

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

A Practical Guide

A practical guide to the regulations, including:

- An overview
- Definitions of the regimes
- Levels of authorisation
- The General Binding Rules

Version 9.3, June 2023

Briefing Note

The CAR Practical Guide, Version 9, January 2022

1. Background

This revised guide provides practical advice on the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended), or CAR. It details which activities are regulated by SEPA. The key changes to the guide are summarised in this briefing note. For further information on the regulations, visit the water regulation pages of the SEPA website. Please note that the CAR Practical Guide is only available electronically.

2. Summary of Changes

This revision is to include the changes introduced by the Water Environment (Controlled Activities) (Scotland) Amendment Regulations 2021 and some other changes as detailed below.

2.1 The Controlled Activities Regulations authorisation requirements

• Changes to the descriptions of controlled activities.

2.2 Pollution Control Regime

- Amendments to GBR10, GBR11, GBR21, GBR22, GBR25, GBR27 and GBR28
- New agricultural GBRs: GBR29, GBR30, GBR31, GBR32, GBR33 and GBR34
- Changes to the scope of two surface water drainage licence activities.

2.3 Engineering Regime

- New table outlining regulatory approach for maintenance, repair, removal and replacement works.
- Changes to clarify authorisation levels.
- Amendments to GBR5, GBR6, GBR8, GBR9, GBR14, GBR15 and GBR18

2.4 Glossary of terms New definitions added.

Version 9.1, March 2022

Section 3.1 has an addition to the table of activities which do not require authorisation - the discharge of naturally occurring, fish bacterial pathogen-specific bacteriophages from finfish farm facilities. **Section 3.3** has further clarification on thresholds for registrations for domestic and non-domestic sewage discharges.

Version 9.2, December 2022

Section 2 CAR authorisation requirements

Replaced reference to Radioactive Substances Act with Environmental Authorisations (Scotland) Regulations.

Section 3 Pollution Control regime

Added that no authorisation is required for a discharge from a single domestic hot tub, small volumes of filters backwash and discharges from some vessels in coastal and transitional waters.

Clarified that discharges from geothermal heat pumps fall under the heading of thermal discharges. Add some content from WAT-SG-39 such as examples of trade effluent. Added some clarification on interaction with WML and PPC regimes in terms of authorising discharges.

Section 4 Abstraction regime

Added that abstraction of groundwater below coastal and transitional waters $\geq 10m^3/d$ is authorised at registration level.

Section 5 Impoundment regime

- Clarification of impoundment definition and which aspects are regulated under CAR
- Clarification of impounding works not normally authorised i.e. specific peatland restoration activities.

Version 9.3, June 2023

Section 3 Point source pollution control

Discharges that don't require authorisation. Altered the activity description for discharges of uncontaminated groundwater to:

- remove reference open cast coal sites, which are no longer present.
- to add the term "mines" to cover some metal mines; and
- to allow of the discharge of water abstracted for testing or sampling where GBR 4 does not apply.

Added that an authorisation from SEPA is not normally required for the discharge of uncontaminated groundwater that arises during the construction and extension of a borehole. Added that that an authorisation from SEPA is not normally required for the disposal of bleach solution used to clean beehives onto vegetated land provided the bleach is dechlorinated prior to discharge.

Altered the activity description for hots tub discharges that don't require authorisation from SEPA to cover all single tubs, not just domestic ones. Made clear that this only applies if the discharge is to groundwater and that other discharges up to 10m³/d require a registration.

Thermal effluents. Made it clear that discharges to coastal and transitional waters are the only discharges that don't have thermal compliance implications and therefore fall under the registration tier of authorisation. Discharges to inland surface waters will have thermal compliance implications.

Engineering activities. Clarified when a bed reinforcement activity to protect an existing structure is a maintenance activity.

Some small changes to the definition of "raised loch" and "realignment/diversion".

Previous Version Updates

v8.0 January 2018

This revision was primarily to include the changes to CAR brought in by the Water Environment (Miscellaneous) (Scotland) Regulations 2017.

v8.1 January 2018

Correction relating to herbicide applications.

v8.2 February 2018

Pollution control regime

A licence is now required for surface water discharge from 60 hectares of residential development (>1000 houses previously) and A roads are now included.

Engineering regime

Updated information text in relation to contacting local District Salmon Fishery Boards or Trusts for advice.

v8.3 February 2019

Pollution control regime

Clarification of the level of authorisation of surface water from different types of construction sites.

Engineering regime

Updated information text in relation to clarifying river width in determining level of authorisation.

v8.4 October 2019 (plus correction for Simple Licences issued December 2019) Pollution control regime

Change to the scope of a Registration and Simple Licence levels of authorisation for sewage discharges.

v8.5 July 2021

Pollution control regime

Changes to Section 3.1:

- to reflect changes to legislation which enables SEPA to control discharges of chemical resides from vessels at marine pen fish farms under CAR.
- Changes to table 1:
 - text regarding sewage effluents;
 - text from cage to pen for fish farms;
 - thermal effluents removing reference to freshwater fisheries directive and minor changes in wording;
 - new registration: disposal of disinfectants during a disease outbreak in inorganic and other trade effluents;
 - levels of authorisation and text for surface water runoff from construction sites;
 - text regarding authorisations for the application of plant protection products, including GBR23.

Abstraction regime

Changes to Section 4.1:

• points of note table 3, text describing when SEPA will consider the construction and operation of multiple boreholes as a single activity.

Changes to Section 4.2

• Amendments to GBR 15 and supporting text to reflect legislative changes.

Impoundment regime

Changes to Section 5:

• reordering of text and boxes and minor changes to text regarding modifications.

Engineering regime

Changes to Section 6.1:

- Changes to table 5:
 - new registration: grey bank reinforcement associated with existing manmade structures.
- Changes to section 6.1 'Points of Note- registration activities':
 - explanation of registration activity references;
 - adding new activity O notes.

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1. Purpose of the guide

This guide provides practical advice on the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended), or CAR. It details which activities are regulated by SEPA.

More detailed guidance on how SEPA has implemented CAR and background information on the Water Framework Directive (WFD) can be found at: <u>www.sepa.org.uk/water.aspx</u>

The CAR Practical Guide will help you determine which level of authorisation you need to apply for:

- 1. Refer to the relevant chapter to see if your activity requires authorisation.
- 2. If your activity falls under a General Binding Rule (GBR) you do not need to apply to SEPA for an authorisation, though you must ensure you comply with the conditions of the GBR. If your activity needs to be registered or licensed you will need to apply to SEPA. Application forms are available at:

www.sepa.org.uk/water/water_regulation/car_application_forms.aspx

- To work out the cost of the application, and to find out whether a subsistence (annual) fee applies, you will need to refer to the Charging Scheme Guidance at: <u>www.sepa.org.uk/wfd/regimes/charging.htm</u>
- You can also use SEPA's online Charge Calculator to determine the fee (this will also calculate reduced application fees for multiple activities): www.sepa.org.uk/wfd/regimes/charging.htm
- 5. Submit the completed application form, with the correct application fee, to the appropriate SEPA office: www.sepa.org.uk/contact

Note: If at any point you have a query, please contact your local SEPA office: <u>www.sepa.org.uk/contact</u>

CAR authorising process¹



¹ As required by the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended).

2. The Controlled Activities Regulations authorisation requirement

It is an offence to undertake, or cause or permit others to carry on, the following activities without a CAR authorisation:

- any activity liable to cause pollution of the water environment, including discharges of polluting matter and disposal of waste sheep dip and waste pesticides;
- abstraction of water from the water environment;
- construction or alteration of impounding works (e.g. dams and weirs) in inland water (other than groundwater) or wetlands;
- operation of impounding works in surface water or wetlands;
- carrying out building or engineering works or works other than those referred to in the two bullet points above (a) in inland water (other than groundwater) or wetlands; or (b) in the vicinity of inland water or wetlands and having or likely to have a significant adverse impact on the water environment;
- artificial recharge or augmentation of groundwater;
- the direct or indirect discharge, and any activity likely to cause a direct or indirect discharge, into groundwater of any hazardous substance or other pollutant;
- any other activity which directly or indirectly has or is likely to have a significant adverse impact on the water environment.

If any of these activities is already authorised by one of the following environmental regulatory regimes, it will be considered authorised under CAR. You will not need to apply for separate authorisation:

- The Environmental Authorisations (Scotland) Regulations 2018
- Integrated Pollution Control (Part 1 of Environmental Protection Act 1990)
- The Pollution Prevention and Control (Scotland) Regulations 2000
- The Pollution Prevention and Control (Scotland) Regulations 2012
- Waste Management Licensing (Part II of Environmental Protection Act 1990)

CAR authorisation is intended to control impacts on the water environment, including mitigating the effects on other water users. Additional consents may be required from other authorities, such as planning permission or permission associated with conservation areas or protected species.

Throughout this guide there are references to new and existing activities. As a general rule, a new CAR activity is one that started on or after 1 April 2006, while an existing activity is one that started before 1 April 2006, unless otherwise stated in this guide.

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2.1 Levels of authorisation

In order to allow for proportionate regulation based on the risk an activity poses to the water environment, there are three types of CAR authorisation:

- General Binding Rules (GBRs)
- Registrations
- Licences

2.2 General Binding Rules

GBRs represent a set of mandatory rules which cover specific low risk activities. Activities complying with the rules do not require an application to be made to SEPA, as compliance with a GBR is considered to be compliance with an authorisation. Since the operator is not required to apply to SEPA, there are no associated charges. SEPA uses its statutory role in the land use planning system to highlight GBRs that may apply to a given proposal. The individual GBRs are described in more detail in the appropriate regime-specific sections of this guide. The direct links to the GBRs and amendments in the legislation can be found as follows.

| GBR | CAR amendment where main text | Subsequent Amendment(s) |
|-----|-------------------------------|-------------------------|
| | of the GBR can be found | |
| 1 | CAR 2013 | none |
| 2 | CAR 2013 | none |
| 3 | CAR 2017 | none |
| 4 | CAR 2013 | none |
| 5 | CAR 2013 | CAR 2021 |
| 6 | CAR 2013 | CAR 2021 |
| 7 | CAR 2013 | none |
| 8 | CAR 2013 | CAR 2021 |
| 9 | CAR 2017 | CAR 2021 |
| 10 | CAR 2021 | none |
| 11 | CAR 2017 | CAR 2021 |

| GBR | CAR amendment where main text | Subsequent Amendment(s) | |
|-----|-------------------------------|-------------------------|--|
| | of the GBR can be found | | |
| 12 | CAR 2017 | none | |
| 13 | CAR 2013 | CAR 2017 | |
| 14 | CAR 2013 | CAR 2021 | |
| 15 | CAR 2013 | CAR 2017 and CAR 2021 | |
| 16 | CAR 2013 | none | |
| 17 | CAR 2017 | none | |
| 18 | CAR 2017 | CAR 2021 | |
| 19 | CAR 2017 | none | |
| 20 | CAR 2017 | none | |
| 21 | CAR 2013 | CAR 2021 | |
| 22 | CAR 2021 | none | |
| 23 | CAR 2017 | none | |
| 24 | CAR 2017 | none | |
| 25 | CAR 2017 | CAR 2021 | |
| 26 | CAR 2017 | none | |
| 27 | CAR 2017 | CAR 2021 | |
| 28 | CAR 2017 | CAR 2021 | |
| 29 | CAR 2021 | none | |
| 30 | CAR 2021 | none | |
| 31 | CAR 2021 | none | |
| 32 | CAR 2021 | none | |
| 33 | CAR 2021 | none | |
| 34 | CAR 2021 | none | |

"CAR 2013" is the <u>Water Environment (Controlled Activities) (Scotland) Amendment</u> <u>Regulations 2013</u>

"CAR 2017" is the <u>Water Environment (Miscellaneous) (Scotland) Regulations 2017</u> "CAR 2021" is the <u>Water Environment (Controlled Activities) (Scotland) Amendment</u> <u>Regulations 2021</u> **Note:** If you think you would be unable to comply with one or more of the general binding rules applicable to your proposed activity, you may still be able to carry out the activity by obtaining an authorisation from SEPA in the form of a registration or water use licence. SEPA will be able to determine whether the activity can be carried out under one of these forms of authorisation without posing a significant environmental risk. Please contact your local SEPA office for advice.

2.3 Registrations

These allow for the registration of small-scale activities that individually pose low environmental risk but, cumulatively, can result in greater environmental risk. Operators must apply to SEPA to register these activities. A registration will include details of the scale of the activity and its location, and there will be a number of conditions that must be complied with. There is an application fee for registrations, though subsistence (annual) charges do not apply.

