.
Saturated Zone (phreatic zone)	The zone in which the voids of the rock or soil are filled with water at a pressure greater than atmospheric. The water table is the top of the saturated zone in an unconfined groundwater system. In general, flow on a macro scale is horizontal and typically faster than for unsaturated zone flow. Flow rates between different types of strata vary over several orders of magnitude.
Sediment Management	Any works which involve moving, introducing or removing sediment from the channel of a river or bed of a loch, e.g. dredging, gravel extraction and pool maintenance.
Sewage Effluent	Any effluent from sewage disposal, or sewage works vested in a sewerage authority.
Significant pressure	In the context of the WFD, a pressure that, on its own, or in combination with other pressures, would be liable to cause a failure to achieve the environmental objectives set out under Article 4.
Siltation	Silt deposition on a river bed – often unnaturally high due to land-use change and channel modifications.
Sinuosity	Degree of deviation from a straight line; usually defined as channel length/valley length.
Soakaway	System for allowing water or effluent to soak into the ground, commonly used in conjunction with septic tanks.
Source	Point of abstraction of water, e.g. well, borehole, spring or the point, area or origin where a hazardous substance or agent may enter the natural system.
Spot Samples	Groundwater - a sample taken from a specific depth in a borehole. Surface water - a sample taken almost instantaneously from a specific location in a surface water, or from a discharge. Synonymous with " <i>Discrete Sample</i> ".
Spring	Natural emergence of groundwater at surface.
Status	The physical, chemical, biological, or ecological behaviour of a water body.
Subsistence	Charges applied to certain authorisations reflecting SEPA effort in regulating that authorisation (for example, inspections, audits and environmental monitoring).
Surface Water	Inland water (other than groundwater), transitional water and coastal water.
SUDS (Sustainable Urban Drainage System)	A "treatment train" sequence of management practices and control structures designed to drain surface water in a sustainable fashion (providing attenuation and or treatment of the water). More guidance is available at : www.ciria.org.uk
Trade Effluent	Effluent derived from a commercial process/premises.
Transboundary	Crossing the boundary between Member States, River Basin Districts etc.

Transitional Water	Water (other than groundwater) in the vicinity of river mouths which is partly saline in character as a result of its proximity to coastal water but which is substantially influenced by freshwater flows.
Transport Route	Footpath, cycle route, road or railway line. Excludes an airport runway.
Treatment Train	A series of techniques employed to change the flow and characteristics of surface water discharges. As a general principle it is better to deal with runoff locally (i.e. in the first stages of a management train close to the source of runoff) returning water to the natural drainage system as close to source as possible.
Unsaturated Zone (vadose zone)	The zone between the land surface and the water table. The pore space contains water less than atmospheric pressure, as well as air and other gases. Saturated bodies, such as perched groundwater may exist in the unsaturated zone. Also called the Vadose Zone. Overall flow, on a macro scale, is downward (gravity driven); moisture content is low and water normally flows slowly in close contact with the rock matrix.
Water Bodies	A 'body of surface water' is a discrete and significant element of surface water such as part of a burn, river or canal or a loch, reservoir or a transitional water such as an estuary or brackish lagoon or a stretch of coastal water. A 'body of groundwater' is a distinct volume of underground water within an aquifer or aquifers.
Watercourse	Includes all rivers, streams, ditches, drains and passages through which water flows, except mains and other pipes used for the purpose only of providing a supply of water to any premises.
Water Environment	All surface water, groundwater and wetlands.
Water Resources	Term commonly used to refer a) to hydrological characteristics of water (flow, levels etc) or b) to activities which may cause impacts on these characteristics (i.e. abstractions or impoundments).
Water Table	Top surface of the saturated zone within the aquifer.
Weir	Device to control flows above a pre-determined level. See definitions of passive and managed weirs noted separately.
Well	A hole sunk into the ground for abstraction of water or leachate or for observation purposes. A well is generally of larger diameter than a borehole and dug rather than drilled.
Wetland	An area of ground the ecological, chemical and hydrological characteristics of which are attributable to frequent inundation or saturation by water and which is directly dependent, with regard to its water needs, on a body of groundwater or a body of surface water.
WEWS	Water Environment and Water Services (Scotland) Act 2003.
WFD, The Directive	The Water Framework Directive 2000/60/EC establishing a framework for Community action in the field of water policy.
Yield	Quantity of water able to be removed from an abstraction source.



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2011**

LICENCE APPLICANT GUIDANCE

**FORM A – RESPONSIBLE PERSON, OTHER
CONTACTS AND SITE DETAILS**

Guidance structure:

FORM A:

- Data protection notice
- 1. Responsible Person and Other Contacts
- 2. About The Site or Scheme of Associated Activities
- 3. National Security and Commercial Confidentiality
- 4. Signatures and Declaration
- 5. Fees and Charges
- 6. Application Checklist
- 7. What To Do Next - Activity Specific Forms

DATA PROTECTION NOTICE

The Data Protection Notice on the front of your application form gives you information about how SEPA may process the information which you supply in your application. SEPA must comply with the Data Protection Act 1998 which specifies how personal information can be collected, stored, processed and disseminated. It also gives persons a right to be informed about the information which organisations hold on them, and how this information has been used.

If you feel that data may have been handled inappropriately, you can contact the Information Commissioner's Office. The Information Officer is an independent official appointed by the Crown to oversee the Data Protection Act 1998, the Freedom of Information Act 2000 and the Environment Information Regulations 2004. More information can be obtained from the Information Commissioner's website at www.informationcommissioner.gov.uk.

SECTION 1: RESPONSIBLE PERSON AND OTHER CONTACTS

1.1.1 Responsible Person

The CAR licensing regime requires the licence holder to nominate a “responsible person” who shall be responsible for securing compliance with the terms of the licence and the conditions specified within it. A ‘responsible person’ may, in legal terms, be a **natural** person (i.e. an individual) or a **legal** person (i.e. a registered company, a corporation established by statute or charter, or a partnership).

Below are more detailed descriptions of legal and natural responsible persons

Legal Person	A legal person is not an individual person, but is an organisation recognised in the eyes of the law as having a distinct personality from the individuals who are its members, directors or partners. If such a legal person is to be the ‘responsible person’, the full name of the legal person, its status in law (e.g. public limited company, partnership), registration number if a company and contact address should be inserted where indicated. An individual, who has authority to bind the organisation by signing legal documents on its behalf, must sign the application on behalf of the organisation. Where the organisation is a company, this will normally be a director or company secretary. In the case of a partnership, this will normally be a partner. Details of the individual's full name and position within the organisation is required to be inserted, and the application form signed by that individual.
Natural Person	If you are a natural responsible person, you, as an individual, will be responsible for securing compliance with the terms and conditions of the licence. You should therefore insert your full name with a contact address. You must sign the application form.

NB Scots law does not recognise clubs, friendly societies, building societies, trade unions and other unincorporated or voluntary associations (such as residents associations) as legal persons, so such bodies cannot be ‘responsible persons’ and will require to nominate a **natural** or **legal** person to be the ‘responsible person’ on its behalf.

A “responsible person” may ultimately be subject to criminal liability if the terms of the licence are breached. If you are unsure of the implications of being the ‘responsible person’, you should obtain legal advice before continuing.

The application form asks you to specify if the responsible person is an individual or corporate body and if so what type. The name should be an individual's name where the responsible person is to be a natural person and the name of a company or organisation if the responsible person is to be a legal person.

The **address** for the Responsible person should be the registered office if this is a company – otherwise an address where the responsible person can be contacted (which may be different from the site address where the “activities” occur).

1.1.2 Anything to Disclose?

Although it is not SEPA's intention to carry out a compliance test in respect of each individual application due to the escalating costs this would involve, SEPA expects that persons applying to take on the responsibility of licence conditions should not do so lightly. Therefore, if you feel, for whatever reason, that you might **not** be able to ensure compliance with any licence conditions, please declare your concerns now. SEPA will make appropriate enquiries if it is felt that licence conditions are not being complied with.

1.1.3 Other Contacts, Billing and Correspondence Addresses

Please specify if the address given for the responsible person is to be used for other purposes by indicating if the responsible person and the address provided in 1.1.1 are the same as the **applicant contact, billing contact, correspondence address and address for serving of notices**. If not, enter these details under 1.2 and/ or 1.3.

Applicant Contact	It will help us to have someone we can contact if there are any queries or issues regarding the application. This person should have the authority to act on your behalf. This could be an agent or operational manager rather than the responsible person or applicant.
Billing Address	If you are applying for a licence then you may be required to pay an annual subsistence charge. Details should be provided of the address you wish invoices to be sent to along with a contact name.
Correspondence Address	This is the address where any correspondence such as official letters and copy of the licence are to be sent.
Address for Serving of Notices	There may be occasions when SEPA must serve notice on the responsible person, and it is important that you detail if there is a specific/different address you wish such notices to be sent, or if you wish the actual licence (once determined) to be issued to an alternative address, e.g. an agent's address.

SECTION 2: ABOUT THE SITE OR SCHEME OF ASSOCIATED ACTIVITIES

2.1 Site Details

Where the site address (i.e. the address from where the controlled activities are carried out) is different to the registered office please provide the full address or location details here

The activities at your site may fall under a Companies House Standard Industry Code (SIC), if so please provide the SIC code number.

2.2 Activities carried out at the site

Please state the number of activities you are applying for under each regime;

- Point Source discharges to land (including soakaways and waste sheep dip or waste pesticide disposal), groundwater or surface waters
- Impoundment of water
- Abstraction of water (including borehole construction)
- Engineering within, or within the vicinity, of freshwaters

This section indicates to SEPA, and to you, the correct additional forms to be completed and submitted with your application.

2.3 Grid Reference

Please supply a 10 character National Grid Reference (NGR) for the site location i.e. a central or key point at the site which is representative of its location (e.g. XY 1234 5678). If the site is large, or extends beyond a single point, please give the NGR for the front gate/entrance.

If in doubt about your NGR you may seek help from your local SEPA office who can check a grid reference with you before you submit an application, but will not generate one for you.

National Grid References should be given in at least a **ten character** format e.g. XY 1234 / 5678. A quick guide is given here, but more detailed guidance is available from the Ordnance Survey at: www.ordnancesurvey.co.uk/oswebsite/getamap/.

GUIDANCE ON HOW TO GIVE A 10 CHARACTER NATIONAL GRID REFERENCE (Use at least a 1:25000 scale OS Map or a 1:10000 if possible):

1. Note the letters identifying the 100 000 metre square in which the point lies. These letters can usually be found in each corner of the map.	NG
2. First quote EASTINGS. Locate first VERTICAL grid line to LEFT of the point and read LARGE figures.	NG 91
3. Subdivide the 1000 metre square into imaginary 10 by 10 squares. Estimate which imaginary square to the RIGHT of the VERTICAL grid line identified in step 2 the point lies in.	NG 914
4. Estimate tenths from the LEFT of the imaginary square to the point.	NG 9142
5. Then quote NORTHINGS. Locate first HORIZONTAL grid line BELOW the point and read LARGE figures.	NG 9142 58
6. Subdivide the 1000 metre square into imaginary 10 by 10 squares. Estimate which imaginary square ABOVE the HORIZONTAL grid line identified in step 5 the point lies in.	NG 9142 582
7. Estimate tenths from the BASE of the imaginary square to the point.	NG 9142 5826

2.4 The Site Plan

Your site plan will vary depending upon the size and scale of the activities involved. Ideally your plan will be **at least** 1:25,000 scale and clearly show the location of the site, and the locations of all the related activities being applied for. This is an overview plan to establish correct activity locations and the nature of the whole site. Detailed plans and designs for specific activities may be asked for in other forms. It is important that any submitted plans are to scale, clear and legible.

2.5 Existing SEPA licenses associated with the site

Your site may currently have an environmental licence issued by SEPA. This could be:

- Other CAR licenses or registrations
- Waste Management licence,
- Pollution Prevention Control permit,
- Air Pollution Control authorisation,
- Integrated Pollution Control Authorisation,
- Control of Pollution Act discharge consent
- Groundwater authorisation

Where such an environmental licence exists for the site, please provide the reference number. This is usually written on the licence document. Continue on a separate sheet if necessary.

2.6 Planning Permissions and Building Warrants

If appropriate please detail any planning permission or building warrant reference numbers associated with the activities. It may be that certain environmental conditions have already been placed on your development that SEPA wish to take into account during the determination of the application.

2.7 Non-Technical Summary

You must provide a non-technical summary of the information submitted in your application. This should cover your answers to all the questions relevant to your application. Where possible, it should follow the same order in which you have answered the other questions on the application form, highlighting the main points in non-technical language that is understandable by the general public as non-specialists. As a guide, a non-technical summary of the following information should be included:

- a description of the controlled activity(ies) being applied for comprising information on siting, design and size;
- a description of the measures envisaged in order to mitigate and, if possible, remedy significant adverse effects on the water environment;
- any data provided to SEPA in order to identify and assess the main effects which the controlled activity(ies) is/are likely to have on the water environment;
- an outline of the main alternatives studied by you and an indication of the main reasons for the choice made, taking into account the environmental effects;

The amount of detail you provide in the Non-Technical summary depends on the complexity of the application. Simple activities will clearly require less detailed information to be submitted. If you are unsure of the level of detail required, please contact your local area office for further advice.

SECTION 3: NATIONAL SECURITY AND COMMERCIAL CONFIDENTIALITY

This section allows you to initiate a claim for information to be protected as **commercially confidential** and asks you to tell us if you have applied to the Scottish Ministers for a direction on **national security**.

3.1 Commercial Confidentiality

You have the right to claim that information contained within or attached to an application is commercially confidential. If you wish to do this you should tick the 'yes' box in response to this question. You should submit an attachment giving precise reasons to justify any such claim. If possible, please submit the information that you consider to be confidential in a way that will allow it to be removed easily. For example, you may submit it on separate pages rather than mixing it with information for which confidentiality is not claimed. You should mark the information 'claimed confidential' where appropriate on the application form or any attachments and ensure it is clearly referenced.

N.B. Please note that an additional application fee is due where a commercial confidentiality request is made. Please refer to Clause 12 of the "Charging Scheme" for the correct fee and ensure that this is included in the total licence application fee submitted.

SEPA will consider whether any such claim is justified. We are required to let you know within 28 days of receipt of the application whether or not we agree that the information is confidential. If we agree, the application will be placed on the register with the confidential information removed. If SEPA does not agree, you may withdraw the application or appeal to the Scottish Ministers. If you do not appeal or withdraw the application within 21 days of our decision on the confidentiality claim, we will place the information on the public register. If you appeal, we will initially place the information for which commercial confidentiality has not been claimed on the public register. The other information will only be placed on the register, if appropriate, once the appeal has been determined.

3.2 National Security

You may consider that your application includes information that needs to be protected for reasons of national security. Any such claim should be submitted for determination by the Scottish Ministers, who will direct SEPA. If you believe there is any information in your application that should be kept from the public register for reasons of national security, please do not write anything on the Application Form that reveals this. Rather, you should provide details on a separate sheet, which is clearly referenced, and attach a copy of the application to the Scottish Ministers for a national security direction.