2.4 Licences

These allow for site-specific conditions to be set to protect the water environment from activities that pose a higher risk. Licences can cover linked activities on several sites over a wide area, as well as single or multiple activities on a single site. Application fees apply to all licences, and subsistence (annual) charges may apply. SEPA has simple licences and complex licences for activities, for which different charges apply.

A key feature of CAR licences, unlike GBRs and registrations, is that they require the applicant to nominate a 'responsible person' (i.e. an individual/partnership/company) to be held accountable for securing compliance with the terms of the licence. To determine which level of authorisation is required for an activity, please consult the regime-specific sections of this guide.

Information on charges and associated guidance is available at: <u>https://www.sepa.org.uk/regulations/authorisations-and-permits/charging-schemes/charging-schemes-and-summary-charging-booklets/</u>

3. Pollution control regime

WEWS² and CAR provide a framework within which certain activities that may impact on the water environment may be authorised subject to conditions that adequately protect the water environment, but it may not be appropriate to authorise all activities e.g. a slurry spill in the vicinity of a watercourse is an activity liable to cause pollution of the water environment, but SEPA would not authorise it. SEPA routinely uses this framework to control point source discharges to the water environment as well as disposals to groundwater via land.

Pollution, in relation to the water environment, means the direct or indirect introduction, as a result of human activity, of substances (including bacteria and other pathogens) or heat into the water environment, or any part of it, which may give rise to any harm.

For these purposes, 'harm' means:

- (a) harm to the 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 or other legitimate uses of the water environment.

The Water Environment (Diffuse Pollution)(Scotland) Regulations 2008 introduced a number of General Binding Rules (GBRs) to control specified activities that are liable to cause diffuse pollution, these changes are now incorporated in CAR.

² The Water Environment and Water Services (Scotland) Act 2003

The Water Environment (Miscellaneous) (Scotland) Regulations 2017 brought the provisions of the Water Environment (Oil Storage) (Scotland) Regulations 2006 which is now revoked. These are contained within General Binding Rules 26, 27 and 28.

The Water Environment (Controlled Activities) (Scotland) Amendment Regulations 2021 amalgamated the requirements of the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) (Scotland) Regulations 2003 which are now revoked into CAR. These are now GBR 29, 30, 31, 32 & 33. In addition, GBR 34 was introduced to control the storage of liquid digestate where not already covered by regulations.

3.1 Point source pollution control

Point source discharges include:

- sewage and trade effluent discharges;
- surface water discharges from urban areas;
- abandoned mine discharges;
- disposals of waste sheep dip and other waste pesticides

Such discharges will typically be made directly to the water environment. However, the regime also covers discharges to land that result in the indirect discharge of matter liable to cause pollution of groundwater. SEPA authorises discharges of sewage and trade effluent to land.

Authorisation from SEPA will be required for the disposal to land of waste sheep dip or waste pesticides and pesticide washings.

It is recognised that in certain circumstances a structure may have to be constructed before an authorised activity can be carried out (e.g. a new outfall pipe to facilitate a point source discharge or an intake structure to facilitate an abstraction). In these circumstances, SEPA treats the construction (an engineering activity) as secondary to the primary activity and will normally authorise the construction activity in the same authorisation document as the primary activity. This means that SEPA will not normally require two separate applications to be made or fees to be paid, however, SEPA will need details of any dependent activities to be submitted with the main application.

SEPA does not require authorisation for the following types of discharge:

- Discharges of any reagent or chemical or particle tracer used in connection with any scientific experiment or survey in coastal or transitional water. A marine licence may be required by Marine Scotland for these discharges.
- Occasional discharges from public water treatment works, and the water supply system, provided it is undertaken in accordance with the Water Supply Hygiene procedures (Scottish Water) or the Water (Scotland) Act 1980.
- Discharges of uncontaminated groundwater abstracted³ directly through boreholes/well pointing and discharged without contact with any other drainage run-off, in order to either
 - o dewater mines/quarries/construction sites; or
 - test the yield of the borehole or well or the hydraulic properties of the aquifer where GBR 4 does not apply; or
 - o sample the water quality where GBR 4 does not apply.

It must be made very clear to the operator that this only applies to uncontaminated groundwater.

- Discharges of uncontaminated groundwater that arises during the construction or extension of a well or borehole.
- Discharges of clean water from storage tanks/pipelines which are filled with clean water in order to test water tightness e.g. fish farm tanks, chemical/oil storage tanks.
- Discharges of uncontaminated rainwater which has collected in an oil storage bund. i.e. no visible sheen.

³ The initial abstraction may require authorisation.

- Initial pumping out of water from a dry dock and any uncontaminated water which is released simply by the opening of gates.
- Discharge of naturally occurring, fish bacterial pathogen-specific bacteriophages from finfish farm facilities⁴.
- Discharge of hot tub effluent from a premises with only one hot tub to groundwater. We recommend this is done in accordance with good practice guidance. See Discharge of Chlorinated Effluents, Supporting Guidance WAT-SG-41
- Discharges from vessels in coastal and transitional waters other than the discharge of medicine residues from wellboats for marine finfish farms.
- Discharges of filter backwash waters with a volume of <1m³/day that comes from the maintenance of abstraction equipment to a soakaway. The discharge must not be direct to groundwater and must not contain any added pollutants that are not those derived from the water that is being treated.
- The disposal of bleach solution used to clean beehives onto vegetated land provided the bleach is dechlorinated prior to discharge.

Discharges of turbine water are included in the abstraction licence.

Where trade effluent or surface water run-off is discharged to the water environment, and the discharge point falls within the site boundary of a waste management licence, the discharge can be authorised by a waste management licence. Irrespective of the discharge point location, trade effluent, sewage or surface water run-off discharged to the water

⁴ Naturally occurring bacteriophages are viruses that infect bacteria. They are common in the environment and highly specific to their target bacterium (ie only able to replicate within their specific host). Because of their specificity, they do not pose a risk to the wider environment. Bacterial pathogens of farmed fish include bacteria such as *Yersinia ruckeri*. The use of bacteriophages targeted at such pathogens may reduce infection risk and, hence, the need to use and discharge antimicrobial medicines.

environment can be authorised by a PPC permit if the discharge comes from the stationary technical unit.

3.2 Diffuse pollution control

Diffuse pollution is caused by releases of pollutants from a range of activities on land that individually may have little effect on the water environment, but cumulatively can have a significant impact across a (river) catchment.

The General Binding Rules (GBRs) for diffuse pollution are based on widely accepted standards of good practice, such as the Prevention of Environmental Pollution from Agricultural Activity (PEPFAA) Code, the 4 Point Plan and the Forests and Water Guidelines. Essentially, they provide a statutory baseline of good practice and are expected to contribute significantly to improvements in water quality.

Activities covered by the GBRs include the:

- storage and application of fertilisers;
- keeping of livestock;
- cultivation of land;
- discharge of surface water run-off;
- construction and maintenance of roads and tracks;
- storage and application of pesticide;
- operation of sheep dipping facilities.

3.3 Pollution control – levels of authorisation

Use Table 1 to determine the level of authorisation applicable for pollution activities. The notes below the table provide supporting information.

Table 1: Pollution control levels of authorisation

pe = population equivalent CSO = combined sewer overflow

| GBR | Registration | Simple licence | Complex licence | | | | | | |
|----------------|------------------------------|-------------------|---------------------|--|--|--|--|--|--|
| Sewage and org | Sewage and organic effluents | | | | | | | | |
| | Organic effluents | Organic effluents | Organic effluents | | | | | | |
| | ≤15pe (including | >15– 100pe | >100pe | | | | | | |
| | discharges to | | | | | | | | |
| | soakaways) | | | | | | | | |
| | Sewage: has been | Sewage: has | Sewage | | | | | | |
| | in use more than 2 | been in use more | | | | | | | |
| | years | than 2 years | | | | | | | |
| | serving ≤9 domestic | | | | | | | | |
| | properties or for non- | >50pe – 100pe | >100 pe | | | | | | |
| | domestic | | | | | | | | |
| | developments serving | | | | | | | | |
| | ≤50pe (including | | | | | | | | |
| | discharges to | | | | | | | | |
| | soakaways) | | | | | | | | |
| | Sewage: proposed | Sewage: | Sewage | | | | | | |
| | or has been in use | proposed or has | | | | | | | |
| | less than 2 years | been in use less | | | | | | | |
| | serving ≤3 domestic | than 2 years | | | | | | | |
| | properties or for non- | >15pe – 100pe | >100 pe | | | | | | |
| | domestic | | | | | | | | |
| | developments serving | | | | | | | | |
| | ≤15pe (including | | | | | | | | |
| | discharges to | | | | | | | | |
| | soakaways) | | | | | | | | |
| | | Low significance | Medium and high | | | | | | |
| | | CSOs | significance CSO | | | | | | |
| | | | Emergency overflows | | | | | | |
| Fish farms | · | · | · | | | | | | |

| GBR | Registration | Simple licence C | | C | omplex licence | | | |
|-------------------|---------------------------------------|----------------------|---------|---------|----------------------|-----------------------|--------|----------|
| | All non-commercial | Freshwat | er pei | n fish | | Freshwate | er pe | en fish |
| | fish hatcheries for | farms tha | t proc | luce ≤2 | 2 | farms that | t pro | duce |
| | native fish | tonnes of | fish p | ber | | >2 tonnes | of fi | sh per |
| | | year | | | | year | | |
| | | Marine pe | en/tan | k fish | | Marine pe | en/tai | nk fish |
| | | farms ≤50 |) tonn | es | | farms >50 |) ton | nes |
| | Effluents from | Effluents | from | tank | | | | |
| | commercial tank fish | fish farms | /hatc | heries | | | | |
| | farms/hatcheries with | that produ | ice | | | | | |
| | ≤0.5 tonnes of annual | >0.5 tonn | es of | fish in | | | | |
| | fish production | any one y | ear | | | | | |
| Inorganic effluer | nts and other trade effl | uents use | d in a | proce | es | S | | |
| Direct | Inorganic effluents | Inorganic | efflue | ents | | Inorganic | efflu | ents |
| discharges of | and other trade | and other | trade | ; | | and other trade | | |
| pollutants | effluents including | effluents, including | | | effluents, including | | | |
| into | to mines and quarries, from mines and | | t | | from mine | s an | d | |
| groundwater | airport run-off | quarries, | airpoi | rt run- | | quarries, a | airpo | ort run- |
| as a result of | containing de-icer, | off contail | ning c | le-icer | , | off contair | ning | de-icer, |
| construction or | contaminated | contamina | ated | | | contamina | ated | |
| maintenance | groundwater and | groundwa | ter, la | andfill | | groundwa | ter, | |
| works in or on | discharges from | leachate and | | | landfill lea | chat | e and | |
| the ground | swimming pools or | discharges from | | | discharge | s fro | m | |
| which come | discharge of hot tub | swimming | g pool | s or | | swimming |) poc | ols or |
| into contact with | effluent from a | from a site | e with | more | | from a site with more | | |
| groundwater | premises to surface | than one | hot tu | b | | than one l | hot t | ub |
| (e.g. | water or the | Volume | | ре | | Volume | | ре |
| pouring of | discharge of hot tub | m³/d | | | | m³/d | | |
| concrete | effluent from a | ≤10 | and | >15- | | | | |
| below the water | premises with more | | | 100 | | >100 | or | >100 |
| table) [GBR16] | than one hot tub to | >10- | and | ≤100 | | | | |
| | | 100 | | | | | | |

| GBR | Registration | | Simple licence | Complex licence |
|-------------------|-------------------------|----------|----------------------|-----------------|
| | groundwater | (not | | |
| | landfill leachates) | | | |
| | Volume | ре | | |
| | m³/d | | | |
| | ≤10 ar | id ≤15 | | |
| | Direct discha | rge into | | |
| | groundwater | of grout | | |
| | containing bla | aes for | | |
| | the purpose of | of | | |
| | construction of | or | | |
| | maintenance | works | | |
| | | | Water treatment | |
| | | | works discharges | |
| | | | Discharges from dry | |
| | | | docks | |
| | Disposal to la | ind of | | |
| | >10m ³ /d of | | | |
| | disinfectant w | ashings | | |
| | in the event c | fa | | |
| | notifiable dise | ease | | |
| | outbreak | | | |
| | | | | |
| Thermal effluents | S | | | |
| Discharges of | Cooling wat | er | Cooling water | |
| groundwater from | discharges | to | discharges to inland | |
| geothermal | transitional | and | surface waters and | |
| activities | coastal wate | ers and | discharges from hea | t |
| complying with | discharges | from | pumps with | |
| GBR 17. | geothermal | heat | chemical addition | |
| | pumps to th | e water | | |
| | environmen | t, with | | |

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| GBR | Registration | Simple licence | Complex licence |
|-----|--------------|----------------------|-----------------|
| | no chemical | | |
| | addition. | | |
| | | | |
| | | All boiler blow-down | |

| GBR | Registration | Simple licence | Complex licence | | | | |
|--|--------------|------------------------|-----------------|--|--|--|--|
| Discharge of water run-off from a surface water drainage system to the water | | | | | | | |
| environment ⁵ | | | | | | | |
| Discharge of | | Discharge of water | | | | | |
| water run-off from | | run-off from a surface | | | | | |
| a surface water | | water drainage | | | | | |
| drainage system | | system to the water | | | | | |
| to the water | | environment from any | | | | | |
| environment from | | motorway/trunk road | | | | | |
| buildings, roads | | where any one outfall | | | | | |
| other than | | serves a length of | | | | | |
| waterbound | | road >1km and the | | | | | |
| roads, yards or | | road was either | | | | | |
| any other built | | constructed before 1 | | | | | |
| development | | April 2007 and the | | | | | |
| constructed | | footprint of the road | | | | | |
| before 1 April | | or its associated | | | | | |
| 2007, unless | | infrastructure is | | | | | |
| covered by one | | enlarged or otherwise | | | | | |
| of the listed | | altered on or after 1 | | | | | |
| exceptions | | April 2007, or the | | | | | |
| [GBR10A] | | road was constructed | | | | | |
| | | on or after 1 April | | | | | |
| | | 2007. | | | | | |
| | | | | | | | |

⁵ SEPA has previously used the term "surface water" to describe rain and other water run-off that flows along the surface of the land, but it is more correctly termed "water run-off"

| GBR | Registration | Simple licence | Complex licence |
|----------------------------|--------------|------------------------|-----------------|
| Discharge of | | Discharge of water | |
| water run-off from | | run-off from a surface | |
| a surface water | | water drainage | |
| drainage system | | system to the water | |
| to the water | | environment from: | |
| environment from | | land of >30 hectares | |
| buildings, roads | | used for residential | |
| other than | | premises; industrial | |
| waterbound | | estates; or land used | |
| roads, yards or | | as a motorised | |
| any other built | | vehicle parking area | |
| development | | with >1,000 parking | |
| constructed on or | | spaces; | |
| after 1 April 2007, | | in each case where | |
| unless covered | | constructed on or | |
| by one of the | | after 1 April 2007. | |
| listed exceptions | | | |
| [GBR10B] | | | |
| Discharge of | | | |
| water run-off from | | | |
| a quarry or | | | |
| borrow pit | | | |
| constructed on or | | | |
| after 1 January | | | |
| 2022 [GBR10C] ⁶ | | | |

⁶ For the purpose of this GBR, water collecting in an excavation or quarry is water run-off unless it includes trade or other effluent

| GBR | Registration | Simple licence | Complex licence |
|---------------------|--------------|-------------------------|-----------------|
| Discharge of | | Discharge of water | |
| water run-off from | | run-off from a | |
| a construction | | construction site to | |
| site to the water | | the water | |
| environment | | environment where | |
| where the site, | | the site, including any | |
| including any | | constructed access | |
| constructed | | tracks: | |
| access tracks, | | (i) exceeds 4 | |
| does <u>not</u> : | | hectares; | |
| (i) exceed 4 | | (ii) contains a road or | |
| hectares; | | track length in excess | |
| (ii) contain a road | | of 5km; or | |
| or track length in | | (iii) includes any area | |
| excess of 5km; or | | of more than 1 | |
| (iii) include any | | hectare or any length | |
| area of more than | | of more than 500 | |
| 1 hectare or any | | metres on ground | |
| length of more | | with a slope in excess | |
| than 500 metres | | of 25°. | |
| on ground with a | | | |
| slope in excess | | | |
| of 25°. | | | |
| [GBR10D] | | | |
| Discharge into a | | | |
| surface water | | | |
| drainage system | | | |
| [GBR11] | | | |

| GBR | Registration | Simple licence | Complex licence |
|----------------------|-------------------|----------------|-----------------|
| Discharge of | | | |
| surface water from | | | |
| waterbound roads | | | |
| and tracks, | | | |
| including during | | | |
| the construction | | | |
| and | | | |
| maintenance of | | | |
| such roads | | | |
| and tracks | | | |
| [GBR22] | | | |
| Agricultural and fo | restry activities | | |
| Storage | | | |
| of fertiliser, where | | | |
| not regulated | | | |
| by a waste | | | |
| management | | | |
| licence or an | | | |
| activity specified | | | |
| under GBR31, | | | |
| GBR 32 or GBR | | | |
| 34, and/or the | | | |
| application of any | | | |
| fertiliser. | | | |
| [GBR18] | | | |
| Keeping of | | | |
| livestock | | | |
| [GBR19] | | | |

| GBR | Registration | Simple licence | Complex licence |
|-----------------------------|---------------------------------|------------------------|-----------------|
| Cultivation of land | | | |
| [GBR20] | | | |
| Discharge of water | | | |
| run-off via a | | | |
| surface water | | | |
| drainage system to | | | |
| the water | | | |
| environment as a | | | |
| result of rural land | | | |
| activities [GBR21] | | | |
| | | | |
| Storage/ | The application ⁵ of | Application of | |
| application ⁷ of | pesticides, which | pesticides which are | |
| pesticides that are | are PPPs, within 1 | PPPs in or near | |
| plant protection | metre of any river, | (where not controlled | |
| products (PPPs) | burn, ditch or loch, | by a GBR or | |
| [GBR23] | as measured from | Registration) water to | |
| | the top of the bank; | control any plant | |
| | within 1 metre of a | | |
| | wetland; or within 1 | | |
| | metre of any | | |
| | transitional water or | | |
| | coastal water as | | |
| | measured from the | | |
| | shoreline where; | | |
| | 1. the treated | | |
| | plants are <u>not</u> | | |
| | invasive species | | |

⁷ GBR23(g) provides for the application of pesticides that are PPPs, near water, to invasive species outwith their native range.

| GBR | Registration | Simple licence | Complex licence |
|----------------------|---------------------|------------------------|-------------------------|
| | outwith their | | |
| | native range; and | | |
| | 2. no pesticide | | |
| | will enter the | | |
| | river, burn, ditch, | | |
| | wetland, loch, | | |
| | transitional water | | |
| | or coastal water | | |
| Operating sheep | | Disposal to land of | Disposal to land of |
| dipping facilities | | waste sheep dip or | waste sheep dip or |
| [GBR24] | | waste plant protection | waste plant |
| | | products ≤20m³/day | protection products |
| | | | >20m ³ / day |
| The making and | | | |
| storage of silage in | | | |
| bales or bulk bags | | | |
| [GBR 29] | | | |
| The treatment of | | | |
| silage effluent | | | |
| which consists | | | |
| mainly of rainwater | | | |
| by draining it from | | | |
| a silo through a | | | |
| constructed farm | | | |
| wetland. | | | |
| [GBR 30] | | | |
| The making and | | | |
| storage of silage | | | |
| other than in bales | | | |
| or bulk bags | | | |
| [GBR 31] | | | |

| GBR | Registration | Simple licence | Complex licence | | |
|--------------------|--------------|----------------|-----------------|--|--|
| The storage of | | | | | |
| slurry | | | | | |
| [GBR32] | | | | | |
| The treatment of | | | | | |
| slurry which | | | | | |
| consists mainly of | | | | | |
| rainwater and | | | | | |
| washings by | | | | | |
| draining through a | | | | | |
| constructed farm | | | | | |
| wetland | | | | | |
| [GBR 33] | | | | | |
| Storage of liquid | | | | | |
| digestate unless | | | | | |
| regulated by other | | | | | |
| regulations | | | | | |
| [GBR 34] | | | | | |
| Oil Storage | | | | | |
| The storage of oil | | | | | |
| in a portable | | | | | |
| container with a | | | | | |
| capacity of less | | | | | |
| than 200 litres | | | | | |
| [GBR26] | | | | | |

| GBR | Registration | Simple licence | Complex licence |
|--------------------------|--------------|------------------------|-----------------|
| Storage of oil on | | | |
| premises used as | | | |
| a private dwelling | | | |
| (except where the | | | |
| premises is a | | | |
| vehicle or vessel), | | | |
| where the oil is | | | |
| stored in a | | | |
| container with a | | | |
| capacity of $\leq 2,500$ | | | |
| litres and used | | | |
| solely to serve a | | | |
| fixed combustion | | | |
| appliance | | | |
| installation | | | |
| providing space | | | |
| heating or cooking | | | |
| facilities | | | |
| [GBR27] | | | |
| All other storage of | | The storage of oil for | |
| oil which meets | | onward distribution | |
| specified | | which does not | |
| standards for | | comply with GBR28 | |
| container | | | |
| suitability, | | | |
| secondary | | | |
| containment, | | | |
| ancillary | | | |
| equipment and | | | |
| monitoring | | | |
| [GBR28] | | | |

Registration Activities

- 1. Organic effluents (including discharge to soakaways) that, prior to treatment, have an organic loading of 15 or less population equivalents (pe).
- Sewage systems (including discharge to soakaways) that have been in use for more than 2 years serving ≤9 domestic properties or for non-domestic developments serving ≤50pe.
- Sewage systems (including discharge to soakaways) that have been in use for less than 2 years serving ≤3 domestic properties or for non-domestic developments serving ≤15pe. Full details on how to calculate the pe for non-domestic developments can be found in the British Water Code of Practice Flows and Loads-Sizing Criteria, Treatment Capacity for Small Wastewater Treatment Systems [Package Plants]: (https://www.britishwater.co.uk/page/Publications.
- 4. All non-commercial fish hatcheries for native fish.
- Effluents from commercial fish hatcheries or tank farms with ≤0.5 tonnes of annual fish production.
- Inorganic and other trade effluents with a maximum daily volume ≤10 m³/day and ≤15pe. Landfill leachates must be authorised by either a simple or complex licence.
- 7. Direct discharge into groundwater of grout containing blaes for the purpose of construction or maintenance works.
- Disposal to land of >10m3/d of disinfectant washings in the event of a notifiable disease outbreak.
- Effluents from cooling water processes and discharges from geothermal heat pumps, into which no chemicals have been added and effluents from cooling water processes into coastal and transitional water into which no chemicals have been added.

- 10. The application of pesticides, which are plant protection products within 1 metre of any river, burn, ditch or loch, as measured from the top of the bank; within 1 metre of a wetland; or within 1 metre of any transitional water or coastal water as measured from the shoreline where:
 - 1. The treated plants are not invasive species outwith their native range
 - 2. No pesticide will enter the river, burn, ditch, wetland, loch, transitional water or coastal water

Simple Licence Activities

- Organic effluents that, prior to treatment, have an organic loading >15 and ≤100 population equivalents (pe).
- 2. Sewage systems which have been in use for more than 2 years, with >50-100pe or are proposed and/or been in use for less than 2 years, with >15-100pe.
- 3. Sewage effluent from combined sewer overflows (CSOs) and storm tank discharges, which are of low significance:

Low significance for inland water means that a discharge is made only when the flow in the inlet sewer exceeds 'formula A' and the discharge receives at least eight times dilution (foul dry weather flow (DWF) at 5% low river flows) in the receiving environment and where there is no interaction with other discharges.

Low significance for coastal and transitional water means not in designated bathing waters, shellfish water, or other areas with specific water quality requirements and where there is no interaction with other discharges.

- 4. Freshwater pen fish farms that produce ≤ 2 tonnes of fish in any one year.
- Marine pen fish farms or discharges from marine tanks that hold no more than 50 tonnes in weight of fish at any time (can also include the discharge of chemical treatment residues from wells boats at marine pens)

- 6. Effluent from fish farm hatcheries or tank farms that produce >0.5 tonnes of fish in any one year.
- 7. Inorganic effluents and other trade effluents (including those from mines and quarries, landfill leachates and other effluents not defined elsewhere) that have a maximum daily volume of no more than 100m3 per day, and an organic loading prior to treatment of no more than 100 pe and where it is above the registration criteria.
- 8. Effluents from water treatment works (e.g. backwash water and reject water). Occasional discharges from water treatment works site operations (e.g. safety shower, chlorine monitors) will normally be included in the single water use licence for the site and not require separate authorisation. Discharges of filter backwash waters with a volume of <1m3/day that comes from the maintenance of abstraction equipment to a soakaway does not normally require authorisation.
- 9. Effluents from the dewatering of dry docks.
- 10. Effluents from cooling water processes to inland surface waters and from heat pumps that involve the addition of chemicals
- 11. Effluents from boiler blow-down.
- 12. Discharge of water run-off from a surface water drainage system to the water environment from any motorway/trunk road where any one outfall serves a length of road >1km and the road was either constructed before 1 April 2007 and the footprint of the road or its associated infrastructure is enlarged or otherwise altered on or after 1 April 2007, or the road was constructed on or after 1 April 2007⁸.