You should also contact the appropriate SEPA office before submitting the application to ascertain who is authorised to receive such information. You should then submit the full application in a sealed package with the name of the SEPA contact clearly marked upon it. To assist prompt processing, the application form (i.e. not any attachments) should be photocopied and, together with any application fee, should be placed alongside the envelope containing the full application in another package addressed to the relevant SEPA office.

SECTION 4: SIGNATURE AND DECLARATION

Please read the declaration carefully, ensuring that the ‘responsible person’ (or a duly authorised person on behalf of a responsible person) signs and dates the application form. If the application is for transfer of licence, then the current responsible person and proposed transferee must both sign the form, as it is a joint application.

It is an offence under regulation 44(l) of the Water Environment (Controlled Activities) (Scotland) Regulations 2011 to make any statement which that person knows to be false or misleading in a material particular, or recklessly to make a statement which is false or misleading in a material particular, where the statement is made - ii) for the purpose of obtaining an authorisation issued under these Regulations to that or any other person, or the variation, transfer or surrender of an authorisation. If you make a false statement we may prepare a report for the Procurator Fiscal who may prosecute you and if you are convicted, you are liable to a fine or imprisonment (or both).

If you require any additional information or assistance please visit www.sepa.org.uk/water/water_regulation.aspx

SECTION 5: FEES AND CHARGES

When you send SEPA any application, you need to enclose a one-off application fee for processing. The fee should be calculated using the SEPA Charging Scheme which is available at www.sepa.org.uk/water/water_regulation/charging_scheme.aspx. The fees for the controlled activities under different regimes are calculated separately and then combined.

The application cannot be processed unless the application fee is correct. If the appropriate fee is not enclosed the application will be returned to you. Please complete the box provided, specifying the amount you are submitting.

5.1 Fee Calculator

To aid calculation of the application fee, SEPA has developed an online calculator for applicants which can provide a print out summary which should be appended to your application where the calculator has been used. Visit our website or contact your local office for more details.

5.2 Activity Summary & Commercial Confidentiality Request

The box provides a break down of your charge into the separate regime elements. This is to aid processing and ensures the correct fee is submitted. Remember, any associated Registration level activities must also be accounted for here.

Where applicable, please remember to add the correct fee for determining a request for commercial confidentiality (refer to Clause 12 of the “Charging Scheme”).

5.3 Payment Methods

SEPA are now able to receive several payment methods, electronically or otherwise. Please complete the relevant details for the method chosen.

SECTION 6: APPLICATION CHECKLIST

The application checklist is provided for your convenience. Please use it to ensure that you have included everything in your application before sending it to the appropriate office detailed on the front page of the application form.

Notes: Refusal of application

You can assume that your application has been refused if:

- We notify you of a decision to refuse the application. SEPA will notify the applicant of the reasons for refusal; or
- We do not give you a decision within four months of receiving it (or any other deadline you agree to in writing). SEPA will then notify the applicant of the reasons for refusal.

If we refuse your application or impose conditions which you consider unreasonable, you can appeal to the Scottish Ministers under Regulation 50 of the Water Environment (Controlled Activities) (Scotland) Regulations 2011. You must send any such appeal to the Scottish Ministers within 3 months of the refusal date or the issue of the licence.

SECTION 7: WHAT TO DO NEXT – ACTIVITY-SPECIFIC FORMS

The next forms you must complete should relate only to the activities being carried out at your site. Sites with multiple associated activities should ensure that all relevant forms are submitted together within the same application, including any Registration forms. **Only activities associated with your site or scheme of activities can be applied for within the same application.**

The next forms are:

Point Source Discharges –general (excl fish farms)	B
Point Source Discharges – Fish Farms	C
Abstraction of water	D
Impoundment of water	D
Engineering of inland waters	E
Waste Sheep Dip And Waste Pesticide Disposal To Land	F



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

LICENCE APPLICANT GUIDANCE

**FORM B – POINT SOURCE DISCHARGES TO
SURFACE AND GROUND WATERS (EXCLUDING
FISH FARMS)**

FORM B POINT SOURCE DISCHARGES - GENERAL**INTRODUCTION**

There are 2 forms available for point source discharges to the environment. For **fish farms** please ensure you complete form C. For any other point source discharge to surface waters or indirect/direct discharges to groundwater please complete form B. You can include details of the engineering of new outfalls within the form, and do not have to complete Form E - Engineering.

SINGLE ACTIVITIES

If you are in doubt about which forms or sections to complete then remember that each effluent treatment unit is considered to be **one** activity (even if separate units all discharge to the same outlet). For example if you have a site that has a treated trade discharge, and also a sewage discharge that has its own treatment unit, then these are two separate activities and must be detailed in the form separately. However, if both of these effluents are treated by one single treatment unit, then this are considered to be a single activity.

SECTION 1: GENERAL DISCHARGE INFORMATION**1.1 Drainage Plans**

You must submit an annotated plan that displays the drainage arrangements of your site, such as the drainage layout, location of treatment facilities and all discharge points. The detail necessary will depend on the complexity of your site. In some circumstances e.g. small and simple sites, the Site/Scheme Plan required by Form A may contain the necessary drainage details i.e.

- Drainage layout
- All discharge point locations i.e. the point at which the discharge reaches the water environment
- Location of treatment units and sampling chambers
- Identified pollution risk areas (e.g. oil and chemical stores)

If so please reference this plan "SITE/SCHEME PLAN and DRAINAGE PLAN". However, please ensure that the drainage arrangements on your plan are clearly visible, annotated and scaled.

1.2 Existing or New Discharges

Most applications will be for new discharges; however your discharge may already exist but not yet be licensed by SEPA. Please tick "existing" in the box if this is the case. Alternatively, your discharge may be being altered (e.g. content, scale or location) and you should therefore tick the "alteration to existing" box if this is the case.

1.3 About the Outlets

You may be making a new discharge from an existing outlet, or a new outlet. It is important, therefore, to clarify if the outlet is new, existing or being altered. Again, we also need an accurate National Grid Reference for EACH outlet discharging effluent from your site (minimum 10 characters, e.g. XY 1234 5678). Please also state the outfall diameter.

SEPA (and you) must be able to obtain a representative sample of the effluent to aid assessment of compliance with any licence conditions.

Your treatment facility or outlet should be equipped with a suitably designed sampling chamber or some means of safely obtaining a representative sample of the effluent prior to its discharge to the water environment. Please describe these facilities. They should be identified on your plans.

If the outlet is new, or existing and being modified, you must submit the outlet design to SEPA to allow us to assess the engineering implications. **You do not have to complete form E (engineering) simply for**

a **new/altered outfall** unless SEPA believes the planned work will have a significant effect on the receiving water.

1.4 Environmental Service

Please identify if any of the discharges qualify as “Environmental Service”. If you are undertaking a controlled activity purely for “environmental service” e.g. by enhancing or restoring ecological integrity without obligation or legal requirement on your part, you may apply for your licence at a reduced fee. You should have discussed this issue with your local SEPA office for more detailed advice, prior to making an application.

Set out your claim on a separate sheet detailing why you consider an Environmental Service claim is appropriate and which activities are involved.

1.5 Table 1.5 Discharge Activity Summary

You may be applying for several similar discharges, or several types of discharge from one site. Remember if several effluents are treated by a single treatment plant, then please identify the main purpose of that treatment unit e.g. sewage treatment etc. Each main type of discharge is categorised here, please choose the type(s) applicable to your site.

This will allow SEPA to know at an early stage if we have received all appropriate parts of the form from you.

Table 1.5 allows you to summarise a number of different discharges occurring at your site relating to your licence application. Please detail

- the level of licence applicable (Simple licence or complex licence)
- The NGR of the outlet to the water body
- Outlet diameter
- Type of receiving environment i.e. what sort of water body is the receiving environment
- If a partial soakaway is in use
- Name of the receiving water body if known.

Note on calculating population equivalent (p.e.)

Domestic sewage effluent: Full details on calculating population equivalent for domestic dwellings can be found in 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 (<http://www.britishwater.co.uk/>).

Non-domestic sewage effluent: Multiply the number of people using the system by the BOD load (g/day) and divide by 60 (60g is the average BOD load for one person in one day). Information on BOD loading is contained in the *Code of Practice*.

For larger developments: (normally Scottish Water) An appropriate census figure for occupancy can be used. This should be discussed with your local SEPA office beforehand.

Receiving Environment

Please tell us the destination of the discharge within the water environment. This could be to a surface water body such as a river or loch, or to the coast or “transitional waters” (transitional waters are inland tidal waters such as an estuary). Or you may have a discharge to a constructed soakaway or direct to land or groundwater. If the discharge is to a soakaway, please tick the box provided (even it is only a partial soakaway – there is a further question about this later). If the discharge is into or onto land without a soakaway, please tick “land”. If a direct discharge to groundwater i.e. without soakaway, then please tick groundwater.

You may know the name of the receiving water. If not and the water is a tributary of a named river you could state “tributary of *named river*”. Your local SEPA office may be able to give you more advice on this. Otherwise, if you are unsure you may leave this box empty.

POINT SOURCE – SPECIFIC DISCHARGES

The following sections are split according to types of discharge:

- **Section 2** - Sewage Effluent (Sewage Treatment Works, Combined Sewer Overflows etc)
- **Section 3** - Other Effluents (e.g. trade and industrial effluents)
- **Section 4** - Surface Water Discharges (including those from Sustainable Urban Drainage Systems (SUDS))
- **Section 5** - Discharges to land (non-agricultural)

SECTION 2: SEWAGE EFFLUENTS

Please detail the population equivalent served by your sewage treatment facilities. Giving the total population equivalent (p.e.) of all effluent received at the works.

For sewage or organic discharges “p.e.” stands for population equivalent and is the term used to express the Biochemical Oxygen Demand (BOD) load of waste water. To work out the p.e multiply the daily flow of the discharge (m³/d) by the average BOD (mg/l) and divide by 60. (There is 60g BOD in the average load from one person per day). Further guidance on p.e and BOD loadings for particular discharge types can be found at: <http://stir-ser-net01/cms/uploadedFiles/BRITWATFlows.pdf>.

Justification for not connecting effluent to any existing mains network must be provided if your premises are within a sewered area.

2.1 Flows

We require several types of anticipated sewage flow to be provided. For example, the flow of **domestic sewage** and the flow of anticipated **trade effluent** going to the treatment unit should each be detailed (in m³/day). Additionally the expected infiltration of water into the sewerage system should be given.

Please also detail the current and design dry weather flow (i.e. the flow expected after 7 days without rain).

2.2 Sewage Treatment Works

Please state the mean daily flow of final effluent from the sewage treatment works to the water environment. This is an average flow measured on a daily basis in m³/d. Additionally, you should tell us the maximum flow rate (litres per second) that can be received at the works and undergo FULL treatment prior to discharge to the water environment.

The level and type of sewage treatment given should be detailed here e.g. settlement, activated sludge etc. Where applicable please categorise treatment into primary, secondary and tertiary treatment. Additional documents or diagrams can be appended to help explain your treatment system, but must be clearly referenced (e.g. with the question number from the form).

It is important that mechanical failure is guarded against and that systems are in place to warn of such failures. There should be maintenance arrangements to ensure that the sewage treatment system is in good working order and is maintained in accordance with the manufacturers’ or designers recommendations, or in any case recognised best practice.

2.3 Combined Sewer Overflows (CSOs)

No further guidance is presented here – applications should follow previous formats agreed with Scottish Water by completion of the detailed table in the form.

2.4 Storm Tanks

Please justify the size of the storm tank provided and explain how tank contents will be returned to treatment once the high flow has abated i.e. explain how the storm tank capacity and function has been designed for the purpose of preventing polluting releases to the water environment during high flows.

2.5 Emergency Overflows (EOs)

The need for an EO must be fully justified to SEPA, due to the potential environmental harm from such flows. There is a presumption against use of EOs except in exceptional circumstances, and adequate storage in the system may be able to counter the need for an EO. You are advised to contact SEPA to discuss this issue prior to submission of your application.

SECTION 3: OTHER EFFLUENTS (E.G. TRADE, COMMERCIAL AND INDUSTRIAL)

Every commercial or industrial effluent will be different, and this guide cannot detail all types.

3.1 will allow you to give a description of your effluent and aid our understanding of it. Each effluent discharging from individual treatment units should be described.

3.2 The **composition** of your effluent must be detailed. The tables within the form will allow you to list the key pollutants within both the treated and untreated effluent i.e. the maximum and mean concentrations of pollutants within the treated “final” effluent, including the chemicals highlighted in the Annex I of Form B. For discharges to groundwater please detail the minimum and mean annual concentration of pollutants in the effluent. Please give concentrations in units of mg/l or ug/l where appropriate.

3.3 SEPA also needs to know if the untreated effluent contains substances listed in Annex I, even if they have been removed by treatment. Please detail the maximum and mean annual concentrations of such substances if they are found in the influent i.e. untreated effluent.

3.4 If you store chemical and liquid wastes on site this must be properly contained to prevent polluting releases to the water environment. Please detail how these chemicals are stored and what containment measures are in place to prevent accidental releases.

Summary Note: Annex 1 substances:

For untreated effluent (i.e. the influent); give the mean annual concentration of each Annex 1 substance in the influent.

For the treated effluent; (i.e. the final effluent) give the maximum concentration and mean annual concentration for these substances.

If there are daily, weekly or seasonal patterns in the concentrations of these pollutants please detail this in the form, showing the degree of change expected over the relevant period.

3.5 Treatment: Each effluent treatment unit must be described. If applicable, treatment descriptions can be split into primary, secondary and tertiary levels of treatment. If your effluent has a significant Biochemical Oxygen Demand (BOD) i.e. it is an “organic” discharge, then please state the BOD level (mg/l) contained within it and the relevant **population equivalent**.

3.6 and 3.7 Please tell us the maximum and mean daily volumes discharged i.e. in a 24 hour period how much effluent will enter the water environment. Use the units “cubic metres per day (m³/d). Also detail the maximum flow rate i.e. how many litres of effluent are discharged every second (l/s).

3.8 Indicate how failures in the treatment system including pumps will be detected – telemetry and/or visible/audible alarms

3.9 The temperature of your effluent may be very different from the ambient temperature of the receiving environment (because the effluent from your process is heated or cooled in some way). If this is the case please give the mean temperature expected and the range i.e. highest and lowest temperature expected.

3.10 You must consider how you will ensure the maintenance and good working order of your process and effluent treatment system. You may receive conditions in your licence which specify the maintenance arrangements to be complied with. Please give the details here of any maintenance and process management techniques to be employed (you can refer to extra sheets or available site procedures if necessary).

3.11 Sewage effluent may be contained within your discharge (e.g. non-residential domestic sewage from staff lavatories, showers and canteen areas). Please detail the number of people served by any on-site sewerage system, or the population equivalent.

3.12 If the effluent treatment unit(s) at your site receive surface water (i.e. rain water) from impermeable hard standing areas such as yards, roof space, car parks, site roads etc, please tell us the area (m²) involved.