⁸ Drainage from new or modified motorways and trunk roads should be licensed if any one outfall drains a length of >1km. The requirement for licensing also covers drainage from major intersections from such roads, but not junctions of a major

- 13. Discharge of water run-off from a surface water drainage system to the water environment from:
 - land of >30 hectares used for residential premises;
 - land used as a motorised vehicle parking area with more than 1,000 parking spaces; or
 - industrial estates⁹

in each case where constructed on or after 1 April 2007.

- 14. Discharge of water run-off from a construction site to the water environment where the site, including any constructed access tracks:
 - exceeds 4 hectares; or
 - contains a road or track, pipe/ services infrastructure e.g. rail line, pipeline, power-line >5km; or
 - includes any area of more than 1 hectare or any length greater than 500 metres on ground with a slope in excess of 25°.

Note the definition of area or length can include combinations of sections e.g. 3 independent sections of track 1km long plus 3km of road etc. which are under construction and/or in use to facilitate construction at the same time and as part of the same project or phase of a project. Further information on water run-off licensing can be found <u>here</u>.

road, etc. and a minor road. 'Modified' in this context means major work, such as the addition of an extra lane and would not cover retarring of roads etc. Each outfall draining a length of >1km needs a licence. For example, a length of new motorway with 20 surface water outfalls, five of which drain lengths of >1 km, would require an application for a licence incorporating five associated activities.

⁹ 'Industrial estates' does not include business parks (offices) or retail parks (shops); these are considered on the basis of the number of car parking spaces. An industrial estate would normally include marshalling yards, lorry parks and distribution depots, including ports, but does not include developments of low significance consisting of one or several small units.

- 15. The application of pesticides which are plant protection products in or near water, on land within 50m of any spring that supplies water for human consumption, within 50m of any uncapped well or borehole or there is an abstraction intended for human consumption within 250m downstream of the pesticide application.
- 16. All activities involving the disposal of waste sheep dip or waste plant protection products onto or into land, where the proposed total volume is ≤20m³ per day.
- 17. The storage of oil for onward distribution which does not comply with GBR28.

Complex Licence Activities

- 1. Sewage and organic effluents that, prior to treatment, have an organic loading more than 100 population equivalent (pe).
- 2. Sewage effluent from storm tanks and combined storm sewage overflows that are not considered to be of low significance (as defined above).
- 3. Effluent from emergency overflows.
- 4. Freshwater pen fish farms producing >2 tonnes of fish in any year.
- Marine pen fish farms or effluents from marine tanks which hold >50 tonnes in weight of fish at any time (can also include the discharge of chemical treatment residues from well boats at marine pens).
- Inorganic effluents and other trade effluents (including those from mines and quarries, landfill leachates and other effluents not defined elsewhere), that either have a maximum daily volume >100m³ per day or an organic loading prior to treatment of >100pe.
- All activities involving the disposal of waste sheep dip and waste plant protection products onto or into land, where the proposed total volume is >20m³ per day.

3.4 Pollution control – General Binding Rules
As described in Section 2, CAR contains General Binding Rules (GBRs) for specific low risk activities. When an activity complies with the relevant GBR, there is no need to contact SEPA or apply for a formal authorisation.

Compliance with the GBR is treated as compliance with an authorisation under CAR. SEPA may ask to be satisfied that a GBR is appropriate for a given activity, when consulted as a statutory consultee on a planning application under the Town and Country Planning System.

Note: If you will be unable to comply with one or more of the general binding rules applicable to your proposed activity, you may still be able to carry out the activity by obtaining an authorisation from SEPA in the form of a registration or water use licence.

The GBRs are outlined below. For ease of interpretation, the format and language in this practical guide may differ slightly from the exact wording in CAR. If you are unclear about an activity or its associated GBRs, you are advised to consult Schedule 3 of CAR.

GBR10A:

The discharge of water run-off from a surface water drainage system to the water environment from buildings, roads other than waterbound roads, yards, or any other built development constructed before 1 April 2007, with the exception of runoff from any motorway or trunk road where—

- i. any one outfall serves a length of road greater than 1km, and
- ii. the footprint of the road or its associated infrastructure is enlarged or otherwise altered on or after 1 April 2007.

- a) All reasonable steps must be taken to ensure that the discharge does not result in pollution of the water environment,
- b) the discharge must not
 - i) contain any trade effluent or domestic sewage,
 - ii) result in visible discolouration, iridescence, foaming or sewage fungus in the water environment, or
 - iii) contain any water run-off from a construction site,
- c) the discharge must not result in the destabilisation of the banks or bed of the receiving surface water,
- all facilities with which the surface water drainage system is equipped to avoid pollution, including oil interceptors, silt traps and SUD system attenuation, settlement and treatment facilities, must be maintained in good order and repair,
- e) all reasonable steps must be taken to ensure that any matter liable to block, obstruct, or otherwise impair the ability of the surface water drainage system to avoid pollution of the water environment is prevented from entering the drainage system.

GBR10B:

The discharge of water run-off from a surface water drainage system to the water environment from buildings, roads other than waterbound roads, yards, or any other built development constructed on or after 1 April 2007, with the exception of run-off from—

- i) land of more than 30 hectares which is used for residential premises,
- ii) industrial estates,
- iii) land used as a motorised vehicle parking area with more than 1,000 parking spaces,
- iv) motorways and trunk roads where any one outfall serves a length of road greater than 1km.

- a) All reasonable steps must be taken to ensure that the discharge does not result in pollution of the water environment,
- b) the discharge must not
 - i) contain any trade effluent or domestic sewage,
 - ii) result in visible discolouration, iridescence, foaming or sewage fungus in the water environment, or
 - iii) contain any water run-off from a construction site,
- c) the discharge must not result in the destabilisation of the banks or bed of the receiving surface water,
- d) the development must be drained by a SUD system equipped to avoid pollution of the water environment, unless
 - i) the run-off is from a development that is a single dwelling and its curtilage, or
 - ii) the discharge is to coastal water,

- e) the discharge must not contain any water run-off from
 - i) any fuel delivery areas constructed on or after 1 April 2007, or any areas where vehicles, plant and equipment are refuelled constructed on or after 1 April 2007,
 - ii) vehicle loading or unloading bays constructed on or after 1 April 2007 where potentially polluting matter is handled, or
 - iii) oil and chemical storage handling and delivery areas constructed on or after 1 April 2007,
- f) all facilities with which the surface water drainage system is equipped to avoid pollution, including oil interceptors, silt traps and SUD system attenuation, settlement and treatment facilities, must be maintained in good order and repair,
- g) all reasonable steps must be taken to ensure that any matter liable to block, obstruct, or otherwise impair the ability of the surface water drainage system to avoid pollution of the water environment is prevented from entering the drainage system.

GBR10C:

The discharge of water run-off from a quarry or borrow pit constructed on or after 1 January 2022.

- a) All reasonable steps must be taken to ensure that the discharge does not result in pollution of the water environment,
- b) the discharge must not
 - i) contain any trade effluent or domestic sewage, or
 - ii) result in visible discolouration, iridescence, foaming or sewage fungus in the water environment,
- c) the discharge must not result in the destabilisation of the banks or bed of the receiving surface water,
- d) the discharge must not contain any water run-off from
 - i) any fuel delivery areas constructed on or after 1 April 2007, or any areas where vehicles, plant and equipment are refuelled constructed on or after 1 April 2007,
 - ii) vehicle loading or unloading bays constructed on or after 1 April 2007 where potentially polluting matter is handled, or
 - iii) oil and chemical storage handling and delivery areas constructed on or after 1 April 2007,
- e) the quarry or borrow pit must be drained by a SUD system or equivalent system equipped to avoid pollution of the water environment,
- f) all facilities with which the surface water drainage system is equipped to avoid pollution, including oil interceptors, silt traps and SUD system attenuation, settlement and treatment facilities, must be maintained in good order and repair,
- g) all reasonable steps must be taken to ensure that any matter liable to block, obstruct, or otherwise impair the ability of the surface water drainage system to avoid pollution of the water environment is prevented from entering the drainage system.

GBR10D:

The discharge of water run-off from a construction site to the water environment where the site, including any constructed access tracks, does not—

- i) exceed 4 hectares,
- ii) contain a road or track length in excess of 5km, or
- include any area of more than 1 hectare or any length of more than 500 metres on ground with a slope in excess of 25°.

Rules:

- a) All reasonable steps must be taken to ensure that the discharge does not result in pollution of the water environment,
- b) the discharge must not
 - i) contain any trade effluent or domestic sewage, or
 - ii) result in visible discolouration, iridescence, foaming or sewage fungus in the water environment,
- c) the discharge must not result in the destabilisation of the banks or bed of the receiving surface water,
- d) the discharge must not contain any water run-off from any built developments, unless during construction those developments are drained by a SUD system or equivalent system equipped to avoid pollution of the water environment,
- e) the discharge must not contain any water run-off from
 - i) any fuel delivery areas constructed on or after 1 April 2007, or any areas where vehicles, plant and equipment are refuelled constructed on or after 1 April 2007,
 - ii) vehicle loading or unloading bays constructed on or after 1 April 2007 where potentially polluting matter is handled, or
 - iii) oil and chemical storage handling and delivery areas constructed on or after 1 April 2007,
- f) all parts of a construction site on which
 - i) operations first commenced on or after 1 June 2018, and
 - any works are to be undertaken, or any vehicles are to be operated or parked, must be drained by a surface water drainage system with capacity to accommodate the maximum volume of run-off that would reasonably be expected to occur from that land during the period of construction,

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- g) all facilities with which the surface water drainage system is equipped to avoid pollution, including oil interceptors, silt traps and SUD system attenuation, settlement and treatment facilities, must be maintained in good order and repair,
- all reasonable steps must be taken to ensure that any matter liable to block, obstruct, or otherwise impair the ability of the surface water drainage system to avoid pollution of the water environment is prevented from entering the drainage system.

GBR11: Discharge into a surface water drainage system

- a) Oil, paint thinners, pesticides, detergents, disinfectants or other pollutants must not be disposed of into a surface water drainage system or onto any surface that drains into a surface water drainage system;
- b) any matter liable to block, obstruct or otherwise impair the ability of the surface water drainage system to avoid pollution of the water environment must not be disposed of into a surface water drainage system or onto a surface that drains into a surface water drainage system;
- c) domestic sewage or trade effluent must not be discharged into any surface water drainage system; and
- d) on construction sites, any area of exposed soil from which the discharge of water run-off to the water environment is authorised under activity 10D, and the period of time during which such soil is exposed, must be the minimum required to facilitate the construction works being undertaken at that site.

GBR16:

Direct discharge of pollutants into groundwater as a result of construction or maintenance works in or on the ground, which come into contact with groundwater

Rules:

- a) No solid or liquid materials coming into contact with groundwater shall contain substances listed in CAR Schedule 2 (except drilling fluids used during the works, provided they do not result in pollution of the water environment).
- b) No materials coming into contact with groundwater shall cause pollution of the water environment.

Pulverised Fuel Ash (PFA) is often a component of grout used to stabilise underground mine workings and operators should be aware that it may contain substances listed in Schedule 2 of CAR. SEPA therefore recommends that the operator or their agent assesses whether the use of PFA in grout will meet the requirements of GBR16. Acceptable assessments will be in line with the guidance document entitled 'BRE488 Stabilising Mine Workings with PFA Grouts – Environmental Code of Practice (2006)', which includes a methodology for assessing the risks to groundwater from PFA grouts.

GBR18: The storage¹⁰ and application of fertiliser

Rules:

- a) No fertiliser may be stored, including temporarily in a mobile tank or bowser, on land that:
 - i. is within 10 metres of any-
 - river, burn, ditch or loch, as measured from the top of the bank;
 - wetland; or
 - transitional water or coastal water, as measured from the shoreline;
 - ii. is within 50 metres of any-
 - spring that supplies water for human consumption; or
 - well or borehole that is not capped in such a way so as to prevent the ingress of water;
 - iii. is waterlogged;
 - iv. has an average soil depth of less than 40cm and overlies gravel or fissured rock, unless the fertiliser is stored in an impermeable container; or
 - v. is sloping (unless the fertiliser is inorganic or it is ensured that any run-off of fertiliser is intercepted (by means of a sufficient buffer zone or otherwise) to prevent it from entering any river, burn, ditch, wetland, loch, transitional water or coastal water towards which the land slopes).

Rule (a) does not apply where the fertiliser is stored in a building which is constructed and maintained to such a standard as is necessary to prevent run-off or seepage of fertiliser from the building.

¹⁰ Unless (i) the storage is regulated by a waste management licence in terms of section 35 of the Environmental Protection Act 1990 or (ii) it is an activity specified at GBRs 31, 32, or 34.

GBR18 rules continued (rule b deleted in 2021 amendment):

- c) any storage system used to store liquid sewage sludge must be maintained in such a condition that no sewage sludge escapes from the system.
- d) inorganic liquid fertiliser must only be stored in a rigid, impermeable tank that:
 - i. has a lockable, double valve on the outlet that is closed and locked when the tank is unattended;
 - ii. is located above ground; and
 - iii. is protected from vehicle collision;
- e) inorganic liquid fertiliser must not be stored in a field unless contained in a tank, bowser or spreading equipment:
 - i. whose hatches and lids are securely closed and whose outlets are securely closed and locked, except when the fertiliser is being transferred or applied;
 - ii. that is held on a support in such a way that it cannot become dislodged; and
 - iii. that is on a support which is stable under the fully loaded weight of the tank or bowser and cannot itself become dislodged;
- f) when any inorganic liquid fertiliser, liquid digestate or liquid sewage sludge is being transferred to a tank, bowser or spreading equipment, all reasonable steps must be taken to prevent any spillage or leakage entering the water environment;
- g) no organic fertiliser maybe applied to land that
 - i. is within 10 metres of any-
 - river, burn, ditch or loch, as measured from the top of the bank;
 - wetland;
 - transitional water or coastal water, as measured from the shoreline; or
 - opening into any surface water drainage system;

- ii. is within 50 metres of any-
 - spring that supplies water for human consumption; or
 - well or borehole that is not capped in such a way so as to prevent the ingress of water;
- iii. has an average soil depth of less than 40cm and overlies gravel or fissured rock, except where the application is for forestry operations;
- iv. is frozen (except where the fertiliser is farm yard manure) waterlogged or covered in snow; or
- v. is sloping, unless it is ensured that any run-off of fertiliser is intercepted (by means of a sufficient buffer zone or otherwise) to prevent it from entering any river, burn, ditch, wetland, loch, transitional water or coastal water towards which the land slopes;
- h) no inorganic fertiliser may be applied to land that
 - i. is within 2 metres of any-
 - river, burn, ditch or loch, as measured from the top of the bank;
 - wetland;
 - transitional water or coastal water, as measured from the shoreline; or
 - opening into any surface water drainage system;
 - ii. is within 5 metres of any-
 - spring that supplies water for human consumption, or
 - well or borehole that is not capped in such a way so as to prevent the ingress of water;

- iii. has an average soil depth of less than 40cm and overlies gravel or fissured rock, except where the application is for forestry operations;
- iv. is frozen waterlogged or covered in snow;
- v. is sloping, unless it is ensured that any run-off of fertiliser is intercepted (by means of a sufficient buffer zone or otherwise) to prevent it from entering any river, burn, ditch, wetland, loch, transitional water or coastal water towards which the land slopes.
- i) fertilisers must not be applied to land:
 - i. in such amounts that the crop requirement for nitrogen is exceeded;
 - ii. in excess of the amount required to maintain the soil phosphorus status at acceptable agronomic levels; or
 - iii. during heavy rainfall or where heavy rainfall is forecast within 24 hours.
- j) dewatered digestate or dewatered sewage sludge must be stored:
 - i. in such a way that it is securely contained so that any escape or run-off is prevented; or
 - ii. in a heap which is protected from the ingress of water;
- k) if dewatered digestate or dewatered sewage sludge is stored in a heap in field, it must be applied to land within 6 months of the commencement of the storage;
- I) any equipment used to apply fertiliser must be maintained in a good state of repair;
- m) fertiliser must be applied on land in such a way and at such times that the risk of pollution of the water environment is minimised;
- n) where organic fertilisers are to be applied to land—

a risk assessment must be carried out in respect of that land, including the preparation of a map of the farm which clearly shows—

- 1) the delineation of every field,
- 2) the area of every field in hectares,
- the location of all surface water, springs, wells, boreholes storage tanks or any other structures sunk into underground strata for the purpose of providing a water supply,
- 4) any area of land with a slope of 12 degrees or more,
- 5) the location of any field heaps,
- 6) areas where organic fertiliser must not be applied in accordance with paragraph (g)(i), (ii), (iii) and (v), and
- 7) any other area of high risk to the water environment,
- ii. the person carrying out the application of organic fertilisers must be provided with the map for the area to which fertiliser is being applied,
- iii. field heaps of organic fertilisers must not be located in any area identified on the map in accordance with points (i)(3), (6) or (7), above; and
- o) If slurry is—
 - (a) applied by contractors,

(b) applied on farms with more than 100 milking cows or 200 beef cattle livestock units, **or**

(c) applied on pig units with more than 800 fattening pigs or 800 sows,

the slurry must be applied using precision equipment from 1 January 2023. Otherwise, slurry must be applied using precision equipment from 1 January 2027.

In situations where slurry does not need to be applied using precision equipment until 1 January 2027, slurry must not be applied by means of a raised splash plate or rain gun after 1 January 2023.

In calculating the number of beef cattle livestock units on the farm for the purposes of this rule an animal of 2 years and older is 1 unit, and an animal under 2 years old is 0.5 of a unit.

In all cases, liquid digestate must be applied using precision equipment from 1 January 2023.

GBR19: Keeping of livestock

Rules:

- a) Significant erosion or poaching of any land that is within 5m of any
 - i. river, burn, ditch or loch as measured from the top of the bank;
 - ii. wetland;
 - iii. spring that supplies water for human consumption;
 - iv. well or borehole that is not capped in such a way so as to prevent ingress of water; or
 - v. transitional water or coastal water, as measured from the shoreline,

must be prevented;

- b) livestock must be prevented from entering any land that is within 5m of a spring that supplies water for human consumption or any well or borehole that is not capped in such a way as to prevent ingress of water;
- c) livestock feeders must not be positioned within 10 metres of any
 - i. river, burn, ditch or loch as measured from the top of the bank;
 - ii. wetland;
 - iii. spring that supplies water for human consumption;
 - iv. well or borehole that is not capped in such a way so as to prevent ingress of water; or
 - v. transitional water or coastal water as measure from the shoreline; and
- d) run-off from land on which livestock congregate to access watering points or feeders must be intercepted (by means of a sufficient buffer zone or otherwise) such that any faeces, urine or soil in the run-off are prevented from entering any spring, well, borehole, surface water or wetland.

GBR20: Cultivation of land

Rules:

- a) No land may be cultivated for crops that is
 - i. within 2m of any-
 - 1) river, burn, ditch, or loch, as measured from the top of the bank;
 - 2) wetland; or
 - 3) transitional water or coastal water, as measured from the shoreline;

ii. within 5m of any-

- 1) spring that supplies water for human consumption; or
- 2) well or borehole that is not capped in such a way so as to prevent the ingress of water; or
- iii. waterlogged;
- b) moling of land must not be carried out on slopes that:
 - i. have an overall gradient in excess of 4.5°; and
 - ii. slope towards any surface water or wetland; and
- c) land must be cultivated in a way that minimises the risk of pollution to surface water or wetland.

GBR21:

The discharge of water run-off via a surface water drainage system to the water environment as a result of rural land activities (without prejudice to the operation of activities covered by GBR10A, 10B, 10C and 10D, and the rules related to them)

Rules:

- a) Water must be discharged in a way which minimises the risk of pollution of any river, burn, ditch, wetland, loch, transitional water or coastal water; and
- b) no discharge from drainage may result in the destabilisation of the banks or bed of the receiving river, burn, ditch, wetland, loch, transitional water or coastal water.

GBR22:

The discharge of surface water from waterbound roads and tracks to the water environment, including during the construction and maintenance of such roads and tracks.

- a) All reasonable steps must be taken to ensure that any discharge does not result in pollution of the water environment,
- b) any discharge must not result in visible discolouration, iridescence, foaming or sewage fungus in the water environment, and
- c) any discharge must not result in the destabilisation of the banks or bed of the receiving surface water.

PUBLIC

GBR23:

The storage and application of pesticides that are plant protection products

- a) The preparation of pesticide for application and the filling, cleaning or maintenance of pesticide sprayers or other devices used to apply pesticides:
 - i. must be undertaken in a manner which prevents any spillages, run-off or washings from entering any surface water or wetland; and
 - ii. must not be undertaken within 10 metres of any-
 - 1) river, burn, ditch or loch, as measured from the top of the bank;
 - 2) wetland;
 - 3) transitional water or coastal water, as measured from the shoreline; or
 - 4) opening into a surface water drainage system;
- b) pesticide sprayers and other devices used to apply pesticides must be maintained in a good state of repair, such that there is no leakage of pesticide from any part of the equipment and the sprayer is calibrated to accurately deliver the required application rate;
- c) pesticide sprayers and other devices used to apply pesticide must not be filled with water taken from any river, burn, ditch, wetland or loch unless:
 - i. a device preventing back siphoning is fitted to the system; or
 - ii. the water is first placed in an intermediate container;
- d) pesticide-treated plants must not be stored or soaked in any river, burn, ditch, wetland, or loch;

- e) pesticide must be applied in accordance with the terms and instructions of the relevant product approval;
- f) unless in accordance with paragraph (g), pesticide must not be applied in, onto or over ground or allowed to drift onto or over ground
 - i. that is frozen, snow covered or waterlogged, except where the application in, onto or over waterlogged ground is necessary for the purpose of controlling fungal disease and all precautions are taken to minimise the risk of pesticide entering any river, burn, ditch, wetland, loch, transitional water or coastal water;
 - that is within 1m of any river, burn, ditch, wetland or loch, as measured from the top of the bank, or within 1m of any transitional water or coastal water as measured from the shoreline;
 - iii. that is sloping, unless it is ensured that any run-off of pesticide is intercepted (by means of a sufficient buffer zone or otherwise) to prevent it from entering any river, burn, ditch, wetland, loch, transitional water or coastal water towards which the land slopes;
 - iv. that is within 50m of any spring that supplies water for human consumption;
 - v. that is within 50 metres of any well or borehole unless the well or borehole is capped in such a way as to prevent the ingress of the pesticide;
 - vi. that has an impermeable surface which drains directly to a surface water drainage system, unless measures are taken to minimise the risk of pesticides entering the drainage system; or
 - vii. along roads, railway lines, permeable surfaces or other infrastructure, unless measures are taken to minimise the risk of pollution of any river, burn, ditch, wetland, loch, transitional water, coastal water or surface water drainage system; and

- g) pesticide may be applied within 1 metre of any river, burn, ditch or loch, as measured from the top of the bank; within 1 metre of any wetland; or within 1 metre of any transitional water or coastal water as measured from the shoreline where-
 - they are specifically approved for aquatic use under Regulation (EC) No 1107/2009 of the European Parliament and of the Council concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC(a) and are applied in accordance with the terms of that approval;
 - ii. the application is for the sole purpose of controlling an invasive species of plant outwith its native range;
 - iii. no pesticide enters the river, burn, ditch, wetland, loch, transitional water or coastal water;
 - iv. the ground over or onto which pesticide is applied is not frozen snow covered or waterlogged;
 - v. the ground over or onto which plant protection product is applied is not an impermeable surface which drains directly into a surface water drainage system unless measures are taken to minimise the risk of pesticide entering the drainage system;
 - vi. the ground over or onto which pesticide is applied is not within 50 metres of any spring that supplies water for human consumption;
 - vii. the ground over or onto which pesticide is applied is not within 50 metres of any well or borehole unless the well or borehole is capped in such a way as to prevent the ingress of the pesticide;
 - viii. the application, including the method used, is designed to minimise damage to other, non-target vegetation;

- ix. all necessary steps are taken to ensure that the application does not result in increased erosion of the banks of the river, burn, or loch or the shoreline of the transitional water or coastal water; and
- x. there is no abstraction of water intended for human consumption from the-
 - 1) river burn or ditch, within 250 metres downstream of the application; or
 - 2) the loch or wetland within 250 metres of the application;
- h) application of pesticide must be carried out in such a way, and at such times, that the risk of pollution of any river, burn, ditch, wetland, loch, transitional water or coastal water is minimised, in particular, pesticide must not be applied
 - i. during rainfall; or
 - ii. during conditions when there is a risk that spray will drift or be blown outwith the target area;
- pesticide, including any used packaging that has been stored in contact with the pesticide, must not be stored
 - i. within 10m of any-
 - 1) river, burn, ditch or loch, as measured from the top of the bank;
 - 2) wetland; or
 - 3) transitional water or coastal water as measured from the shoreline;
 - ii. within 50m of any spring that supplies water for human consumption; or
 - iii. within 50m of any well or borehole (unless the well or borehole is capped in such a way as to prevent the ingress of any pesticide),

unless the pesticide or used packaging is stored in such a way that any leakage or spillage and any exposed pesticide on used packaging cannot reach any river, burn,

ditch, wetland, loch, transitional water, coastal water or any opening into a surface water drainage system, including by being transported in rainwater runoff;

 j) pesticide, including any used packaging that has been stored in contact with pesticide, must not be stored on an impermeable surface draining to a surface water drainage system.