3.13 If your premises has material storage areas or has other maintenance or operational areas, and areas with regular vehicle movements that do **not** drain to your effluent treatment plant, then this surface water may be at risk of being contaminated. Please tell us how surface water **not** entering the effluent treatment system is handled prior to discharge to the environment. A separate discharge of surface water from your site may also require licensing, unless it is covered by a GBR (see "CAR Practical Guide" within this document). The next section of the form contains the questions relevant to this.

SECTION 4: SURFACE WATER DISCHARGES INCLUDING SUDS

4.1 The treatment train refers to the series of techniques employed to change the flow and characteristics of a surface water discharge. As a general principle it is better to deal with runoff locally (i.e. in the first stages of a 'management train' close to the source of runoff) returning water to the natural drainage system as close to source as possible. More on SUDS at www.ciria.org.uk

Attenuation of flow must be demonstrated. A guiding principle is to ensure that the treated water runoff rates after development are the same as runoff rates prior to development (effectively as if the site was 'greenfield' prior to development). Maintenance agreements: many SUDs systems require regular maintenance to ensure that they perform effectively. Please detail any such arrangements.

SECTION 5: DISCHARGES TO LAND (NON AGRICULTURAL) – PRIOR INVESTIGATION

This section of the form is for you to detail how any of the previously detailed effluents (sewage, surface water or other) discharge to groundwater (either by soakaway, direct to land or direct to the ground water). If your discharge is direct to surface waters (rivers lochs, estuaries or the coast) then you do not need to complete this section. The guidance here follows directly the Prior Investigation questions within the application form.

APPLICANT NOTES TO COMPLETING THE PRIOR INVESTIGATION FORM

¹ Please note that most direct discharges to groundwater are prohibited. It is recommended that the disposal is made to land or infiltration system.

² Part 2 of the form is to be completed for those discharges which have a high loading classification or for sewage discharges serving greater than 50PE. To determine whether your discharge has a high loading classification use the following formula and table:

Loading classification	Criteria
	Presence of:
Low - Medium	<ul style="list-style-type: none"> Heat above or below temperature normally found in groundwater. Loading factor <1200 for non-List I* pollutants
High relative	<ul style="list-style-type: none"> Loading factor >1200 for non-list I* pollutants Presence of List I* substances

* (as defined by the Groundwater Directive)

*Loading factor = Concentration in the discharge (mg/l) x discharge rate (m³/d)
/Compliance concentration for contaminant (e.g. DWS) (mg/l)*

The mean (post treatment) concentration should be used when calculating the loading classification. If more than one contaminant is present in the discharge then the loading classification should be worked out for each contaminant. The loading classification used to determine the amount of information required, and whether Part 2 of the form needs to be completed, should be based on the highest loading classification for the discharge. This equation does not work for heat and in general if the discharge contains heat in excess or below that normally found in groundwater the discharge should be considered to be low-medium risk unless it contains list I substances or large amounts of other pollutants.

³ The depth to groundwater at the discharge location should be provided for all discharges. This information should be obtained from trial pits or boreholes if available. Where the depth to the water table is determined from trial pits and are assessed in the summer when the water table is likely to be at a low level, the soil should be examined for the presence of mottling, which can indicate the position of a seasonally high water table

⁴ A check should be carried out to determine the nature and the locations of water abstractions in the area as these could potentially be impacted by the discharge. The location of these should be marked on a map and it should be indicated whether the abstraction is from a surface water (SW), spring (S), well (W) or borehole (B). If the site is supplied by a private water supply please also detail this supply on the form and map.

⁵ If there are any abstractions within 50m of the discharge then you should consider relocating the discharge since the discharge may pose a high risk of contamination to these supplies.

⁶ Field drains can provide a rapid flow path for any discharged effluent to be routed into surface waters. Due to the risk of contamination of water courses any discharges within 10m of a field drain of should be relocated unless a scientific justification can be provided to demonstrate that these discharges will not pose a risk to environment.

⁷ Details of the slope of the land should be provided. It is more difficult to install pipework and ensure that the wastewater will stay in the soil if the land has an extreme slope. For this reason areas with extreme slopes are not suitable for infiltration systems unless it can be demonstrated via on site assessment that the infiltration system will adequately function in these areas.

⁸ Percolation testing should be carried out to determine whether the strata are able to accept the discharge. The percolation value (or Vp value) can also be used to calculate the size of infiltration areas which will be required for the discharge.

⁹ Trial pit logs should be recorded on the trial pit log table provided or in a similar format. The description of the soil/subsoil should be carried out in accordance with BS5930:1999. This part of the form should be replicated depending on the number of trial pits which have been constructed.

¹⁰ Superficial deposits overly bedrock and have a primary porosity whereby water can move through the pore spaces between the grains of material. Where these materials are unsaturated, pollutant attenuation processes are often enhanced. The thickness of these deposits (or depth to bedrock from the surface) can be obtained from the trial pit or borehole log.

¹¹ The area of the infiltration system should be calculated and detailed.

¹² The length of the infiltration system, perpendicular to the groundwater flow direction (or the slope of the topography which can be used as a guide to the groundwater flow direction in absence of more detailed information) should be provided.

¹³ A diagram showing the construction of the infiltration system should also be provided. This should show and detail the depth of the discharge pipes beneath the ground as well as the area, length and orientation of the discharge system.

¹⁴ Part 2 of the form is to be completed for those discharges which have a high loading classification or for sewage discharges of greater than 50PE.

To complete this section it is likely that at least 3 boreholes or peizometres should be constructed. Consideration should be given when drilling and positioning these boreholes for their potential use as ongoing monitoring points.

¹⁵ Mark the groundwater flow direction on the map. This should be determined from groundwater level data obtained from boreholes.

¹⁶ The hydraulic gradient is the slope of the water table, This can be determined by the difference between the groundwater level up and down gradient divided by the distance between them. The groundwater level needs to be expressed in metres relative to a common datum to determine the hydraulic gradient and groundwater levels in metres below ground level should not be used.

¹⁷ The permeability of the aquifer should be determined by carrying out testing of the boreholes e.g. test pumping.

¹⁸ The background groundwater quality should be obtained by taking samples of groundwater from the boreholes drilled. These should be taken from up and down gradient boreholes. Analysis sheets should be attached.

¹⁹ Proposals should be put forward for the ongoing monitoring of the impact which the discharge is having on groundwater. In general at least one down gradient monitoring point will be required.

²⁰ A quantitative risk assessment to determine the impact that the discharge will have on groundwater quality should be carried out and include any measures necessary to ensure that the discharge does not allow the entry of **List I substances (as defined by the Groundwater Directive) into groundwater or groundwater pollution by other pollutants. This assessment should be attached.**

Information on the contaminants present in the discharge should be provided in section 3.2. of the point source application form. Where possible this should be supported by analysis of the effluent quality. If this is not possible (for example the process is not yet up and running) other forms of data, such as analysis of effluent from similar sites, could be provided. The effluent should be sampled for the contaminants which are likely to be present and those which are most toxic.

A map should also be provided detailing the information listed in the application form.

ANNEX**The Annex to the form (Substances)**

The Annex to the application form lists a number of substances which are considered to be potentially dangerous if they are discharged to the water environment. Under the Water Environment and Water Services (Scotland) Act 2003 SEPA is under a duty to protect and enhance the aquatic environment by, amongst other measures, the progressive reduction of discharges of priority substances and the cessation or phasing out of discharges containing priority hazardous substances.

The annex lists the;

- Priority Hazardous Substances,
- Priority Substances under review
- Priority Substances not proposed as Priority Hazardous Substances, and
- Other specific pollutants SEPA is concerned to limit within effluents.

You must check the annex to record whether the influent into or effluent from your site contains any of the listed substances.



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

LICENCE APPLICANT GUIDANCE

**FORM C – POINT SOURCE FISH FARM
DISCHARGES TO THE WATER ENVIRONMENT**

FISH FARMS

The intention of this guidance is to describe the information requirements to supplement the licence application form.

SECTION A: GENERAL INFORMATION**Site Details**

It is important to ensure that the applicant provides a clear description of the fish farm site together with a map showing its position. For marine cage sites a map showing the extent of the leased area should also be provided which identifies the proposed location(s) of the cages. Four NGRs should be annotated onto the map identifying the boundaries of the area proposed for the cages (i.e. ten characters XY 1234 5678). It is usually preferable that an applicant applies for "planning" permission (presently a Crown Estates Commission Lease) prior to making a licence application. This ensures that planning/ infra-structure issues are considered first and an Environmental Impact Assessment has been undertaken where appropriate. However, Planning permission is not required prior to a licence application.

Production

Maximum planned production is required for the models used to predict the impact of nutrients and organic matter. The maximum planned biomass (the weight of fish which can be held on site at any one time) is also required for inclusion in the licence, for the modelling of environmental impact and assess the appropriate charge.

Stocking and Growing Plan

Supplementary information on the number of smolts to be introduced, length of growing cycle, stocking density in kg/m³, anticipated time for which maximum biomass will be held and the anticipated harvesting strategy should be supplied. It is accepted that applicants may wish to vary their stocking plans in future. However, the outputs from the AutoDEPOMOD modelling package which are used to determine the site biomass limit are dependant upon the stocking density and thus the density should not exceed that proposed in the application.

Fish Food

The annual quantity of feed to be used, the proposed feeding method, the feed conversion ratio and the phosphorus and nitrogen content should be included in the application.

List of Chemicals

SEPA requires information on the intended usage of medicines and chemicals to be provided in any application. Applicants are required to list all medicines and chemicals, whether in-feed or bath treatments, that they intend to use on the farm which may enter the water (e.g. therapeutants, anaesthetics, disinfectants, antifouling net coatings) including the trade name, manufacturer and active chemical ingredients in the products. For any antifouling treatments it should be stated where and when the nets were treated and are likely to be retreated.

The applicant is also required to list the method by which these chemicals will be used (including maximum treatment concentrations, total quantities necessary for each treatment and probable number of applications). It is important that the applicant can demonstrate that he/she has considered how to minimise their use in each case.

Cage Details

The application should provide information on cage number, size and layout. The cage layout has an important bearing on the outputs from the model AutoDEPOMOD used to determine site biomass and it is important therefore that plans are provided of cage construction and the anticipated position of the cages or cage groups.

Fallowing

The introduction of sea bed fallowing can have direct implications for effective planning and management of a site as well as a benefit in maintaining environmental quality. Whilst SEPA do not consider them to be a mandatory requirement, significant fallowing periods, e.g. at least a year, can allow any accumulation of organic wastes to be assimilated by benthic processes. Site rotation is a common practice in some parts of the country which allows site fallowing for significant periods. At sites with low current speeds a higher biomass may be considered if the growth cycle is followed by a fallowing period long enough for the sediment to recover.

Fallowing periods can also help to break the life cycle of sea lice particularly if included in management agreements between operators. The application should include details of proposed fallowing periods to reduce parasite and disease infestations. The application may also include details of longer fallowing periods where necessary to enable recovery of the sea bed and its fauna.

Environmental Information

SEPA will provide detailed specifications with the application form on the appropriate level of pre-development environmental survey data required. Applicants must contact their local office to discuss these needs to avoid this request at a later date (i.e. to avoid delays in processing the application).

Hydrography

SEPA requires tidal current measurements, bathymetric information and modelling outputs from the AutoDEPOMOD modelling package to be provided in support of any application for discharge from a marine cage fish farm. This is needed to assess the dispersion and dilution of organic wastes, nutrients, medicines and chemicals and determine a site specific footprint and biomass limit. The provision of hydrographic and modelling data is essential to assess the likely environmental impact of a marine cage fish farm. The data can be used in several ways:

- as a quantitative assessment of dispersion around the site,
- with other data to set the maximum licensed biomass at the site,
- modelling of the impact of faeces, waste food and chemical usage.

In general, the higher the mean current speed, the greater the dispersion. The area of benthic impact of discharges from the site is defined from current speeds and other site specific data using AutoDEPOMOD.

For reliable modelling of deposition and dispersion, an assessment is required of the variability of currents over a full spring-neap-spring tidal cycle (15 days minimum) at several depths. At Island sites where tidal currents close to the shore are relatively weak, a longer current speed record may be beneficial in identifying the full importance of wind-driven currents for the dispersion of waste solids. For all data sets, the provision of wind speed and direction records is fundamental and the application will be considered incomplete without this.

Location and Bathymetry

To assess the localised impact of discharges from the farm, details of the local bathymetry and shoreline are required as inputs to the AutoDEPOMOD package. The minimum distance of the cages from the shore is important in assessing the dispersion of discharges before they reach the shore. In most cases Admiralty charts or local plans with the same format will provide suitable information on the shoreline and depth around the cage location and within the leased area. Applications should be accompanied by the appropriate Admiralty chart, or copy of the appropriate part, on which the location of the cages should be annotated. If this is found to be inadequate it may need to be augmented by local measurements.

Baseline Environmental Conditions

The application should be accompanied by sufficient information to allow SEPA to assess the existing water quality and the effects that the proposed discharge will have on that water quality. Existing water quality is more likely to be a limiting factor where the existing biomass is high and the flushing characteristics of the receiving water are poor. Therefore a site specific monitoring strategy and pre-development water quality data are required. Further advice can be provided by SEPA Marine Science staff.

Dissolved oxygen depletion is seldom a problem in connection with cage fish farming and so baseline monitoring of dissolved oxygen is only required if the residence time of the defined system is greater than 3 days and there is more than 1000 tonnes total biomass proposed. If this is the case then appropriate dissolved oxygen measurements should be made.

Similarly, nutrient enrichment is rarely a problem, although where there are a number of farms in slowly flushed systems hypernutrification could occur. Baseline information on nutrients is only required if the residence time of the defined system is greater than 3 days, and when the total biomass exceeds 1000 tonnes. In such a case, appropriate nutrient measurements, should be made.

Applications which include the use of antifouling agents should include any available data on the expected concentration of the active ingredient (e.g. copper) within the water column in the vicinity of the cages and/ or the rate of loss into the water following treatment (this may be available from the manufacturers).

If the application is for increased biomass or for sea lice medicines which may reach the sea bed then the existing condition of the sea bed should be taken into account. A sea bed survey should be undertaken if this is not already available to SEPA (if there is an existing farm with a history of monitoring then this information should be used in the sea bed assessment).

Minimising the release of Polluting Matter

SEPA has a strategic aim to progressively reduce the pollutant load per tonne of fish produced by the marine cage fish farming industry. In order to achieve this objective it is essential that the applicant demonstrates that they will follow best environmental practice.

SEPA requires that marine cage fish farms carry out bath treatments within full containment. The applicant must confirm that the net construction will allow the use of tarpaulins which will fully enclose the treated fish. In addition, applicants must **confirm** that the treatment volume **can** be reduced by a significant percentage of the cage volume.

SECTION C: LAND BASED FISH FARMS

Site Details

In addition to answering the questions within the application form, the applicant should provide a plan of the layout of the farm showing:

- location and volume of tanks, raceways and ponds;
- location of treatment facilities.

The applicant should demonstrate that the design of the site will minimise the pollutant load to the river. Best environmental practice requires that feeding techniques minimise the loss of food (i.e. maximise the food conversion ratio). In addition, it is important that particulate matter generated within the farm is removed rapidly from the system to minimise the solubilisation of the organic and nutrient constituents of the food and faeces. The farm should therefore be designed to be self cleaning preventing the accumulation of particulates within fish holding facilities or channels. Filtering devices, which remove particulates from the main farm flow are preferred to settlement ponds. Settlement ponds do perform a

useful purpose as polishing facilities after a filter or as a backup form of treatment in the event of the failure of the filter.

It is important to ensure that the handling of any filter backwash is adequately addressed.

ANNEX

The Annex to the form (Substances)

The Annex to the application form lists a number of substances which are considered to be potentially dangerous if they are discharged to the water environment. Under the Water Environment and Water Services (Scotland) Act 2003 SEPA is under a duty to protect and enhance the aquatic environment by, amongst other measures, the progressive reduction of discharges of priority substances and the cessation or phasing out of discharges containing priority hazardous substances.

The annex lists the;

- Priority Hazardous Substances,
- Priority Substances under review
- Priority Substances not proposed as Priority Hazardous Substances, and
- Other specific pollutants SEPA is concerned to limit within effluents.

You must check the annex to record whether the influent into or effluent from your site contains any of the listed substances.



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

LICENCE APPLICANT GUIDANCE

**FORM D – ABSTRACTIONS AND
IMPOUNDMENTS**

1. Abstraction and impoundment activity table
2. Reasonable need
3. Abstraction details
4. Impoundment details
5. Additional information

SECTION 1: ABOUT THE ABSTRACTION / IMPOUNDMENT ACTIVITY**ABSTRACTION OR IMPOUNDMENT ACTIVITY TABLE**

This table should be completed to cover all abstraction and/or impoundment activities being applied for as part of one licence. Please refer to the CAR Practical Guide available from SEPA's website at www.sepa.org.uk/water/water_regulation/car_application_forms.aspx.

1.1 Abstractions

Registration abstraction activities are abstractions greater than or equal to 10m³/day and less than 50m³/day. There is a separate form for these activities which can be accessed via www.sepa.org.uk/water/water_regulation/car_application_forms.aspx

Where the registration level abstraction is associated with a licensable controlled activity, an impoundment or abstraction, the registration application form should be appended to this licence application. This allows associated activities to be grouped into one licence document. Registration level activities are not included in the annual subsistence charge calculation. In the box provided please give the number of registration abstraction activities that you are applying for. For example if you are applying for two abstractions of 30m³/day put '2' in the 'No. column'.

Simple licence abstraction activities are those non-coastal or transitional abstractions greater than or equal to 50m³/day and less than 2000m³/day. The details for each simple licence abstraction activity should be completed on this form. As with registrations, please state the number of simple licence abstraction activities you are applying for in each category.

Complex licence abstraction activities are non-coastal or transitional abstractions greater than 2000m³/day. Again, the details for each complex licence abstraction activity should be applied for using this form. In the box provided please give the number of complex licence abstraction activities you are applying for as part of this application.

1.2 Mobile abstraction units used to abstract water under this application

Mobile plant may be used for the abstraction activity, rather than having fixed intake structures. This information is required to enable the application fee to be calculated. Please state here the number of mobile units you intend to use to abstract water at the locations applied for in the application.

1.3 Impoundments

Impoundments are also regulated under the Water Environment (Controlled Activities) (Scotland) Regulations 2011. There are no registration level activities with impoundments. Any impoundment will either be within the simple or complex licence category.

Simple licence impoundment activities include all existing (constructed prior to 1 April 2006) passive weirs, existing managed weirs that are less than or equal to 1 metre in height and existing raised lochs which are less than or equal to 1 metre in height. Definitions of 'height', 'managed' and 'passive' weirs and 'raised lochs' can be found in the glossary section (Form A guidance). In addition, the construction and operation of all new impoundments where the height is less than or equal to one meter and the impoundment does not affect the passage of salmon or sea trout. Please state the number of simple licence impoundment activities in the 'No. column' of the Table. For example, if you are applying for a licence for two existing managed weirs where the height of the impoundments are 0.5 metres you should write 2 in the relevant box. Details of each of these impoundment activities should be provided in this application form.

Complex licence impoundment activities include the construction and operation of all other impoundments not included in the simple licence category above. Please indicate the number of complex licence impoundment activities you are applying for and complete the relevant sections of this application form.

SECTION 2: REASONABLE NEED

Under CAR, SEPA has a duty to secure efficient and sustainable water use. SEPA also needs to understand the social and economic value of water that is abstracted or impounded for use.

All water users undertaking a controlled activity have a duty to take all reasonable steps to secure efficient and sustainable water use. SEPA is responsible for enforcing the Regulations and therefore needs to ensure that the quantities being applied for are consistent with the efficient use of the water required. To achieve this, SEPA needs to understand the components of the demand for water that you abstract and how this relates to the scale of use that it supports (e.g. the annual production capacity for an industrial abstraction). The information we seek in this section of the form is to enable you to justify the quantities that you are applying for. Where significant variations from these conditions arise, we will want to discuss these with you to seek a better understanding of any local factors contributing to the difference.

The basis of our assessments will be published data and research undertaken where available.

Applicants should complete Section 2.1 and 2.2 and also the appropriate table for their sector and/or use.

2.1 Main category of use

Please indicate the sector into which your activities fall. This may be more than one, for example a farm unit may include an irrigation supply, stock watering and private household supply, in which case tables A, B and E should be completed. If 'other' is selected please state the type of activity you are applying for.

2.2.1 Total quantities of water

We need to understand fully what you expect your total requirements to be for all abstraction activities that need to be authorised by the licence. Please set these out here, per hour, day and year. There is a separate opportunity in Section 3 of the form to give more details about maximum rates at individual points of abstraction. [Note: If the application only relates to a single abstraction activity (one point or stretch), the information should be the same in both answers.]

NB: Note that when giving information about the quantities of water you intend to use we will need to know the

maximum requirement, for abstraction. It is for you to decide what quantities you wish the licence to authorise, and then for SEPA to decide whether this can be allowed or whether any conditions need to be imposed.

2.2.2 Additional information

Please set out here any supporting information that helps to explain the total quantities you have requested in the preceding question, in addition to information you will include in the relevant following table(s). This should particularly explain any unusual feature of your water usage, any local factors that we need to know about, reasons for selecting a particular depth of application of water, irrigation practice, extent of any re-use and recirculation etc.

2.2.3 Ensure efficient use

Also please set out here what measures you have or intend to put in place to ensure efficient use of water. This will inevitably vary with the nature of the use, but may include good housekeeping practices, monitoring, leakage checks, undertaking water audits etc.

Main usage sectors

The following notes support the key sectors and the information we require.

TABLE A: AGRICULTURAL IRRIGATION

SEPA uses a method of calculating the optimum irrigation need, based upon crop types and areas, soil types and agro-climatic conditions. If you want further information on this methodology please contact your local SEPA Office.

If you are applying for one licence covering a number of farming units please complete one copy of Table A for each farm unit applied for under this licence application.

A.1 Crop type and area

Please give details on crop type, areas to be irrigated and the maximum annual depth of irrigation. These figures should represent the crops that you would grow in the same season and ensure that you give a combination of crops and areas likely to give rise to the maximum irrigation demand in any season.

A.2 Soil type

Please provide details on which soil type is applicable to the farming unit you are applying for. If more than one soil type is relevant, please indicate the approximate split across the unit.

TABLE B: AGRICULTURAL WATER SUPPLY

The number of livestock supplied gives an indication of the expected volumes of water required. The Scottish Agricultural College has provided estimates of daily drinking water requirements for different classes of stock. For more information on this, refer to SEPA guidance document WAT-SG-70 at http://www.sepa.org.uk/water/water_regulation/guidance/abstraction_and_impoundment.aspx or contact your local SEPA Office.

B.1 Number and type of livestock

Please indicate the type of stock reared, giving the highest demand scenario in terms of likely water use (i.e. highest numbers of livestock with the greatest water demand) at any one time. The livestock diet, such as straw or silage can impact on the typical water requirements. Please use the final column to indicate any special factors such as this, along with details of any special feeds or housing requirements, influencing water consumption.

B.2 Washing and cleaning

Please give an indication of your requirement for cleaning, washing and dairy use etc. This can be by power hose or non-power hose. Please provide the maximum anticipated usage per day along with any comments you believe inform this value.

TABLE C: GOLF COURSE IRRIGATION**C.1 Irrigation per annum**

Please indicate the areas of tees, greens, fairways and other areas irrigated (where relevant) giving information about total annual requirements.

C.2 Irrigation per day

Please indicate the areas of tees, greens, fairways and other areas irrigated (where relevant) giving information about total maximum daily requirements.

TABLE D: INDUSTRIAL USE

SEPA will assess your water usage against best practice guidance using published research where this is available. For further details on this please contact your local SEPA Office.

D.1 Process outline

Please give brief details of your main production process and water usage within this, e.g. the proportions of cooling and process water, product type, main process steps etc.

D.2 Water per unit of production and annual production

Please select which industry sector within the table is appropriate for your site. For this sector, give the known or estimated water use per unit of production, using the most appropriate unit output measure for your particular processes/usage. For example, for brewing - m³ of water used per m³ of beer produced, fibreglass – m³ of water used per tonne of product, fish farm – m³ of water used per tonne fish produced, distilleries - m³ of water used per litres of alcohol produced, power production – m³ of water use per Giga Watt hours etc.

For quarries or mines undertaking dewatering operations, those quantities need not be included in this table. Only include the quantities used for processing, washing, dust suppression etc. The quantities pumped for dewatering purposes should be separately identified in the 'other' section and appropriate details provided within Table H.

Note that where industrial premises also have their own private water supply for domestic/sanitary purposes, Table E should be completed for this element.

TABLE E: PRIVATE WATER SUPPLIES

This section is for all 'domestic' type supplies not supplied by Scottish Water.

E.1 Nature of supply

Please give the type of establishment that will be supplied with water. This may include households, estate supplies (which may supply houses and farms), small water supply schemes not provided by Scottish Water, private supplies to hotels, schools, factories, commercial premises, light industrial estates etc. For industrial premises, include in this table all non-process water use.

E.2 Details of supply

Please indicate the number of properties served and the total population i.e. the number of people within all of the properties served. Where farm dwellings are included then the element described here should only relate to the domestic property. Any livestock drinking water and wash water should be described in Table B: Agricultural water supply. Where the supply is for hotels, prisons etc then the maximum occupancy for the year should be provided. If this section includes the domestic element of a factory or industrial estate then the non-domestic water use should also be completed in the relevant table of this application form. If the private water supply does not fit into any of the categories described on this section of the form please describe your circumstances in 'other'.

TABLE F: PUBLIC WATER SUPPLIES

F.1 Nature of abstraction

Details should be provided on the nature and characteristics of the abstraction including information on where the water is being transferred to.

F.2.1 Water Resources Zone

The water resources zone should be consistent with the water resources plan submitted to SEPA

F.2.2 Population supplied

This is to give an indication of the scale of the application. If you are applying for a variation then this should reflect the additional population.

F.2.3 Components of supply

Please provide details on the activities served by the controlled activities applied for.

F.3 Water resources plan

These developments will normally only be considered where they conform to the agreed water resources development plans for the area. Please provide the details requested and in particular the reasons for any departure from the water resources plan and any other related proposals that should be taken into consideration.

TABLE G: HYDROPOWER

Although non-consumptive in use, these schemes have the potential for major impacts on the flow regime.

G.1 Head and flow of water

The head of water (H) is the maximum available vertical fall in the water, from the upstream level to the downstream level. The flow (Q) is the design flow, usually at Q_{mean} of water through the turbine. If the design flow is not Q_{mean} please specify.

G.2 Estimated turbine efficiency

Turbines will have a range of efficiencies dependant on the location, turbine type and production capacity. The manufacturer will be able to indicate an estimated efficiency for the site under consideration based on the hydraulic efficiency of the turbine at its design point.

G.3 Installed capacity

The installed capacity is the maximum generating capacity of the turbine at that location.

TABLE H: OTHER

H.1 Details of water use

Please provide a description of the water use and the purpose of the abstraction, such as conservation and details of what habitat type or species is being protected.

H.2 Operational regime

Please give details of the main elements of the process such as timings, triggers for operation, management plans and agreements etc.

SECTION 3 APPLICATIONS INCLUDING ABSTRACTION ACTIVITIES

A Section 3 table should be completed for all abstraction activities that you are applying for with this form.

ABSTRACTION DETAILS

3.1 Abstraction point

If the abstraction point has a name or a reference or number (e.g. Abstraction A, Point 1) then please provide this information here. This should correspond to the site map reference on the map provided under Form A, section 2.4.

3.2 Source type

Please refer to the glossary of this guidance (Form A guidance) for definitions of the different source types. Please note that if you are abstracting from a canal the 'watercourse' option should be selected.

3.3 Name of watercourse or loch

If the river or loch from which you are abstracting is named then please provide this in the box provided on the application form. These names can often be found from the local OS map. If the loch or river does not have a name please give a description, for example tributary of the River Blue. If you are abstracting

from a canal please give the name of the canal such as Union Canal, Caledonian Canal. If you are abstracting from groundwater sources then please leave blank.

3.4 National Grid Reference (NGR)

Please provide an 8-figure grid reference for the proposed point of abstraction. If a mobile abstraction unit is used along a stretch of a watercourse please provide the grid reference at the upstream and downstream limits of this abstraction. A stretch is a length of watercourse where the water resource is broadly consistent along the identified length, and therefore only one environmental impact will be required. This means that there should be no significant changes in ecological sensitivity along the stretch or significant discharges, incoming tributaries or further abstractions.

See 2.3 of Form A guidance for advice on how to give a grid reference.

3.5 Description of intake structure proposals

The design of any fixed intake structures are to be included in the licence to ensure that the integrity of the riparian bank is not compromised and it will not result in excessive erosion in the vicinity of the structure. Please enclose with your application drawings, plans and cross sections of the intake design clearly indicating the dimensions of the width and height of the structure and the size of any associated pipe work. Please note that any future extension of this intake requires an application to vary the licence.

3.6 Method statements during the construction phase

A method statement sets out your operational controls once the environmental risk assessment of an operation has been undertaken. The method statement is used to control the works to ensure that all operators are aware of the environmental risks and issues associated with the work. It sets out the precautions, mitigation methods or specific actions to be taken to reduce or prevent ecological harm and details areas of work such as the boundaries of the working area, plant and equipment requirements etc. The level of detail within the method statement is dependant on the scale of the works being carried out. All river engineering works should adhere to the principles in PPG05 - Works in near or liable to affect watercourses and PPG06 - Working at construction and demolition sites

3.7 Look up table – purpose categories

Abstracted water can be used for a number of purposes, for example irrigating potatoes or food processing. We need this information to determine if the volume is appropriate for that purpose. Select from the table below the description or descriptions that most accurately reflect the use of that water. Where the water abstracted is used for more than one purpose please list both the primary purpose and the secondary purpose.