GBR24:

Operating sheep dip facilities and operating sheep handling facilities where:

- a) sheep are held immediately after dipping;
- b) pour-on parasite treatments are applied; or
- c) sheep are held immediately after the application of pour-on treatments

- a) Sheep must be prevented from having access to any surface water or wetland while there is a risk of transfer of sheep dip fluid or any pour-on parasite treatment from their fleece to such places;
- b) no mobile sheep dipping facility, or part of any sheep dipping facility constructed on or after 1 April 2008 or sheep handling facility used for pour-on treatments constructed on or after 1st January 2018, may be located within 50 metres of any
 - i. river, burn, ditch; or loch as measured from the top of the bank;
 - ii. wetland;
 - iii. transitional water or coastal water, as measured from the shoreline; or

iv. well, spring or borehole;

- c) sheep dipping facilities must not discharge underground and must not leak or overspill;
- d) sheep dipping facilities must not be filled with water taken from the water environment unless
 - i. a device preventing back siphoning is fitted to the system; or
 - ii. the water is first placed in an intermediate container; and
- e) without prejudice to the continued requirement to obtain specific authorisation for the disposal of sheep dip under CAR, sheep dip facilities must be emptied within 24 hours following completion of dipping.

GBR26:

The storage of oil in a portable container with a capacity of less than 200 litres

Rule: The container must be of sufficient strength and structural integrity so as to ensure that it is unlikely to burst or leak in its ordinary use.

GBR27:

The storage of oil on premises used as a private dwelling (except where the premises is a vehicle or vessel), where the oil is-

- a) stored in a container with a capacity of 2,500 litres or less; and
- b) where the oil is used solely to serve a fixed combustion appliance installation providing space heating or cooking facilities

Rules:

- a) The container must be of sufficient strength and structural integrity so as to ensure that it is unlikely to burst or leak in its ordinary use; and
- b) any container which is installed or altered must comply with the requirements of any applicable regulations under the Building (Scotland) Act 2003.

GBR28: The storage of oil on premises other than:

- a) where the premises is a vehicle or vessel;
- b) where the storage is:
 - i. an activity specified in GBR 26 or 27; or
 - ii. otherwise authorised under CAR;
- c) in a container which is wholly underground (unless situated wholly within a building underground)

Rules:

 a) The oil must be stored in a container which is of sufficient strength and structural integrity, and has been installed so as to ensure that it is unlikely to burst or leak in its ordinary use

- b) The container must be situated within a secondary containment system which:
 - Subject to paragraph (e), must have a capacity of not less than 110% of the container's storage capacity or, if there is more than one container within the system, of not less than 110% of the largest container's storage capacity, or 25% of the aggregate storage capacity, whichever is greater;
 - ii) It must be positioned, or other steps taken so as to minimise any risk of damage to it by impact so far as it is reasonably practicable;
 - iii) Its base and walls must be impermeable to water and oil;
 - iv) Its base and walls must not be penetrated by any valve, pipe or other opening which is used for draining the system; and
 - v) If a fill pipe or draw off pipe penetrates its base or any of its walls, all points at which the pipe meets the base or walls must be adequately sealed to prevent oil escaping from the system;
- c) Any valve, filter, sight gauge, vent pipe or other equipment ancillary to the container (other than a fill pipe or draw off pipe or a pump) must be situated with in the secondary containment system;
- d) If the connection point to a fill pipe is not within the secondary containment system, a drip tray must be used to catch any oil spilled when the container is being filled with oil;
- e) Where any drum is used for the storage of oil in conjunction with a drip tray as a secondary containment system, it is sufficient if the tray has a capacity of not less than 25% of:
 - i) The drum's storage capacity; or
 - ii) If there is more than one drum used at the same time with the tray, the aggregate storage capacity of the drums;

- f) Where a fixed tank is used for storing oil:
 - i) Any sight gauge must be properly supported and fitted with a valve which closes automatically when not in use;
 - ii) Any fill pipe, draw off pipe or overflow pipe must:
 - 1) Be positioned or other steps taken, so as to minimise any risk of damage by impact so far as is reasonably practicable;
 - 2) If made of materials which are liable to corrosion, be adequately protected against corrosion; and
 - 3) Not be permeable to hydrocarbon vapours;
 - iii) If underground, any fill pipe, draw off pipe or overflow pipe must:
 - Have no mechanical joints, except at a place where such joints care accessible for inspection by removing a hatch or cover;
 - 2) Be adequately protected from physical damage;
 - 3) Have adequate facilities for detecting leaks;
 - 4) If fitted with a leakage detection device which is continuously to monitor for leaks the detection device must be maintained in working order and tested at the appropriate intervals, and at least every 5 years, to ensure that it works properly; and
 - 5) If not fitted with a leakage detection device, must be tested for leaks before it is first used and further tests for leaks must be performed in the case of pipes which have mechanical joints, at least once every 5 years, and in other cases, at least once in every 10 years;
 - iv) If above ground, any fill pipe, draw off pipe or overflow pipe must be properly supported;

- v) The tank must be fitted with an automatic overfill protection device (which may include an alarm sounding device) if the filling operation is controlled from a place where it is not reasonably practicable to observe the tank or any vent pipe;
- vi) Where a screw fitting or other fixed coupling is fitted, it must be maintained in good condition and used whenever the tank is being filled with oil;
- vii) Where oil from the tank is delivered through a flexible pipe which is permanently attached to the container or delivery pump:
 - 1) The pipe must be fitted with a tap or valve at the delivery end which closes automatically when not in use;
 - The tap or valve must not be capable of being fixed in the open position unless the pipe is fitted with an automatic shut off device;
 - 3) The pipe must-
 - (a) Be enclosed in a secure cabinet (equipped with a drip tray) which is locked shut when not in use; or
 - (b) Have a lockable valve where it leaves the container which is locked shut when not in use; or
 - (c) Be situated in premises which have appropriate security to prevent unauthorised access; and
 - Where sub-paragraph 3(b) or (c) applies, the pipe must be kept within the secondary containment system or positioned above an area which drains to a suitable oil interceptor when not in use;
 - viii) Any pump must be:
 - 1) Fitted with a non-return valve or an isolating device in its feed line;

- Positioned or other steps must be taken, so as to minimise any risk of damage to it so far as is reasonably practicable; and
- 3) Protected from unauthorised use; and
- ix) Any permanent vent pipe, tap or valve through which oil can be discharged from the tank to the open must be:
 - 1) Situated within the secondary containment system;
 - 2) Arranged so that any oil discharged from the tank other than to its intended destination is contained within the system; and
 - In the case of a tap or valve, fitted with a lock and locked shut when not in use; and
- g) Where a mobile bowser is used for storing oil:
 - Any tap or valve permanently fixed to the bowser through which oil can be discharged to the open must be fitted with a lock and locked shut when not in use;
 - ii) Where oil is delivered through a flexible pipe which is permanently attached to the mobile bowser:
 - The pipe must be fitted with a manually operated pump or a valve at the delivery end which automatically closes when not in use;
 - The pump or valve must be provided with a lock and locked shut when not in use; and
 - The pipe must be fitted with a lockable valve at the end where it leaves the container and must be locked shut when not in use; and
 - iii) Any sight gauge must be secured to the mobile bowser and be fitted with a valve or tap which must be locked in the shut position when not in use.

PUBLIC

GBR29:

The making and storage of silage in bales or bulk bags

- a) The bales or bulk bags must not be stored, opened, or unwrapped within 10 metres of any—,
 - (i) river, burn, ditch or loch, as measured from the top of the bank,
 - (ii) wetland,
 - (iii) transitional or coastal water, as measured from the shoreline, or
 - (iv) opening into a surface water drain which silage effluent could enter if it were to escape,
- b) the bulk bags must—,
 - (i) have an impermeable membrane,
 - (ii) be resealed when not in use, to prevent the escape of silage effluent,
 - (iii) incorporate a facility to enable the removal of any excess effluent without spillage, and
 - (iv) be situated on a firm level surface,
- c) the bales must be wrapped and sealed into impermeable membranes or enclosed in impermeable bags.

GBR30:

The treatment of silage effluent which consists mainly of rainwater by draining it from a silo through a constructed farm wetland

Rules:

Silage effluent which consists mainly of rainwater may be drained through a constructed farm wetland only if—,

- (i), the silo is open for use,
- (ii), the drainage of the silage effluent from the silo to the constructed farm wetland is direct and through a separate channel or pipe from the base of the silo,
- (iii), no crop is added to the silo whilst it is open.

GBR31:

The making and storage of silage other than in bales or bulk bags

- a) Silage must be made and stored in a silo which--,
 - (i) complies with paragraphs (b) to (g),
 - (ii) if constructed, or substantially reconstructed or enlarged, on or after 1
 September 1991, in addition to paragraph (a)(i), complies with paragraphs (h) to (j),
 - (iii) if new (including a silo constructed from used materials), or substantially reconstructed or enlarged on or after 1 January 2022, has a life expectancy of at least 20 years, with proper maintenance, from its construction, reconstruction or enlargement
 - b) the base of the silo must be constructed with channels to collect silage effluent from the silo, and with channels or pipes which must drain any such silage effluent to an effluent tank,

- c) the capacity of the effluent tank must be at least:
 - (i) for a silo with a capacity of less than 1500m³, 20 litres for every 1m³ of silo capacity, or
 - (ii) for a silo with a capacity of 1500m³ or greater, 30,000 litres plus 6.7 litres for every 1m³ of silo capacity over 1500m³,
- where the effluent collection system associated with the silo incorporates a system of pumps and sumps, it must be fitted with an automatic overfill prevention device with a dedicated electrical supply and an alarm,
- e) the base of the silo, the base and walls of its effluent tank and channels, and the walls of any pipes must be impermeable,
- f) the base and any walls of the silo, its effluent tank and channels, and the walls of any pipes must, so far as reasonably practicable, be resistant to attack by silage effluent and, where the walls are made of earth, they must be lined with an impermeable membrane of 1000 gauge polyethylene or a material of at least equivalent impermeability and durability,
- g) if the silo has retaining walls which are not made of earth, the stored silage level within that silo once compacted must be no greater than the height of the retaining wall,
- h) the base of any silo constructed, or substantially reconstructed or enlarged, on or after 1 September 1991 must, in addition to paragraph (b),
 - (i) comply with British Standard EN 1992-3:2006 and British Standard EN-1-1-2004 +A1:2014 (for concrete bases), or British Standard EN 13108-4:2016 (for hot-rolled asphalt bases),
 - (ii) where the silo has retaining walls made other than of earth, extend beyond those walls,

- where any part of an effluent tank constructed, or substantially reconstructed or enlarged, on or after 1 September 1991 is installed below ground level, it must be designed and constructed in accordance with the Code of Practice on Buildings and Structures for Agriculture published by the British Standards Institution and numbered BS 5502-22:2003+A1:2013,
- a silo constructed, or substantially reconstructed or enlarged, on or after 1
 September 1991, which has retaining walls which are not made of earth, must have retaining walls capable of withstanding the minimum wall loadings calculated in accordance with the Code of Practice on Buildings and Structures for Agriculture published by the British Standards Institution and numbered BS 5502-22:2003+A1:2013,
- a silo constructed (including from used materials), or substantially reconstructed or enlarged, on or after 1 January 2022, which has retaining walls which are not made of earth, must have the maximum loadings of the silo visibly displayed on it,
- a silo, its effluent tank, channels and any associated pipes constructed on or after 1 January 2022 must not be situated within 10 metres of any surface water or opening into a surface water drain which silage effluent could enter if it were to escape,
- m) the silo, its effluent tank, channel and pipes must be operationally maintained to be free of any structural defects during its lifecycle,
- n) the silo must not be filled beyond the drainage channel,

- where a silo or effluent tank is to be constructed or to be substantially rebuilt or enlarged—,
 - the operator must notify SEPA no later than 30 days prior to commencing the works,
 - (ii) the notification under paragraph (i) must be accompanied by an engineering plan for the works to be carried out,
 - (iii) the operator must retain the engineer's final sign-off certificate for the works for the lifetime of the silo or effluent tank, for inspection by SEPA on request.

In relation to GBR31

- (A) a silo which was exempt under regulation 5 of the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) (Scotland) Regulations 2003 immediately before 1 January 2022 is not required to comply with the rules specified in paragraphs (a) to (g) until 1 January 2026,
- (B) a silo constructed before 1 January 2022, to which paragraph (A) does not apply, is not required to comply with the rules specified in paragraphs (a) to (j) until 1 January 2024,
- (C) a silo in respect of which planning permission was granted before 1 January 2022, but which is not constructed before that date, is not required to comply with the rules specified in paragraphs (a) to (j) until 1 January 2024.

GBR32: The storage of slurry

Rules:

- a) Where slurry is produced on the farm by housed livestock, the slurry must be stored in a slurry storage system, liquid digestate storage system, or slurry bags which have sufficient capacity to store the total quantity of slurry likely to be produced in—
 - (i) 26 weeks by housed pigs, or
 - (ii) 22 weeks by housed cattle,

taking account of any additional inputs to or exports from the storage as described in paragraph (c),

- b) the total quantity of slurry referred to in paragraph (a) is to be calculated by adding up the figures produced for each type of livestock, as applicable, in accordance with the formula for housed pigs or housed cattle, contained in regulation 7(2) of the Action Programme for Nitrate Vulnerable Zones (Scotland) Regulations 2008,
- c) in calculating the minimum storage capacity necessary to comply with paragraph
 (a), the following figures must be included in respect of the relevant 26 or 22 week
 period—
 - (i) the quantity of any rainfall (including any fall of snow, hail or sleet) that is likely to enter the system (directly or indirectly) including from dungsteads, silage pits or dirty yards,
 - (ii) the quantity of any cleaning water that is likely to enter the system or slurry bag,
 - (iii) the likely quantity of any imported slurries and liquid digestate added to the system or slurry bag,
 - (iv) the quantity of any slurry exported off farm,
- where slurry is imported onto the farm, there must be sufficient storage capacity on the farm to store the quantities imported during periods when application is not authorised under GBR18 or would not comply with the requirements of the Action Programme for Nitrate Vulnerable Zones (Scotland) Regulations 2008,
- e) the capacity of any facility used for the temporary storage of slurry before it is transferred to a slurry storage tank must be the equivalent of at least 1.5% of the minimum on farm storage capacity in accordance with paragraph (a),
- f) the slurry storage system must—
 - (i) comply with paragraphs (g) to (l),

- (ii) where constructed, or substantially reconstructed or enlarged, on or after 1 September 1991, comply, in addition to paragraph (f)(i), with paragraphs (m) and (n),
- (iii) if new (including systems constructed from used materials), substantially reconstructed or enlarged, on or after 1 January 2022, have a life expectancy of at least 20 years with proper maintenance, from its construction, reconstruction or enlargement,
- g) the base and walls of any slurry storage tank, any channels and reception pit, and the walls of any pipes, must be impermeable (except where the conditions in paragraph (j) are complied with) and free from any cracks or structural defects,
- where slurry flows into a channel before discharging into a reception pit, and the flow is controlled by means of a sluice or valve, the capacity of the reception pit must be sufficient to store the maximum quantity of slurry which can be released by opening the sluice or valve,
- i) the slurry storage tank, channels, pipes, valves, and reception pit must be operationally maintained to be free of any structural defects during their lifecycle,
- j) where the walls of the slurry storage tank are not impermeable—
 - the base of the tank must extend beyond its walls and be provided with channels designed and constructed so as to collect any slurry which may escape from the tank,
 - (ii) the tank must have adequate provision to collect, drain and store slurry from the channels to a slurry storage system,
- k) where the slurry storage tank or reception pit is fitted with a drainage pipe—

- (i) there must be two values in series on the pipe and each value must be capable of stopping the flow of slurry through the pipe and must be kept shut and locked in that position when not in use,
- (ii) sub-paragraph (i) does not apply in relation to a slurry storage tank which drains through the pipe into another slurry storage tank of equal or greater capacity or where the tops of the tanks are at the same level,
- I) where a slurry storage system has walls which are made of earth, the system must not be filled to a level which allows less than 750 millimetres of freeboard, and in all other cases the slurry storage tank must not be filled to a level which allows less than 300 millimetres of freeboard,
- m) the base and walls of any slurry storage tank, channels and reception pit, valves, and the walls of any pipes, constructed, or substantially reconstructed or enlarged, on or after 1 September 1991 must be protected against corrosion in accordance with paragraph 7.2 of the Code of Practice on Buildings and Structures for Agriculture published by the British Standards Institution and numbered BS 5502-50:1993+A2:2010,
- n) the base and walls of any slurry storage tank and any reception pit constructed, or substantially reconstructed or enlarged, on or after 1 September 1991, must be capable of withstanding characteristic loads calculated on the assumptions and in the manner as set out in paragraph 5 of the Code of Practice on Buildings and Structures for Agriculture published by the British Standards Institution and numbered BS 5502-50:1993+A2:2010,
 - p) any slurry storage system, constructed, or substantially reconstructed or enlarged, on or after 1 January 2022, which has walls made of earth, must be lined with an impermeable sheet material which, with proper maintenance, slurry cannot permeate for a period of at least 20 years,
GBR32 rules continued:

- a slurry storage system constructed on or after 1 January 2022 must not be situated within 10 metres of any surface water or opening into a surface water drain which slurry could enter into if it were to escape,
- q) a slurry bag may only be used to store slurry if-
 - the bag is constructed of impermeable material of sufficient strength and structural integrity such that it is unlikely to burst or leak in its ordinary use, and
 - (ii) it is situated in a bund which complies with the following requirements—
 - 1) the bund must be of at least equivalent capacity to the slurry bag,
 - 2) the bund must be lined with an impermeable sheet material which, with proper maintenance, slurry cannot permeate for a period of at least 20 years,
 - 3) the bund must have a means of removing rainwater, and
 - 4) other than as necessary to allow rainwater to be removed, the base and walls of the bund must not be penetrated by any valve, pipe or other opening,
- r) where a slurry storage system (including a reception pit or channels) is to be constructed or to be substantially rebuilt or enlarged—
 - (i) the operator must notify SEPA no later than 30 days prior to commencing the works,
 - (ii) the notification under sub-paragraph (i) must be accompanied by an engineering plan for the works to be carried out,
 - (iii) the operator must retain the engineer's final sign-off certificate for the works for the lifetime of the slurry storage system, for inspection by SEPA on request,
- s) slurry may be stored in a liquid digestate storage system which complies with GBR34 in relation to the storage of liquid digestate.

In relation to GBR32

(A) a slurry storage system which was exempt under regulation 5 of the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) (Scotland) Regulations 2003 immediately before 1 January 2022 is not required to comply with the rules specified in paragraphs (e) to (I) until 1 January 2026,

- (B) a slurry storage system constructed before 1 January 2022, to which paragraph (A) does not apply, is not required to comply with the rules specified in paragraphs (e) to (n) until 1 January 2024,
- (C) a slurry storage system in respect of which planning permission was granted before 1 January 2022, but which is not constructed before that date, is not required to comply with the rules specified in paragraphs
 (e) to (n) until 1 January 2024.
- (D) the rules specified in paragraphs (a) to (c) do not apply where the activity takes place outside a nitrate vulnerable zone until 1 January 2026.

GBR33:

The treatment of slurry which consists mainly of rainwater and washings by draining through a constructed farm wetland.

Rules:

- a) Slurry may be drained through a constructed farm wetland only if it consists mainly of rainwater and washings which derive from—
 - a midden which mainly contains farm yard manure and is situated where its contents can be affected directly by precipitation,
 - (ii) any uncovered yard, used by livestock to move from one area to another but not including areas covered by paragraph (b),
 - (iii) a yard which is used for the gathering or holding of livestock no more than once a week and which can be directly affected by precipitation,
- b) slurry must not be drained through a constructed farm wetland from areas-
 - (i) where livestock are gathered or held more than once a week, or
 - (ii) used for livestock movement or holding prior to, during or after being—1) milked,
 - 2) housed, or
 - 3) fed,
- c) slurry which contains pesticide must not be drained through a constructed farm wetland,
- d) all reasonable steps must be taken to ensure that the drainage of slurry through a constructed farm wetland does not cause pollution of the water environment.

Constructed farm wetlands (CFWs) are not suitable for treating more nutrient-rich effluents or run-off containing pesticides or sheep dip. It is strongly recommended that expert advice is sought when considering installing a CFW to ensure that the discharge does not cause pollution of the water environment. The SEPA CFW design manual illustrates the design standards which SEPA recommends should be considered in order to construct a robust CFW.

GBR34:

Storage of liquid digestate unless the storage is regulated by-

- (a) a waste management licence in terms of section 35 of the Environmental Protection Act 1990,
- (b) the registration of a registered exemption under the Waste Management Licensing (Scotland) Regulations 2011,
- (c) a permit in terms of regulation 11 of the Pollution Prevention and Control (Scotland) Regulations 2012.

Rules:

- a) Where liquid digestate is produced on the farm, it must be stored in a liquid digestate storage system, slurry storage system or slurry bag which has sufficient capacity to accommodate the volume of liquid digestate produced during periods when application is not authorised under GBR 18 or would not comply with the requirements of the Action Programme for Nitrate Vulnerable Zones (Scotland) Regulations 2008,
- b) where liquid digestate is imported onto a farm, it must be stored in a liquid digestate storage system, slurry storage system or slurry bag which has sufficient capacity to store the quantities imported during periods when application is not authorised under GBR18 or would not comply with the requirements of the Action Programme for Nitrate Vulnerable Zones (Scotland) Regulations 2008,

| GBR34 rules | continued: |
|--------------------|------------|
|--------------------|------------|

c) in calculating the required storage capacity, the following figures must be included—

 the quantity of any rainfall (including any fall of snow, hail or sleet that is likely to enter the system or slurry bag (directly or indirectly) including from dungsteads, silage pits or dirty yards,

- (ii) the quantity of any cleaning water that is likely to enter the system or slurry bag,
- (iii) the quantity of any slurry from housed livestock,
- (iv) the likely quantity of any imported slurries and liquid digestate added to the system or slurry bag,
- (v) the quantity of any liquid digestate exported off farm,
- d) a liquid digestate storage system must,
 - (i) comply with paragraphs (e) to (k),
 - (ii) if new (including systems constructed from used materials), or substantially reconstructed or enlarged, on or after 1 January 2022, have a life expectancy of at least 20 years, with proper maintenance, from its construction, reconstruction or enlargement,
- e) the base and walls of the liquid digestate storage tank and the walls of any feedstock tank, channels and pipes must be impermeable,
- f) the base and walls of the liquid digestate storage tank and feedstock tank, valves and the walls of any pipes must be protected against corrosion in accordance with paragraph 7.2 of the Code of Practice on Buildings and Structures for Agriculture published by the British Standards Institution and numbered BS 5502-50:1993+A2:2010,
- g) the base and walls of the liquid digestate storage tank and any feedstock tank must be capable of withstanding characteristic loads calculated on the assumptions and in the manner as set out in paragraph 5 of the Code of Practice on Buildings and

GBR34 rules continued:

Structures for Agriculture published by the British Standards Institution and numbered BS 5502-50:1993+A2:2010,

- h) the liquid digestate storage system must not be situated within 10 metres of any surface water or opening into a surface water drain which liquid digestate could enter if it were to escape,
- i) the liquid digestate tank, pipes, valves and feedstock tank must be operationally maintained to be free of any structural defects during their lifecycle,
- j) where the liquid digestate storage tank is fitted with a drainage pipe-
 - (i) there must be two valves in series on the pipe and each valve must be capable of stopping the flow of liquid digestate through the pipe and must be kept shut and locked in that position when not in use,
 - (ii) sub-paragraph (i) does not apply in relation to a liquid digestate storage tank which drains through the pipe into another liquid digestate storage tank of equal or greater capacity or where the tops of the tanks are at the same level,
- where a liquid digestate storage system includes a lagoon with walls which are made of earth, the lagoon must not be filled to a level which allows less than 750 millimetres of freeboard, and in all other cases the liquid digestate storage tank must not be filled to a level which allows less than 300 millimetres of freeboard,
- where a liquid digestate storage system constructed, or substantially reconstructed or enlarged, on or after 1 January 2022 includes a lagoon with walls which are made of earth, the lagoon must be lined with an impermeable sheet material which, with proper maintenance, liquid digestate cannot permeate for a period of at least 20 years,

GBR34 rules continued:

- m) a slurry bag may only be used to store liquid digestate if-
 - (i) the bag is constructed of impermeable material, is of sufficient strength and structural integrity, and is unlikely to burst or leak in its ordinary use, and
 - (ii) it is situated in a bund which complies with the following requirements—
 - 1) the bund must be of at least equivalent capacity to the slurry bag,
 - the bund must be lined with an impermeable sheet material which, with proper maintenance, liquid digestate cannot permeate for a period of at least 20 years,
 - 3) the bund must have a means of removing rainwater from it,
 - other than as necessary to allow rainwater to be removed, the base and walls of the bund must not be penetrated by any valve, pipe or other opening,
- n) where a liquid digestate storage system is to be constructed or to be substantially rebuilt or enlarged—
 - the operator must notify SEPA no later than 30 days prior to commencing the works,
 - (ii) the notification under sub-paragraph (i) must be accompanied by an engineering plan for the works to be carried out, and
 - (iii) the operator must retain for the lifetime of the liquid digestate storage system, for inspection by SEPA on request, the engineer's final sign-off certificate for the works,
- liquid digestate may be stored in a slurry storage system which complies with the requirements of GBR 32 in relation to the storage of slurry.