Description - Abstraction
Agriculture (other than irrigation)
Agriculture (irrigation – mobile plant)
Agriculture (irrigation- fixed intake)
Drinking water supply (public)
Drinking water supply (private)
Environmental Service
Fish production
Golf course
Hydropower
Industrial or commercial: process water
Industrial or commercial: evaporative cooling
Industrial or commercial: non-evaporative cooling
Navigation (including canals)
Mining and Quarrying

3.8 Environmental service

'Environmental service' means the carrying out, operation or maintenance of any activity which is, in the view of SEPA, solely for the benefit of the environment, not being for commercial purposes or in implementation of a statutory duty. *SEPA Guidance, updated from time to time, is available via the website or on request.*

Such activities will be exempt from application and subsistence charges. An environmental service should not be confused with mitigation measures which are intended to reduce the impact of a controlled activity. For example the following activity would not be considered as an environmental service:

1. A reservoir which maintains flows in a downstream river to compensate for upstream abstractions.

SEPA will regard the following types of activity as providing an environmental service and hence exempt from application and subsistence charges:

1. Abstractions associated with the control of historic causes of pollution, for example
 - Abstraction from mines that are no longer operational and where the abstraction is intended solely to control the breakout of polluted groundwater
 - Abstraction of groundwater associated with contaminated land solely for the purpose of the remediation of that contaminated land.
2. Structures and abstractions to maintain or improve the existing water environment, for example
 - An ex-water supply reservoir that is no longer intended as a drinking water source and is maintained solely to support the ecology which has developed within the reservoir.
 - A canal that is no longer used for navigation and is maintained solely to support the ecology which has developed within the canal.
 - A wetland or pond, fed by an abstraction, which is intended solely to maintain or enhance the biodiversity of the water environment.

3. Habitat restoration

This is activities intended solely to restore the environment to a more natural state or to enhance the biodiversity of the water environment or wider environment. It covers:

- The restoration of a canalised or culverted watercourse to a more natural profile;
- The removal of flood defences in order to restore a flood plain;
- The creation of wetlands and ponds to enhance biodiversity.

This definition does not include fishery improvement work that modifies a natural river in order to improve fishing.

If you are unsure if your activity would qualify for environmental service please contact your local SEPA Office for advice.

3.9 Activities incurring abated charges

Certain controlled activities may be subject to abated charges which are not classed as environmental service. These activities will still be regulated in the same way as other activities.

The abstraction and impoundment activities which may be subject to abated charges are under the following categories;

- Lades
- Sustainable energy generation
 - Hydropower
 - Geothermal heat pumps
- Groundwater abstraction licences. Please note that only a time limited licence to allow drilling and test pumping is likely to be issued if adverse environmental impacts are thought to be possible.

Should further information suggest that adverse environmental impacts are not likely then a variation to the time limited licence can be applied for at the appropriate licence technical variation fee.

- Flood defence
- Impoundments
 - Dams less than a metre
 - Offline impoundments and isolated ponds
 - Abstractions from offline impoundments and isolated ponds
 - Commercial/amenity use reservoirs
- Outfalls and abstraction points

Further details of these activities can be found in the current Charging Scheme available at www.sepa.org.uk/water/water_regulation/charging_scheme.aspx or from your local SEPA Office.

3.10 Maximum rate of abstraction

Please state the maximum amount of water that you are applying to abstract. This information should be entered in each of the three boxes provided (i.e. in litres per second (l/s), cubic metres per day (m³/day) and cubic metres per year (m³/year)). A conversion factor for UK gallons and litres is provided for your convenience on the application form.

The volumes you enter should reflect the volumes you intend to abstract. It may be that the daily volume is not a direct multiple of the litres per second rate or it may be that the annual volume a direct multiple of the daily volume.

3.11 Means of demonstrating volume abstracted

Please describe how you intend to measure the volume of water abstracted. This could be through, for example, using a water meter, or based on the intake design capacity, pipe or pump capacity and duration of abstraction. Depending on the sensitivity of the location and your operation, you may be required to carry out environmental monitoring as well as monitoring of the volumes abstracted. If necessary, this will be discussed with you during the determination of your application.

3.12 Annual or Intermittent abstraction

If you carry out an activity that requires abstraction, or could require abstraction, every year then select the annual box. Please note that annual abstraction would include irrigation if the operator wants to have the capability to abstract water every year from the same location. Intermittent should be selected where it is known that the abstraction in that location shall not take place in particular years (for example, abstraction for irrigation that is known to take place once every six years and that year is predictable). If you select intermittent, provide additional information in a separate sheet about the intermittent schedule of water use (i.e. years that intend to abstract). If you abstract water intermittently then your subsistence charge will reflect this. Please note that the years in which you may abstract will be specified within the licence and the subsistence charge calculated accordingly.

3.13 Months of year when abstraction takes place

The time of year when you abstract water will influence the level of environmental impact. You may abstract water all year around, if so please select all the boxes, alternatively you may only abstract during the summer or only during the winter months. Where you are applying to abstract in particular seasons rather than throughout the year the subsistence charges may be influenced. Therefore, if you are applying to abstract predominantly in the summer months (April to October inclusive) or only over the winter months (November to March inclusive) then you will have to specify which months you intend to abstract here, and where known the volumes abstracted in each month.

3.14 Discharge of abstracted water

The location of any discharged water associated with the abstraction will affect the environmental impact of the abstraction activity. SEPA are interested in discharges associated with the abstraction activity only, such as the return of cooling water, other discharge activities are not to be included here. If you do discharge abstracted water please give the 8 figure grid reference of where the abstracted water is

returned to the water environment. See Section 2.3 of the Form A guidance for advice on how to give a grid reference. Please do not include any discharges to a public sewerage system.

Please note that providing details here does not remove the requirement to apply for authorisation to discharge potentially polluting substances into the water environment. For details on discharges which require authorisation please see the CAR Practical guide document available at

www.sepa.org.uk/water/water_regulation/car_application_forms.aspx or contact your local SEPA office.

3.15 Percentage of abstracted water returned

Where you return a proportion of the abstracted water please give the percentage of the abstracted water which is returned to the water environment at that National Grid Reference. This may be an estimate where the actual percentage returned is not known.

3.16 Operating regime

Any details of the proposed operating regime should be included. This could be with respect to maintained or hands off flow requirements as agreed with other stakeholders, and how any maintained or hands off flows are measured and/or guaranteed etc.

3.17 Management agreement

Where a water user has entered into a non statutory agreement with a landowner, District Salmon Fishery Board or other third party, or where a group of water users are reliant on the same source they may have come to some agreement as to how they each use the water to ensure they are all able to meet their requirements. While these agreements are non statutory in that they are not set in regulation, they form an important part of managing the operations. For example, a group of industrial users on a stretch of river may have an agreement as to how much each of them abstracts to enable downstream users to guarantee their water supply. If your abstraction or impoundment activity is part of such a non statutory agreement then please provide information as outlined in the table below and attach a copy of any written agreement.

Activity	Location		Parties in agreement	Agreement details
	NGR	Affected watercourse		
<i>example: Abstractions</i>	<i>XY 1111 2222</i>	<i>River Blue</i>	<i>White Paper Mill Green Turf Co.</i>	<i>During low flows, the Green Turf company will use their borehole and stop abstracting from the River Blue when flows in the river reach 15m³/sec to enable the White Paper Mill to continue production.</i>

3.18 Inter-relationships between abstraction points

A number of abstraction points may be operated for the same purpose or in conjunction with each other. Where this is the case such inter-relationships should be described. This could include a series of 4 boreholes which together will provide 100m³/day but individually could provide 50m³/day, or an operational intake and an emergency/standby intake which is only used when the operational intake is not functioning. The licence may enable the abstraction from any of the abstraction points applied for, but the total water abstracted for the overall site would not be a simple addition of all the maximum abstraction rates given in Section 3.

This total volume represents the impact on the environment and is the basis for the calculation of the annual subsistence charge.

3.19 Rights to water

SEPA has a duty to have regard to all controlled activities being carried on or likely to be carried on in the area which the application relates. Therefore, please provide details of any legal rights and/or access to the water which you intend to abstract. Where you do not hold the water rights, please describe any

agreements with the holder of the rights or access. Please indicate where these are currently under negotiation.

3.20 Commencement of abstraction

Please give an indication of date on which the abstraction is to commence. Where this cannot be defined, such as for irrigation where the date is weather dependant, please give the season and the year of expected commencement of the abstraction.

3.21 Construction works

Where you are applying to construct any intake structures, please give an indication of the date when construction of the intake will start.

ADDITIONAL INFORMATION FOR GROUNDWATER ABSTRACTIONS ONLY

3.22 Dimensions of borehole/well

For the dimensions of the borehole or well, where possible, please report to 2 decimal places expressed in metres. A conversion factor for inches/ feet is provided for your convenience on the application form. Please note that if you extend the depth or diameter of the borehole/well in the future then you will have to apply to vary your licence.

3.23 Water Feature Survey

If you are applying to abstract greater than 50m³/day then you will need to carry out and submit a water feature survey. This identifies other water users and water dependant features which may be impacted by your proposal. The water feature survey ensures the assessment of your application considers the relevant aspects. There is a separate guidance note (An applicants guide to water supply boreholes) which should be referred to, detailing the method of carrying out a water feature survey. This guidance is available from our website at www.sepa.org.uk/water/water_regulation/guidance/abstraction_and_impoundment.aspx or from your local SEPA Office.

3.24 Rock type

If known, please indicate by selecting the appropriate box the type of rock from which you are abstracting. In unconsolidated rock the individual particles that make up the rock are not stuck together (not cemented). For example river gravels or glacial drift. Solid rock is cemented or crystalline, examples are sandstone or granite.

SECTION 4: APPLICATIONS INCLUDING IMPOUNDMENT ACTIVITIES

IMPOUNDMENT DETAILS

4.1 Impoundment No./Ref/Name

The impoundment number or reference should correspond to the site map reference on the map provided under section 2.4 of Form A.

4.2 Type of original waterbody impounded

The type of waterbody to be impounded is the original river or loch across which the impoundment is to be constructed. See definitions of watercourse and loch in the glossary in the Form A guidance section. If the impoundment is to be constructed on land where there was no pre-existing watercourse or loch then select None.

4.3 Name of watercourse or loch impounded

The waterbody name is often given on OS maps or may have a local name. Where there is no known waterbody name, please give a description, for example, tributary of River Blue.

4.4 Grid reference.

Please provide an 8-figure grid reference for the mid point of the impounding structure (i.e. the dam or weir). See 2.3 of Form A guidance for advice on how to give a grid reference.

4.5 Look up table – purpose categories

Impounded water can be used for a number of purposes, for example flood prevention or fish production. We need this information to determine if the volume is appropriate for that purpose. Select from the table below the description or descriptions that most accurately reflect the use of that water. Where the water impounded is used for more than one purpose please list both the primary purpose and the secondary purpose.

Description - Impoundment
Agriculture
Drinking water supply (public)
Drinking water supply (private)
Environmental Service
Flood defence
Fish production
Golf course
Hydropower
All other industrial or commercial
Navigation (including canals)

4.6 Environmental service

Please refer to 3.8 above and the Charging Scheme guidance at www.sepa.org.uk/water/water_regulation/charging_scheme.aspx

4.7 Activities incurring abated charges

Please refer to guidance in 3.9 above and the Charging Scheme guidance at www.sepa.org.uk/water/water_regulation/charging_scheme.aspx

4.8 Management agreements

Please refer to guidance in section 3.17 above.

4.9 Plans and cross sections of the impoundment

Please provide detailed plans and cross sections of the impoundment structure. The agreed design of the impoundment will be referred to in the licence and it is recommended that you discuss the design of the impoundment with your local SEPA Office prior to submitting an application. Please note that should you extend or alter the impoundment in the future you will be required to apply for a variation of your licence.

SEPA will assess the impoundment in terms of its potential impact on the water environment. SEPA nor any licence issued by SEPA in any way approves the structure in terms of structural integrity or safety.

4.10 Method statements during the construction phase

A method statement sets out your operational controls once the environmental risk assessment of an operation has been undertaken. The method statement is used to control the works to ensure that all operators are aware of the environmental risks and issues associated with the work. It sets out the precautions, mitigation methods or specific actions to be taken to reduce or prevent ecological harm.

Whether by plans, drawings or text, the method statement should cover the following details:

- the boundaries of the working area,
- type and volume of materials being used,
- plant and equipment requirements,
- detailed, annotated and referenced maps, designs and plans for the works, and the dimensions of structures involved

- the timing of works, and expected start and finish dates for individual parcels of work and the project as a whole (including the period of use of any diversions or over pumping).
- mitigation measures to prevent ecological damage from engineering and pollution
- incident reporting and communication routes,
- Sequence of activities to be undertaken, and working methods (e.g. working procedures)
- Checklists and monitoring inspection sheets for relevant staff
- Listed quality requirements for a piece of work, reminding engineers what is required and that designs are checked before being signed off.
- Reinstatement/restoration methods, designs and procedures

All river engineering works should adhere to the principles in PPG05 - Works in near or liable to affect watercourses and PPG06 - Working at construction and demolition sites

4.11 Commencement of operations

Please give an indication of date on which the construction work is to commence.

4.12 Height of structure

For the purposes of this licence application please provide the height of the proposed structure. The height is defined as the height as measured from the downstream toe of the impoundment structure to the crest, or top of the spillway.

4.13 Level of overflow

The level of the overflow or crest of the dam (by reference to Ordnance Datum) is the height of the dam above which water will overtop the structure and spill into the downstream watercourse.

4.14 NGR – outflow point

Please provide an 8-figure grid reference for the outflow point where any compensation flow enters the watercourse downstream from the impoundment. Where there is to be no compensation flow or no outflow, please indicate that this is the case. See 2.1 for guidance on how to give a grid reference.

4.15 Draw off level

The minimum draw off level is the water level (by reference to Ordnance Datum) at which water maybe abstracted (i.e. fully drawn down). If the impoundment is not used for abstraction and so does not have a draw off structure then please enter n/a.

4.16 On-going maintenance

Give details of any ongoing maintenance, describing the frequency and extent of maintenance activities. This would include the operation of scour valves, debris clearance operations fish pass maintenance or any other maintenance that could have a negative impact on the water environment.

4.17 Sediment Management

If there is to be no sediment management associated with the impoundment please indicate this. Any sediment management plan should describe the location of any sediment removal from the waters associated with the impoundment. This includes the dredging of material to maintain the capacity behind the impoundment. In the sediment management plan you should detail the National Grid Reference (NGR) of the sediment removal. If this is to take place along a stretch of watercourse please give the upstream and downstream NGR points. In addition please provide information on estimated quantities to be removed and the frequencies of sediment removal, for example annual, once every five years etc. The timings of sediment removal can impact on fish spawning or other ecologically sensitive features. Therefore, please indicate what times of year the sediment removal operations are typically undertaken. If sediment is to be re-introduced into the water environment this can also be described here, although it is advised to discuss any such proposal with your local SEPA Officer before submitting an application.

4.18 Provision of fish passage

If the impoundment is to have a fish pass please provide details of the type of fish pass and any monitoring that takes place, such as fish counters. If it is not proposed to include a fish pass provide a

justification. This should state why a fish pass is not required at this location or the reasons a fish pass cannot be provided.

4.19 Provision of fish screens

If the impoundment has any screens to stop fry, smolts or adult fish being drawn into channels, turbines, pumps or other hazards then please provide details (e.g. size of screens, sonic screens, etc).

4.20 Operating regime

If there is any additional information please supply this here. Any details of the proposed operating regime should be included. This could be with respect to compensation flow volumes, how the compensation flow is to be delivered, for example through a fish pass or pipe and what level within the reservoir the compensation water is sourced from e.g. the bottom or surface of the reservoir. Details of freshet volumes and times of release along with the location of the freshet discharge. Any draw down regime should be described with rates of draw down and frequency of water level fluctuation where known or any control rules.

4.21 Total volume of impounded water/waterbody

Enter the volume of water to be impounded as a result of the structure. Where the water level of a smaller, pre-existing loch will be raised by an impoundment then it is the additional storage volume that is created which should be provided. If known, the total volume of water held within the whole loch should also be provided in the second box. This information is not mandatory for schemes less than 25,000 m³ but please supply it if available.

4.22 Inter-relationships between impoundments

Where the application relates to a scheme with a number of abstraction or impoundment locations or the waterbody is to be used for a number of reasons, please provide details of how the scheme as a whole will operate. This may be a description of inter-catchment transfers, relationships between impoundments or relationships with other sites, companies or individuals.

4.23 Additional information for large reservoirs

The Reservoirs Act 1975 provides the legal framework to ensure the safety of UK reservoirs that hold at least 25,000m³ of water above natural ground level. If the volume of water held behind the impoundment is greater than 25,000m³ then it should be registered with the local authority.

- 4.23.1** Please provide the name of the local authority with which the reservoir is registered and the registration number.
- 4.23.2** Please provide details of any proposed monitoring. This could consist of water level monitoring at the impoundment or flows that are being released for compensation, freshet or as overflows. Where such monitoring is proposed, please provide details of the location and form of monitoring equipment.

SECTION 5: ADDITIONAL INFORMATION

5.1 Cumulative chargeable abstraction value

If you are applying for authorisation for multiple abstraction points please specify the maximum daily and annual rate of abstraction from all of the abstraction points for which a subsistence charge will apply. This figure should exclude any abstraction volumes which are registration level activities, which you consider are exempt from charging or are for environmental service.

For example you may have two boreholes which are operated as a duty and standby or which have a maximum individual abstraction rate of 100m³/day when used on different days, but if these are both in use simultaneously they might only supply at a rate of 170m³/day. The maximum combined rate would

then be 170m³/day. A conversion factor for UK gallons and litres is provided for your convenience on the application form. The fees and charges for abstraction activities can be found in the latest Charging Scheme seen at www.sepa.org.uk/water/water_regulation/charging_scheme.aspx

5.2 Additional information submitted

Where additional information is to be submitted as separate documents in support of your application and have not already been referred to in the application form, please provide the name and any reference number of the documents in the box provided. Please also mark the document(s) clearly with this reference number. This will ensure documents that are associated to this application are considered as part of the application.

If you are submitting more than four additional documents please refer to a continuation sheet. Provide a reference to a continuation sheet on the application form and make sure the continuation sheet is clearly marked with the same reference number.



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

LICENCE APPLICANT GUIDANCE

**FORM E – BUILDING AND ENGINEERING
WORKS WITHIN, OR WITHIN THE VICINITY OF,
INLAND WATERS**

Engineering Application Form E Guidance

SECTION 1: ASSOCIATED OR DEPENDENT ENGINEERING ACTIVITIES

This table should be completed for all engineering activities being applied for as part of one authorisation. Please refer to the CAR Practical Guide available from SEPA's website at www.sepa.org.uk/water/water_regulation/car_application_forms.aspx for guidance on the appropriate level of authorisation. A greyed out box indicates that level of authorisation is not available for the listed activity.

Enter the number of each activity at each level of authorisation. Associated activities applied for under a single authorisation will be subject to reduced charges. Activities upon which another controlled activity depends (e.g. bed reinforcement associated with a bridge) are classed as dependent engineering activities and will not be subject to charges. All dependent and associated activities should be included in the table.

Registration activities which are associated with the licence activities should be included in the table. There is a separate form for these activities which can be accessed at www.sepa.org.uk/water/water_regulation/car_application_forms.aspx

Where the registration level activity is associated with a licensable controlled activity, the registration application form should be appended to this licence application. This allows associated activities to be grouped into one authorisation document.

The following table provides further guidance on the definition of each activity type within the table.

Activity Category	Activity Type	Definition
RIVER and LOCH CROSSINGS	Bridges	Includes span bridges and bridges with piers (in stream supports).
	Bridging culverts	Pipe, box or arch culverts for river crossings only, not for land gain.
	Causeways	Raised transport route constructed across Lochs.
	Fords	River or Loch crossing but is not raised, is at bed level. May be natural substrate or reinforced with artificial material. Consider under 'Bed Reinforcement' category of CAR practical guide.
	Pipeline/cable crossings	Pipeline or cable laid below the bed, submerged, or spanned across a river above the water surface.
	Removal of crossings	Removal of any of the crossing structures listed above.
IN-STREAM or LOCH STRUCTURES	Jetties, platforms, marinas	This includes jetties (piers), fishing platforms and marinas, can include solid and stilted structures. Considered either under 'Loch structures' or 'Other river structures' categories in CAR practical guide.
	Boat slips	Reinforced structure impacting the bank/shore and sometimes the bed of rivers and lochs. Considered either under 'Loch structures' or 'Other river structures' categories in CAR practical guide.
	Boulder placements	Boulders placed in-river usually for fisheries enhancement, can be used in restoration. Manipulates river flow.

Activity Category	Activity Type	Definition
	Croys, groynes, flow deflectors	Structures placed in-river or in-loch. Usually for fisheries enhancement or bank/shore protection. Manipulates flow and sediment movement. Considered either under 'Loch structures' or 'Other river structures' categories in CAR practical guide.
	Bed reinforcement	Reinforcement of bed only using either artificial (i.e. gabions, concrete) or natural (i.e. rock) materials.
	Removal of structures	Removal of any of the in-stream or loch structures listed above.
CHANNEL MODIFICATIONS	Straightening and/or re-sectioning	Any alteration to a river channel which reduces its naturalness, i.e. takes it to a less natural state. Re-sectioning is where the channel width and/or depth is increased.
	Realignment	Where channel is modified or moved but the natural state is maintained or improved. For example, restoration of a modified river to more natural channel pattern by re meandering. Can also include diverting a channel while maintaining its naturalness.
	Culverting for land gain	Permanent under-grounding of watercourses for land gain. Excludes culverts for river crossings. This category does not include the construction of open culverts (i.e. channels with artificial bed and banks).
	Removal of land gain culvert	Removal of culvert previously used for land gain, excludes culverts for river crossings.
	Flood by-pass channel	Additional flow route, normally associated with flood management schemes.
SEDIMENT MANAGEMENT	Sediment removal (<50% channel width affected)	Removal of substrate from rivers or lochs. Does not extend greater than 50% of the channel/loch width. If removing from >50% of channel or loch width then record as dredging. Considered under 'Sediment Management' category in CAR practical guide.
	Dredging (>50% channel width affected)	Removal of river or loch substrate from more than 50% of the surface water width. Considered under 'Sediment Management' category in CAR practical guide.
	Sediment introduction	Sediment imported from external source or re-introduced from other part of surface water after a period of storage. May be carried out as part of restoration activities. Considered under 'Sediment Management' category in CAR practical guide.
	Sediment manipulation	Movement of sediment within a surface water. For example, for maintenance of fishing pools, where sediment is not removed but displaced in channel. Considered under 'Sediment Management' category in CAR practical guide.
BANK MODIFICATIONS	Green bank protection (soft)	This includes the use of materials such as rip-rap restricted to the bank toe, biodegradable geotextiles and untreated log revetments restricted to the bank toe.
	Grey bank protection (hard)	This includes the use of materials such as rip-rap over the full height of the bank, gabion baskets, concrete, grouted stone, brick or block stonework, sheet piling, wood piling and non-biodegradable geotextiles.
	Bank re-profiling	Changing the slope of a bank/shore. Does not include heightening of bank or shore.

Activity Category	Activity Type	Definition
	Set-back reinforcement	Reinforcement placed back from river bank or loch shore, allows some lateral movement of surface water before reinforcement is exposed. Use the 'Green bank reinforcement' category to determine appropriate level of authorisation in CAR practical guide.
	Embankments	Construction of a embankment within one channel width of bank top to protect adjacent areas from flooding. Includes land raising.
	Set-back embankments	Construction of embankments set back from the bank top a distance greater than one channel width. Includes land raising. Use the 'embankments' category to determine appropriate level of authorisation in CAR practical guide.
	Floodwalls	Walls constructed for the purpose of flood management. Not erosion control.
	Removal of bank modifications	Removal of any of the bank modifications listed above.
OTHER ENGINEERING ACTIVITIES		Please enter any other engineering activities which are not defined elsewhere in this table. SEPA would normally only require an application for activities not defined elsewhere in this table if a significant adverse impact was likely. Please check with your local SEPA office before submitting an application for an activity in this category.

SECTION 2: ENGINEERING ACTIVITIES - DETAILS

This section of the application form is comprised of two parts.

The first part (Section 2.1) relates to best management practice. It allows SEPA to assess if principles of best practice are being followed for each activity. Where the information in this part varies between activities listed in Section 1, Section 2.1 should be completed separately for each activity. Further guidance is provided below.

The second part (Section 2.2) asks for details of each activity listed in Section 1 of the form. A sheet is provided for each activity category defined in Section 1 (Sheets E1 to E6). Please complete a separate sheet for each activity listed in Section 1. Further guidance is provided below.

Section 2.1: Best Management Practice

Under CAR, SEPA has a duty to ensure efficient and sustainable use of the water environment. Everybody undertaking a controlled activity has a duty to take all reasonable steps to secure efficient and sustainable use of the water environment. SEPA is responsible for enforcing the Regulations and therefore needs to ensure that the activities being applied for are consistent with principles of best practice.

To achieve this, SEPA has defined a series of questions to assess best practice. Please complete each question as fully as possible. If required, you can attach a separate sheet or reference a supporting document which should be attached to your application.

Best practice guidance is available from SEPA for a range of activities. Before completing this section of the application, please contact your local SEPA office, or visit our website to obtain a copy of relevant best practice material.

Where SEPA is not satisfied that best practice is being followed, more detailed information on impacts and mitigation measures may be requested. This may in turn result in a delay in processing your application. Therefore, please discuss with your local SEPA office, the principles of best practice before completing this section of the application.

Section 2.1.1: Justification for Activity

Please indicate the reason the proposed activity is being undertaken. For example, if bank reinforcement is being carried out to protect property or infrastructure from erosion, please state this as the reason and give details of the property or infrastructure at risk. If sediment is being removed from a surface water, please give an indication why this is being done. Is it for use as aggregate, for flood prevention (if so, what is being protected) or for maintenance of fisheries?

Also indicate where relevant, the underlying nature or cause of the problem being addressed. For example, if a bank erosion problem is being treated, please indicate as far as possible, the cause of that erosion and the rates of erosion. Is the erosion resulting from natural river processes, or being caused by an existing in-stream structure? Where available, please provide evidence to support your understanding of underlying cause. This could take the form of photographs, historic maps or survey data. Guidance on underlying cause is available in relevant best practice material available from SEPA.

Section 2.1.2: Alternative Approaches

It is a basic principle of best practice to consider a range of alternatives in addressing an identified problem or need. Without consideration of alternatives, it is not possible to determine if the approach represents the best environmental option.

In Section 2.1.2 please detail all the alternative approaches that have been considered to address the need identified in Section 2.1.1. For example, for a river crossing, you may have considered constructing a clear span bridge, a ford, a bridging culvert, or considered using an existing crossing. As part of the range of alternatives, for particular types of activities (e.g. sediment management, bank protection) you should consider the possibility of taking no action to address the problem identified.

Further guidance on alternative approaches to various engineering activities is available for SEPA. Please contact your local office or visit our website to obtain a copy.

Section 2.1.3: Best Practical Environmental Option

The purpose of SEPA's best practice tests is to ensure that the proposed approach represents the best practical environmental option. This doesn't always mean adopting a soft engineering approach. Best practical environmental option means the approach that is effective at addressing the problem, while minimising environmental impacts as far as practical. It also has to be cost effective (i.e. harm is minimised at a cost which is not disproportionate) and achievable for the applicant.

You should use this section of the form to explain why your selected approach represents the best practical environmental option. You should explain why alternatives outlined in Section 2.1.2 which would have less environmental impact, where not selected. This may be for reasons of cost, effectiveness or feasibility (e.g. the underlying cause of a sediment management problem may lie further upstream in the catchment on somebody else's property, therefore ruling out options of addressing the problem at source).

Where cost is given as a reason for rejecting an option with less environmental impact, please provide details.

Section 2.2: Activity Sheets (Sheets E1 to E6)

A sheet is provided for each category of activity listed in the table in Section 1. Please complete a separate sheet for each activity being applied for.

Activity Sheets E1 to E6 – Part 1: All Activities

The first part of the activity sheets follows a standard format.

Q1 – please tick the appropriate box to indicate the type of activity being applied for. For guidance on activity definitions, please refer to Section 1 guidance above.

Q2 – please indicate the appropriate level of authorisation. This information is also required to complete Section 1 above. For details of levels of authorisation please refer to the CAR practical guide which is available from your local SEPA office or our website.

Q3 & Q4 – please indicate the type and name of surface water affected by the proposed activity. If unsure about a surface water name, please refer to an Ordnance Survey map of the area. If an unnamed water please state “tributary of ‘*named water*’”.

Q5 & Q6 – please also provide details of the planned start and end date of the works. Please note that the determination period for licence applications is 4 months.

Q7 – Part 1 of the activity sheets also requires a 10-character national grid reference for each activity. Guidance on determining national grid references is available in the supporting guidance to Form A. Please provide a grid reference for the centre point of each activity.

Q8 – In order to assess the impacts from a proposal, it is necessary to understand the size of the affected surface water. Please indicate the width of the surface water in metres (m) at the centre point of the proposed activity. In estimating width for rivers and lochs, please include any areas of open water and un-vegetated sediments.

Q9 & Q10 – If the activity requires planning permission please tick the appropriate box. If planning permission has already been applied for, please include the planning reference number.

Q11 – please list all dependent engineering activities associated with this activity. This may include bed reinforcement associated with a bridge, or bank re-profiling associated with a culvert. Dependent activities are defined as those activities upon which another controlled activity relies for its integrity. Dependent activities require authorisation, but do not attract separate charges.

Q12 & Q13 (Sheets E2 to E6) – please indicate if the activity qualifies as an environmental service. Further guidance on environmental service is provided in the water environment charging scheme guidance.

Sheet E1 (River and Loch Crossings) – Part 2: Bridges

Q12 – please indicate the number of in-channel supports associated with the bridge. If the bridge spans the bed of the surface water and therefore requires no in-channel supports, please enter ‘none’.

Q13 – please enter the total length of abutments in metres (m) associated with the bridge that affect the bank or shore of the surface water.

Sheet E1 (River and Loch Crossings) – Part 3: Bridging Culverts

Q14 & Q15 – please enter the length and diameter of the culvert in metres (m). For Box and Arch culverts, the diameter should be taken as the maximum width of the culvert.

Q16 – please tick the type of culvert being installed. Box culverts are square or rectangular in section. Pipe culverts are circular. Arch culverts are bottomless structures, which allow a natural bed to form.

Sheet E1 (River and Loch Crossings) – Part 4: Fords and Causeways

Q17 – please enter the length of bed affected in metres (m). This should be measured parallel to the bank/shore. This is not the length of the ford or causeway, which will be taken as the width of the surface water entered under Q8 above.

Q18 – please provide details of the predominant material(s) used in the construction of the ford or causeway.

Sheet E1 (River and Loch Crossings) – Part 5: Pipeline/Cable Crossings

Q19 – please indicate the diameter in metres (m) of the pipeline or cable. Where a single crossing is being used to support multiple pipelines or cables, please provide a total diameter (e.g. if a crossing supports two 0.5m pipelines, enter 1.0m).

Q20 – please indicate the number of in-channel supports associated with the pipeline/cable crossing. If the crossing is below the bed, submerged, or spans the bed of the surface water and therefore requires no in-channel supports, please enter 'none' or '0'.

Q21 – please indicate the position of the pipeline/cable relative to the channel bed. Below bed indicates the pipeline/cable is buried below the surface water. Submerged indicates the pipeline/cable is on or above the bed, but would normally be below the water surface. Above channel means a pipeline or cable which is located above the water surface.

Sheet E2 (In-Stream or Loch Structures) – Part 2: Jetties, Platforms, Marinas and Boat Slips

Q14 & Q15 – please enter the total length in metres (m) of bank or shore affected by the structure and the length the structure extends into the surface water. This length should be measured perpendicular to the banks/shore.

Q16 – for lochs and wetlands, please indicate the total area in square metres (m²) of the surface water affected by the structure (i.e. the structure's 'footprint'). Where the structures form an enclosure (for example in the case of a marina), the area enclosed should be entered.

Q17 – for jetties, platforms and marinas, please indicate if the structure is predominately solid (i.e. allows no movement of water through the structure) or constructed on stilts.

Sheet E2 (In-Stream or Loch Structures) – Part 3: Boulder Placements

Q18 & Q19 – please indicate the total length in metres (m) of reach affected by boulder placements. This should be the distance measured along the river centreline between the first and last boulders. Please also indicate the total number of boulders placed into the channel within this reach.

Sheet E2 (In-Stream or Loch Structures) – Part 4: Croys, Groynes and Flow Deflectors

Q20 & Q21 – please indicate the total length in metres (m) of bank/shore affected by the structure, and the distance in metres (measured perpendicular to the bank/shore) that the structure extends into the surface water.

Sheet E2 (In-Stream or Loch Structures) – Part 5: Bed Reinforcement

Q22 – please enter the length in metres (m) of bed affected. This should be measured parallel to the bank/shore.

Q23 – please provide details of the predominant material(s) used in the construction of the ford or causeway.

Sheet E3 (Channel Modifications) – Part 2: Straightening, Re-sectioning and Re-alignment

Q14 – please enter the length in metres (m) of channel affected by the works. For straightening and realignment, this should be the length of channel pre-construction.

Q15 – where the length of original channel is altered, i.e. by straightening or realignment, please enter the length in metres (m) of channel post-construction.

Sheet E3 (Channel Modifications) – Part 3: Culverting for Land Gain

Q16 & Q17 – please indicate the length in metres (m) of proposed culvert and type of culvert. Three options are provided; Box culverts which are square or rectangular in section; Pipe culverts which have a circular cross section; and Arch culverts which are bottomless structures, that allow a natural bed to form.

Sheet E3 (Channel Modifications) – Part 4: Flood By-Pass Channels

Q18 & Q19 – please enter the length in metres (m) of by-pass channel to be constructed. Please also enter the length in metres (m) of original channel affected by the by-pass. This should be measured along the channel centreline from the point of off-take to the point of return. Where the by-pass channel does not re-enter the same watercourse further downstream, please enter 'not returned' in response to Q20.

Q20 – please enter the operational return period for the by-pass channel. This should be a frequency of operation expressed in years (e.g. 1 in 2 years) or a percentage of time (e.g. 95%) it is expected to be used.

Q21 & Q22 – where the water is not returned by the by-pass to the original watercourse, please indicate a catchment transfer is involved and provide details in a separate document. This should include a clear plan, national grid references and names of affected surface waters.

Sheet E4 (Sediment Management) – Part 2: Sediment Removal and Dredging

Q14 – for rivers, please provide the length in metres (m) of river affected. For lochs and wetlands, please indicate the area affected in square metres (m²).

Q15, Q16 & Q17 – please provide an estimate of the volume of sediment in cubic metres (m³) to be removed. Also indicate if you are applying to carry this out on an annual basis, as a one-off operation or on another frequency basis. If other, please provide details on a separate sheet or in another document of the times you would require sediment removal or dredging to be undertaken. This can be a programme of dates, or a programme designed to respond to natural events or other triggers.

Sheet E4 (Sediment Management) – Part 3: Sediment Manipulation

Q18 – for rivers, please provide the length of river affected in metres (m). For lochs and wetlands, please indicate the area affected in square metres (m²).

Q19 – please provide an estimate of the volume of sediment in cubic metres (m³) that will be manipulated as part of the application.

Sheet E4 (Sediment Management) – Part 4: Sediment Addition/Re-introduction

Q20 – for rivers, please provide the length of river affected in metres (m). For lochs and wetlands, please indicate the area affected in square metres (m²).

Q21 – please provide an estimate of the volume of sediment in cubic metres (m³) that will be added or re-introduced as part of the application.

Sheet E5 (Bank Modifications) – Part 2: Set-Back Reinforcement

Q14 – please enter the distance in metres (m) that the reinforcement will be set-back from the bank top. Where the distance varies, an average set-back distance should be entered.

Q15 – please enter the length in metres (m) of set-back reinforcement proposed. The length should be measured parallel to the bank/shore.

Q16 – please enter the type of reinforcement proposed, either green (soft) or grey (hard). Green reinforcement includes the use of materials such as rip-rap restricted to the base of the structure, biodegradable geotextiles and untreated log revetments restricted to structure base. Grey reinforcement includes the use of materials such as rip-rap over the full height of the structure, gabion baskets, concrete, grouted stone, brick or block stonework, sheet piling, wood piling and non-biodegradable geotextiles.

Q17 – for rivers, please indicate which bank is affected, right or left. The banks are defined right or left when viewed in a downstream direction.

Sheet E5 (Bank Modifications) – Part 3: Green and Grey Bank Reinforcement

Q18 – please enter the length in metres (m) of reinforcement proposed. The length should be measured parallel to the bank/shore.

Q19 – for rivers, please indicate which bank is affected, right or left. The banks are defined right or left when viewed in a downstream direction.

Sheet E5 (Bank Modifications) – Part 4: Embankments, Set-Back Embankments and Floodwalls

Q20 – please enter the length in metres (m) of the proposed modification. The length should be measured parallel to the bank/shore.

Q21 – for rivers, please indicate which bank is affected, right or left. The banks are defined right or left when viewed in a downstream direction.

Q22 – please enter the distance in metres (m) that the embankment or floodwall will be set-back from the bank top. Where the distance varies, an average set-back distance should be entered. Where the embankment or floodwall forms part of the bank (i.e. is not set-back) please enter '0'.

Q23 – please enter the height in metres (m) over the structure above the natural bank height. Where the height varies, please enter an average.

Sheet E5 (Bank Modifications) – Part 5: Removal of Bank Modifications

Q24 – please enter the length in metres (m) of the proposed bank modification removal. The length should be measured parallel to the bank/shore.

Q25 – for rivers, please indicate which bank is affected, right or left. The banks are defined when viewed in a downstream direction.

SECTION 3: ADDITIONAL INFORMATION

In addition to completing the relevant sections above, additional information is required by SEPA to assess applications for engineering works. This additional information includes details of working methods, drawings of structures and modifications, photographs of the site and details of other engineering works in the vicinity of the application.

Please note, in particular circumstances SEPA may require further information on the justification for your proposals, their environmental impact and necessary mitigation measures. To avoid delays in processing your application, please discuss with your local SEPA office if your activity is likely to require these assessments.

The following sections provide more guidance on these requirements.

Section 3.1: Scale Drawings

Engineering Drawings are required for all structures and proposed channel and bank modifications.

The following information should be shown on drawings submitted in support of the application:

1. Location of the site and the water environment in the vicinity of the proposed works
2. The affected medium (river/loch)
3. Site establishment details (where these will be within 25m of water environment)
4. Materials that will be used in relation to any temporary and permanent structures

In addition to the above, the drawings are required to show the following details in plan (viewed from above), section (side view) and profile (front view):

1. The scope and extent of the engineering proposal (length/width of bed or banks affected)

2. Any proposed temporary works where these will impact on the water environment (include details of any temporary structures which will impact on the water environment)
3. Details of structures which will remain permanently in the water environment
4. Reinstatement details

Drawings should be to scale, clear and any annotation legible. A title box should be included on each submitted drawing clearly referencing the activity and providing details of dates and revision numbers.

Section 3.2: Site Photographs

For the location of all activities, photographs should be provided. For rivers, this should be at least one upstream and one downstream view of the affected reach. For lochs, photographs taken viewed along any affected shore line in both directions should be provided. A plan showing the locations of photographs should be provided, with the photographs clearly referenced. The photographs should be in colour and at least 10cm x 8cm in size when printed.

Section 3.3: Method Statements

A method statement is required for all engineering activities. We recognise this might not be possible for all projects at the time the application form is submitted. Therefore, you are given the option of submitting an outline method statement at the time of application, followed by a detailed method statement before work commences as a condition of any subsequent authorisation.

3.3.1: Outline Method Statement

As a detailed method statement will not always be available at the time of application, you are given the option of submitting an outline method statement to SEPA along with the application for an authorisation for engineering works.

The outline method statement submitted should provide information on the environmental risk from the engineering activities that are being applied for. Particular attention should be paid to any risk of damage to habitats and risk of pollution of the water environment during construction. The outline method statement should also include as much of the information required for a detailed method statement (see below) as possible.

3.3.2: Detailed Method Statement

The detailed method statement should be written or approved by the person or persons responsible for carrying out the work and should involve the collation of information from any design drawings, specifications and environmental risk assessments produced for the work. Where the detailed method statement is not submitted at the time of application, it must be submitted and approved by SEPA prior to work commencing on site. You should allow at least 2 weeks for this. Consultation with SEPA at an early stage prior to the production of the detailed method statement will reduce delays in assessment of an application for an authorisation.

The method statement should provide a clear statement of all working procedures involved, including details on the protection of the water environment whilst work is ongoing and after work has been completed. Substantial variations in the working method which may have an impact on the water environment must result in the submission of a revised method statement to SEPA. The method statement should provide details of any maintenance that may be required after the activity has been completed.

Engineering Activities (Points 1 – 6 normally required for outline method statement)

The method statement must provide the following information on the engineering activity being applied for:

1. Proposed start date of project
2. Brief description of the proposed works
3. The method of working that will be used to carry out the operation. Provide details of activities that will impact on the bed or banks of the watercourse (e.g., vegetation removal or excavation of river bed)
4. The temporary works that will be required (e.g., will over-pumping be required to allow works to be carried out?)
5. A description of how the works will be delivered and to what timescale (e.g., Main Contractor/Sub contractor/individual)
6. Details of site drainage in vicinity of operation
7. Details and emergency contact telephone numbers of all main contractors/subcontractors site personnel/individuals responsible for the operation
8. Details of all construction plant to be used in watercourse including details of maintenance checks carried out (dates)
9. Details of all materials stored or used within the vicinity of the watercourse. (types and quantities)

Water Environment (Points 1- 4 normally required for outline method statement)

The method statement must also provide the following details to show how the impact to the Environment of the Works will be minimised.

1. Identify all parts of the water environment (including drainage ditches) which may be impacted by the proposed operation
2. The pollution prevention measures (mitigation) that will be in place to prevent pollution of the water environment
3. How the free passage of migratory fish will be enabled during the period of the works
4. How existing waterbody habitats and features near to the site will be protected from damage during operations
5. Procedures for dealing with refuse/debris produced at the site of the works
6. Training that site personnel have undertaken with regards to protection of the water environment
7. Company policies that relate to the Environment
8. The measures and equipment available which can be used in the event of pollution of the water environment taking place

Section 3.4: Other Engineering Activities

A map and summary table should be provided detailing the locations of all other engineering activities, structures or modifications within 250m of the proposed works. For rivers, this should include activities within 250m upstream and downstream. For lochs and wetlands, engineering works within a radius of 250m should be recorded. The table in Section of Form E should be used as a basis for the types of activities that should be recorded.

APPENDIX A: SAMPLE METHOD STATEMENT

Example of information requirements for large scale river crossing by 2 no.17" pipelines for water supply purposes.

ENGINEERING ACTIVITY	
Project scope	This project involves the crossing of the Dean Water with 2 x 17" water mains by open cut technique.
Project justification	This project forms part of the water supply scheme for the city of Dundee. The existing supply main is in poor condition and is in danger of failing. These 2 pipes will replace this existing main. Failure to carry out this project could result in parts of the city of Dundee running out of drinking water.
Working Method	Construction of cofferdam by driving piles to half width of river channel. River bed now dry to be excavated to a depth of 1m and pipe placed in trench and then backfilled. Pipe will have stopend welded prior to placement to prevent ingress of silt. Concrete slabs will be placed on top of pipe surround. Backfill with 400mm of excavated river bed material. This operation will then be repeated towards south bank of river.
Temporary works requirement	River banking in field no 46 will be reduced in level by 1 – 2m to gain access for piling plant. Whaling beams will be lifted into position to span across the river to allow access for operatives. Sheet piles will be driven using a variable boom excavator suspended vibrating hammer. Work will commence at bulkhead in middle of river and proceed towards north bank of river. Piles will be lifted into place and then pitched and clamped with hammer jaws and driven to refusal in rock. Cofferdam to be created by area behind piles to be pumped dry to enable work on pipe laying to commence. Pumped water to be settled in grit trap to remove solids then run over grass before being returned to river. This whole operation will then be repeated towards south bank of river. Piles then pulled out once pipe is in place and river bed reinstated.
Reinstatement	Install turfmat along edge of existing river when bank has been reinstated to protect river edge from erosion when pipes have been pulled.
Project Delivery Timescale	Commence 6 th Feb 2006 – complete 20 Feb 2006
Names – Contact telephone no	Mr Contractor – 07732 754210
Plant Details	360 degree tracked excavators 4" water pump temporary pipe liebherr 914 HAB piling machine MS – 6 HFB vibrating hammer 330 amp welding plant oxy propane cutting equipment
Material Details	Fuel for machines

Existing site details	Field drains identified on Drg No xxxxxx. Potential for pumped river water to short circuit to river thus not being given full settlement. River water to be run over area where there are no field drains.
WATER ENVIRONMENT	
Plan provided showing controlled waters (drains/ditches/watercourses in the vicinity of the operation)	<ul style="list-style-type: none"> • Yes/No - Yes • If not – why not?
Pollution Prevention Measures	<ul style="list-style-type: none"> • SEPA to be informed prior to commencement • Fuel to be stored 30m from river and refuelling to be carried out 30m from river • Plant to be parked in secure compound overnight • All pumped water to be pumped over grassland area prior to discharge to river
Equipment available in the event of watercourse pollution occurring	<ul style="list-style-type: none"> • Spill kits to be on site at all times • Operatives to be made fully aware of the environmental risks associated with the operation
Fish Passage during operation	<ul style="list-style-type: none"> • Fish can move up or down river as only one half of the river will be worked on at any particular time.
Materials on site	<ul style="list-style-type: none"> • Welding materials • Fuel oil for vehicles and plant
Refuse/debris	<ul style="list-style-type: none"> • All refuse/debris to be returned to secure compound on a daily basis to be removed by suitable certified contractor
Training of operatives in pollution prevention	<ul style="list-style-type: none"> • Toolbox talks held on a regular basis on pollution prevention and environment. Induction course highlights pollution risks associated with operations.
Environmental Policy	<ul style="list-style-type: none"> • The company has an Environmental Policy which has been submitted to SEPA. • ISO accreditation
Proposals for continuous improvement in respect of the water environment	<ul style="list-style-type: none"> • Company are working towards habitat award for the reinstatement work that they intend to carry out on this project



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

LICENCE APPLICATION GUIDANCE

**FORM F - WASTE SHEEP DIP AND/OR WASTE
PESTICIDES DISPOSAL TO LAND**

Guidance structure:

1. General Information
2. Does the activity require authorisation?
 - 2.1. Activities where authorisation is required
 - 2.2. Activities where authorisation is not required
 - 2.3. Activities where authorisation may be required
3. How to apply for authorisation
 - 3.1. Prior Investigation
 - 3.2. Site Map
 - 3.3. Completing the application forms
4. Processing the application
5. Authorisation conditions
6. References

SECTION 1: GENERAL INFORMATION

Disposal to land, or tipping for the purpose of disposal to land, which could result in substances polluting the water environment, must be authorised by SEPA under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 ('CAR 2011') which superseded CAR 2005 on 31 March 2011. Existing authorisations issued under the Groundwater Regulations (1998) or CAR 2005 are automatically transferred to CAR 2011 and farmers holding such an authorisation need not re-apply.

It should be assumed that all agrochemicals contain pollutants; however the risk to the water environment is greater from some than from others. Products containing pesticides and veterinary medicines pose a particular hazard.

You should refer to the following documents for information on how to prevent pollution of the water environment when using or disposing of these products:

Scottish Executive guidance –

The Code of Good Practice for the Prevention of Environmental Pollution from Agricultural Activity (the PEPFAA Code)

SEPA guidance –

Sheep Dip Code of Practice for Farmers and Crofters and Contractors

SECTION 2: DOES THE ACTIVITY REQUIRE AUTHORISATION?

2.1 Activities where authorisation is required

Activities that will definitely require authorisation by SEPA include:

- Disposal to land of waste sheep dip arising from static or mobile dippers and showers. (This includes dips used for parasitic and cosmetic purposes.)
- Disposal to land of waste pesticides and pesticide tank and equipment washings
- The spreading of farm wastes, such as livestock slurries and animal manures containing waste sheep dip and other waste agrochemicals is classified as tipping for the purposes of disposal to land.

Any such disposal activity which is carried out without an authorisation is a criminal offence unless it is:

- An application of dilute waste pesticide and washings on previously treated or untreated crops which is made in accordance with the Code of Good Practice for the Prevention of Environmental Pollution From Agricultural Activity (the PEPFAA Code), and within the terms of the pesticide product approval. (The Scottish Executive is planning to issue guidance on the safe use and disposal of plant protection products in spring 2006. Until such time that this has been issued you may wish to consult the Defra guidance, PESTICIDES – Code of Practice for Using Plant Protection Products for safe practice guidance.)

2.2 Activities where authorisation is not required

There are some agrochemicals that pose less of a risk to the environment. In addition you may wish to undertake other activities that could result in a disposal to land of potentially polluting matter. Activities that do not generally require authorisation by SEPA include:

- Use of nutrients, crop or animal inputs for agricultural benefit (e.g. copper, selenium, boron, cobalt, phosphorus and ammonia), if used in accordance with the Code of Good Practice for the Prevention of Environmental Pollution from Agricultural Activity (PEPFAA).
- Application to land of wastes generated on-farm and applied for agricultural benefit; e.g. livestock slurries and animal manures.
- Sewage sludge applied to land in accordance with the Sludge (Use in Agriculture) Regulations 1989 (as amended).

- The land application of those non-agricultural wastes exempt from the licensing requirements of the Waste Management Licensing Regulations 1994 by virtue of being applied for the purposes of agricultural benefit or ecological improvement.
- Use of potential pollutants in normal agricultural practices (e.g. crop protection), if used in accordance with approved codes and manufacturers instructions.
- If the waste being disposed of contains pollutants in a quantity and concentration so small so as to obviate any present or future deterioration in groundwater quality. In practice it is highly unlikely that this can be achieved as, for example, for sheep dip to achieve exemption, a dilution ratio of approximately 1 part spent dip to 1,000,000 parts of diluent (slurry/water) would be required, which is impractical in all but exceptional cases.

2.3 Activities where authorisation may be required

You may wish to undertake a disposal of a product containing agrochemicals which does not obviously fit into either of the above categories. In such cases you should contact your nearest SEPA office. You will need to be able to identify the ingredients of the product and describe the way in which you plan to dispose of it (amount of dilution, area to be spread, location, etc.) so that you can be advised on the need for authorisation.

Note The movement of waste sheep dip and or waste pesticide from one farm holding to another for disposal will require the farmer or contractor moving the material to fill out consignment notes in line with the Special Waste Regulations (Please contact your local SEPA office for further information).

SECTION 3: HOW TO APPLY FOR AUTHORISATION

3.1 Prior Investigation

Before completing the application form, you must assess the suitability of the area(s) of land you plan to use for disposal by filling in the prior investigation section of the application form *Assessment of Land suitability for the Disposal of Waste Sheep Dip and/or Waste Pesticides*. You must complete all sections of the assessment.

The prior investigation is designed in such a way to identify suitable areas for waste agrochemical disposal.

Your application may be rejected if the prior investigation indicates that the area chosen is unsuitable.

Only one disposal of waste sheep dip or waste pesticide per year can be carried out on a disposal area. The authorisation will allow you to carry out a number of disposals on different areas within the same farm or holding but if you plan to use several disposal areas you must submit a prior investigation assessment for each.

SEPA will not authorise an application without a completed prior investigation for each disposal area.

3.2 Site Map

You must also submit a map of the area with your application. The map can either be a copy of the 1:10,000 scale IACS map, or a copy of an Ordnance Survey map at 1:10,000 or 1:25,000 scale. If you have used one of these for your site plan then a further map will not be required.

You must mark on the map:

- the boundary of the holding, (A holding may comprise common grazing and/or inbye land managed by a crofting or grazing committee)
- the boundaries of the land area(s) you are proposing for disposal, (These area(s) can be part of a field or include a number of fields dependent on the availability of suitable land)

- the location of drinking water supplies within 500 metres of any proposed disposal area or dipping facility,
- the location of the static or mobile dipper(s)/shower(s)

3.3 Completing the application

On completion of a prior investigation for each disposal site and the site map you should fill in the appropriate sections of forms A and F.

Forms A and F with the appropriate sections completed, a prior investigation assessment for each proposed disposal area, the site map together with the appropriate application fee should be sent to your local SEPA Registry at the address indicated in Form A.

SECTION 4: PROCESSING THE APPLICATION

A member of the SEPA's Operations Team will examine your application. They may call upon the expertise of other SEPA specialists in deciding whether or not to authorise the activity. They need to consider a number of factors and it may not be possible to make a decision with the available information. The following are examples of what course of action may be followed.

- Where SEPA considers that there is a risk that a disposal could impact upon a sensitive receptor, such as a drinking water supply, you may be asked to supply additional information before a final decision is made. This could involve:
 - monitoring work and/or
 - a requirement for further hydrogeological assessment of the disposal area(s)
 - A site visit by SEPA staff may be necessary
 - SEPA may request further evidence of any technical precautions you plan to take to prevent pollution.
- Where the disposal could have an impact on parts of the water environment associated with others, e.g. a stretch of fishing waters, you may be required to advertise the application, at your cost, **before** an authorisation decision is made.

SECTION 5: AUTHORISATION CONDITIONS

Where SEPA is satisfied that there will be no significant impact upon the water environment or water users as a result of the disposal, the activity will be authorised. The authorisation will specify:

- i) The area of land to be used for disposal
- ii) The method of disposal used
- iii) Essential precautions to be taken and/or conditions under which disposal is to take place
- iv) The maximum quantity of waste to be disposed of during one or more specified periods of time
- v) The maintenance of accurate disposal records
- vi) Precautions to be implemented to prevent any pollution of groundwater
- vii) If necessary, measures for monitoring groundwater.

Authorisation may be granted for a limited period only and will be reviewed by SEPA when deemed necessary, but at least once in every four years. When an authorisation is reviewed, it may be renewed, amended or revoked.

SEPA must be notified of any change in circumstances, such as the sale or transfer of the farm, croft or holding, change in responsible person or other alteration to the disposal activity specified in the application.

SECTION 6: REFERENCES

- PESTICIDES – Code of Practice for Using Plant Protection Products for safe practice guidance, 2005, Defra
- Prevention of Environmental Pollution From Agricultural Activity, (The PEPFAA Code), 2005, Scottish Executive.
- The Code of Good Practice for the Safe Use of Plant Protection Products, (The Green Code), 2006, Scottish Executive
- Sheep Dip Code of Practice for Farmers and Crofters, SEPA, 2006
- Sludge (Use in Agriculture) Regulations, as amended, DoE, 1989
- Waste Management Licensing Regulations, DoE (1994)



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

LICENCE APPLICANT GUIDANCE

**FORM G -Application for Variation
(Administrative or Technical)
to a Licence**

FOR INFORMATION

All relevant guidance for using this form is included within the form itself.

No other forms need to be completed.



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

LICENCE APPLICANT GUIDANCE

FORM H - Application to Transfer a Licence

FOR INFORMATION

All relevant guidance for using this form is included within the form itself.

No other forms need to be completed.



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

LICENCE APPLICANT GUIDANCE

**FORM I - Application to Surrender an
Authorisation**

FOR INFORMATION

All relevant guidance for using this form is included within the form itself.

No other forms need to be completed.



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

LICENCE APPLICANT GUIDANCE

FORM K – Deep Borehole Construction

Guidance structure:

1. Activities applied for
2. Details of deep boreholes

SECTION 1: ACTIVITIES APPLIED FOR

Please complete this section indicating how many deep boreholes you are applying to construct within each category. The CAR practical guide provides details of the level of authorisation required.

SECTION 2: DETAILS OF DEEP BOREHOLES**2.1 Deep Borehole No/Ref/Name**

Please provide a reference for each borehole e.g. BHA. This should correspond to a reference on the site map in 2.4 of form A.

2.2 Borehole maximum depth

Please specify the maximum borehole depth, where possible, please report to 2 decimal places expressed in metres. Please note that if you extend the depth or diameter of the borehole/well in the future then you will have to apply to vary your licence.

2.3 Borehole diameter

Please specify the maximum and minimum drilled borehole diameter in mm.

2.4 Purpose of borehole

Please specify the purpose of the borehole that is being drilled e.g. exploration drilling for the purpose of unconventional gas extraction.

2.5 National Grid Reference of borehole headworks

Please specify the 10 figure national grid reference of the borehole headworks

2.6 National Grid Reference of maximum lateral extent of the deep borehole.

If there are laterals planned please specify the national grid reference of maximum lateral extent of each.

2.7 Details of strata through which the borehole will be drilled

Please specify these details including depth and type of each strata through which the borehole will be drilled. We suggest this is done by reference to an appropriate section in a supporting document.

2.8 Drilling technique used

Specify the drilling technique(s) that is/are to be used. We suggest this is done by reference to an appropriate section in a supporting document.

2.9 Type of drilling fluid used

Please provide the chemical composition of drilling fluid used.

2.10 Casing types, diameters and depths

Specify the casing type(s), diameter(s) (in mm) and in the depth range over which it is present both in meters below ground level (mbgl) and meters above ordnance datum (mAOD). We suggest this is done by reference to an appropriate section (and diagram) in a supporting document.

2.11 Details of cementing the casing

Provide details such as type of cement used, method of use and depth over which cementing will take place.

2.12 Details of any nearby faults, mineworkings or other deep boreholes.

Please include the location and nature of these as well as stand off distances from these features.

2.13 Water feature survey

A water features survey of radius 1200m should be carried out. The survey should include abstractions, surface waters, springs and wetlands within 1200m of both the top and the bottom of the borehole. Sections 3 and Annex 2 of 'An applicants guide to water supply boreholes' provides further details. http://www.sepa.org.uk/water/water_regulation/guidance/abstraction_and_impoundment.aspx. Note that where horizontal drilling has taken place the water feature survey will need to take account of both the surface position and the position of the horizontal extent of the borehole.

2.14 Contingency plans for fluid and grout loss or artesian flow

Please provide details of an approach for minimising and dealing with drilling fluid loss, dealing with artesian flow and dealing with any variance from anticipated grout volumes. We suggest this is done by reference to an appropriate section in a supporting document.

2.15 Details of any appropriate baseline monitoring planned/undertaken

This could include baseline groundwater monitoring and/or baseline monitoring of other relevant receptors. We suggest this is done by reference to an appropriate section in a supporting document. Further details are provided in SEPA guidance WAT-RM-11 Licensing Groundwater Abstractions including Dewatering.

2.16 Details of monitoring and testing to confirm that the borehole has been adequately constructed

This could include integrity testing to confirm that the borehole has been adequately constructed. We suggest this is done by reference to an appropriate section in a supporting document. Further details are provided in SEPA guidance WAT-RM-11 Licensing Groundwater Abstractions including Dewatering.

2.17 Ongoing monitoring and maintenance planned to ensure the boreholes integrity is maintained

We suggest this is done by reference to an appropriate section in a supporting document. Further details are provided in SEPA guidance WAT-RM-11 Licensing Groundwater Abstractions including Dewatering.

2.18 Details of action that will be taken should any adverse environmental impact be detected

We suggest this is done by reference to an appropriate section in a supporting document.

2.19 Decommissioning plans (include temporary sealing and longer term decommissioning and monitoring).

We suggest this is done by reference to an appropriate section in a supporting document. Further details are provided in SEPA guidance WAT-RM-11 Licensing Groundwater Abstractions including Dewatering,

2.20 What date do you intend to start construction works?

Please detail the date on which you plan to start drilling.

2.21 Do you consider this activity would qualify as an environmental service?

Please identify if the activity qualifies as an "Environmental Service". You should have discussed this issue with your local SEPA office for more detailed advice, prior to making an application.

If appropriate, set out your claim on a separate sheet detailing why you consider an Environmental Service claim is appropriate and which activities are involved.