In relation to GBR34, a liquid digestate storage system or slurry bag storage for liquid digestate— (a) which was constructed before 1 January 2022, or

(b) in respect of which planning permission was granted before 1 January 2022, but which is not constructed before that date,

is not required to comply with these rules until 1 January 2024.

4. Abstraction regime

Abstraction means the doing of anything whereby any water is removed or diverted by mechanical means, pipe or any engineering structure or works from any part of the water environment, whether temporarily or permanently, including anything whereby the water is so removed or diverted for the purpose of being transferred to another part of the water environment.

We have also included borehole construction and operation in this section as it is often associated with abstraction, though not in all cases.

Surface water includes canals and lades. Abstractions from these are therefore controlled activities within the scope of the CAR. Note also that feeds and take-offs from watercourses into canals and lades are also classed as abstractions and therefore require to be authorised.

SEPA will not require authorisation for the following abstraction activities:

- Abstraction of water from the public water supply infrastructure.
- The removal or diversion of water as a result of land drainage works. During the construction phase, the abstraction of groundwater from the dewatering (passive or otherwise) of road, rail or other cuttings is regulated via GBR, registration or licence as any other abstraction would be. Once an operational final passive drainage system is in place for the cutting, such as a pipe network to collect run off and seepage, the activity will be treated as land drainage works and as such no further authorisation will be required.
- The temporary abstraction of water to enable working within a river, including the over pumping of water.
- Abstractions by vessels where the water is returned to the water environment from the vessel.

- Abstractions of water stored in off-line impoundments (see Section 5 for definition) and artificial storage ponds that receive their inflow from an already authorised abstraction. Note that an authorisation is required for an abstraction from a dug storage pond collecting water from field drains and/or groundwater.
- Abstractions from artificial treatment systems, including Sustainable Urban Drainage Systems (SUDS) and quarry settlement lagoons.
- Abstraction for the purposes of fire-fighting.
- Abstraction of rainwater from construction site excavations or quarries of volcanic or metamorphic rocks (e.g. basalt, granite and schist). Note that the abstraction of groundwater from excavations is a controlled activity to which GBR15 applies (see Sections 4.1 and 4.3) as is the abstraction of groundwater from quarries.

Dependent activities

It is recognised that in certain circumstances a structure may have to be constructed before an authorised activity can be carried out (e.g. an intake structure to facilitate an abstraction or abstraction return structure). In these circumstances, SEPA treats the construction (an engineering activity) as secondary to the primary activity and will normally authorise the construction activity in the same authorisation document as the primary activity. This means that SEPA will not normally require two separate applications to be made or fees to be paid, however, SEPA will need details of any dependent activities to be submitted with the main application.

The construction of a flood by-pass channel will be authorised as an engineering activity. When authorising the construction of a flood by-pass channel, the diversion of flood water into the by-pass channel will also be authorised. However, this will not be subject to additional abstraction application fees (or abstraction subsistence charges) and will not require a separate authorisation.

4.1 Abstraction and Borehole Construction and Operation – levels of authorisation

Use Table 2 and Table 3 to determine the level of authorisation applicable for abstraction activities. The notes below each table provide supporting information.

| GBR | Registration | Simple licence | Complex licence |
|----------------------------------|-----------------------|----------------|--------------------------|
| Inland ¹¹ abstraction | ons | | |
| Inland | Inland abstractions | Inland | Inland abstractions |
| abstractions | ≥10 and ≤50m³/day | abstractions | >2000m ³ /day |
| <10m ³ /day | | >50 and | |
| [GBR2] | | ≤2000m³/day | |
| | All abstractions from | | |
| | lochs where the full | | |
| | amount abstracted is | | |
| | returned to the same | | |
| | loch | | |
| | All abstractions from | | |
| | offline impoundments | | |
| | (e.g. storage ponds) | | |
| | fed solely by field | | |
| | drains | | |

¹¹ Inland water includes 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.

| GBR | Registration | Simple licence | Complex licence |
|---|--------------------|----------------|-----------------|
| Abstraction from coastal ¹² and transitional ¹³ water | | | |
| Coastal and | Coastal and | | |
| transitional water | transitional water | | |
| abstractions | abstractions of | | |
| <10m3/ | ≥10m³/day | | |
| day [GBR2] | | | |

Note: The rates of abstraction are the maximum peak daily abstraction on any given day.

Points of note for table 2:

Registration activities

- 1. Inland abstractions of 10-50m³ surface water per day.
- 2. All abstractions from lochs where the full amount abstracted is returned to the same loch.
- 3. All abstractions from offline impoundments (e.g. storage ponds) fed solely by field drains.
- 4. All coastal and transitional water abstractions $\geq 10m^3$ per day.

Simple licence activities

1. Inland abstractions of surface water >50 and $\leq 2000 \text{ m}^3$ per day.

Complex licence activities

1. Inland abstractions of surface water $>2000m^3$ per day.

¹² Coastal water is water between the three-mile limit and the limit of the highest tide, or the seaward limit of transitional water.

¹³ Transitional water is water, other than groundwater, in the vicinity of river mouths that are partly saline as a result of their proximity to coastal water but which are substantially influenced by freshwater flows.

Table 3: Borehole construction and operation and groundwater abstraction levels ofauthorisation

| GBR | Registration | Simple licence | Complex licence | |
|---|-------------------|--|---------------------------|--|
| Borehole construction and operation and abstraction for the purpose of test | | | | |
| pumping or sampling | | | | |
| The construction and | The | The construction and operation of a borehole | | |
| operation of a borehole | construction and | which will be or is int | tended to be greater than | |
| which will be or is | operation of a | 200m in depth. | | |
| intended to be < or | borehole, and | Abstraction from this | borehole would be | |
| equal to 200m deep | abstraction for | authorised by either | an appropriate GBR or | |
| and complies with | the purpose of | an abstraction regist | ration or licence. | |
| GBR3 | test pumping or | | | |
| Abstraction from a | sampling, where | | | |
| borehole intended for | the borehole will | | | |
| the abstraction of | be or is | | | |
| <150m ³ /yr if the | intended to be < | | | |
| abstraction is to test | or equal to | | | |
| the yield or properties | 200m deep and | | | |
| of the aquifer or to | where a | | | |
| sample the water | registration or | | | |
| quality [GBR 4] | licence level | | | |
| | abstraction is | | | |
| | planned | | | |
| | | | | |
| Groundwater abstracti | ons(other than gr | oundwater beneath | coastal and transitional | |
| waters) | | | | |
| Groundwater | Groundwater | Groundwater | Groundwater | |
| abstractions | abstractions ≥10 | abstractions | abstractions | |
| <10m ³ /day | and | >50 and | >2000m ³ /day | |
| [GBR2] | ≤50m³/day | ≤2000m³/day | | |
| | | | | |

| GBR | Registration | Simple licence | Complex licence | | |
|-------------------------------|--|--------------------|-----------------|--|--|
| Groundwater abstracti | Groundwater abstractions below coastal and transitional waters | | | | |
| Groundwater | Groundwater | | | | |
| Abstractions below | Abstractions | | | | |
| coastal and transitional | below coastal | | | | |
| waters <10m ³ /day | and transitional | | | | |
| [GBR2] | waters | | | | |
| | ≥10m³/day | | | | |
| Temporary abstraction | of groundwater f | rom a construction | site | | |
| Dewatering an | | | | | |
| excavation [GBR15] | | | | | |
| | | | | | |
| Abstraction of ground | water for geotherr | nal energy | | | |
| Abstraction and | | | | | |
| subsequent | | | | | |
| re-injection of | | | | | |
| groundwater for the | | | | | |
| purposes of extracting | | | | | |
| geothermal energy | | | | | |
| from the abstracted | | | | | |
| water or for the | | | | | |
| purpose of transferring | | | | | |
| heat to geological | | | | | |
| formations as part of a | | | | | |
| cooling system | | | | | |
| [GBR17] | | | | | |

Note: The rates of abstraction are the maximum peak daily abstraction on any given day.

Points of note for table 3:

Groundwater abstraction and borehole construction and operation

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SEPA will consider if multiple borehole construction and operations can be treated as a CAR single activity where:

a. The boreholes are drilled within a small geographic area:

- Each borehole is within 150m of another borehole in the well-field; or
- The boreholes are temporary in nature* and within 850m of another borehole in the well-field; and
- b. There are no lateral wells; and
- c. Activities associated with the boreholes are not likely to require further demonstration of the integrity of the borehole. For example, boreholes subject to high pressure fracking.

* This means that each borehole is fully backfilled and de-commissioned within 14 days of being constructed or closed loop geothermal systems have their geothermal pipework fully cemented within 14 days of being constructed.

Registration activities

1. Abstractions of groundwater (other than groundwater beneath coastal and transitional waters) of 10-50m³ per day.

- 2. Abstractions of groundwater below coastal and transitional waters of $\geq 10m^3$ per day
- 3. The construction and operation of a borehole which will be or is intended to be < or equal to 200m deep and where a registration or licence level abstraction is planned. If an abstraction of between 10 and 50m³/d is planned, a borehole construction and operation registration should be applied for as part of the abstraction registration. A separate borehole construction and operation registration is required for a borehole intended for a licence level abstraction.

Simple licence activities

1. Abstractions of groundwater (other than groundwater beneath coastal and transitional waters) >50 and \leq 2000m³ per day.

2. The construction and operation of a borehole which will be or is intended to be greater than 200m in depth and is temporary in nature. This means that the borehole will be fully backfilled and de-commissioned within 14 days of being constructed. It includes closed loop geothermal systems where the pipework involved is fully cemented in place within 14 days of being drilled. Because of the higher risk that deep boreholes pose to groundwater an application for a CAR licence will be required for the construction and operation of a borehole which will be or is intended to be greater than 200m in depth.

Complex licence activities

1. Abstractions of groundwater (other than groundwater beneath coastal and transitional waters) >2000m³ per day.

2. The construction and operation of a borehole which will be or is intended to be greater than 200m in depth.

4.2 Abstraction – General Binding Rules

As described in Section 2, CAR contains General Binding Rules (GBRs) for specific low risk activities. When an activity complies with the relevant GBR, there is no need to contact SEPA or to apply for a formal authorisation. Compliance with the GBR is treated as compliance with an authorisation under CAR.

Note: If you will be unable to comply with one or more of the general binding rules applicable to your proposed activity, you may still be able to carry out the activity by obtaining an authorisation from SEPA in the form of a registration or water use licence.

The abstraction GBRs are outlined below. For ease of interpretation, the format and language may differ slightly from the GBRs presented in CAR. If you are unclear about a particular GBR or its rules/conditions, you are advised to consult Schedule 3 of CAR.

GBR2: Abstraction of less than 10m³ of water in any one day

Rules:

- a) There must be a means of demonstrating that the abstraction is less than 10m³ in any one day (e.g. measuring the rate of abstraction) or a means of demonstrating that the maximum volume that could be abstracted cannot exceed 10m³ in any one day; and
- b) water leakage must be kept to a minimum by ensuring that all pipework, storage tanks and other equipment associated with the abstraction and the use of the water are maintained in a state of good repair.

SEPA assumes that the following controlled activities abstract less than 10m³ per day and fall within the scope of GBR2. Abstractions of water for:

- supplying solely domestic water to 50 people or less;
- filling water troughs for livestock;
- filling a pesticide sprayer.

GBR3: The construction, extension or operation of any well, borehole or other works by which water may be abstracted, where such works are-

- a) not intended for the purpose of abstraction;
- b) intended for the abstraction of <10m³ water in any one day;
- c) intended for the abstraction of <150m³ water in any period of one year, and the purpose of the abstraction is either
 - i. to test for the yield of the borehole or well or the hydraulic properties of the aquifer; or
 - ii. to sample the water quality;

GBR3 continued:

- d) intended to dewater one or more excavations at
 - i. a construction site for roads, buildings, pipelines or other built developments; or
 - ii. a site at which the maintenance of such developments is being undertaken; or
- e) intended for the purpose of undertaking activity 17.

Rules:

- a) The construction and operation of
 - i. subject to b) and c), any well or borehole; and
 - ii. any other works,

must be such as to avoid the entry of pollutants or water of a different chemical composition into the water environment;

- b) drilling fluids may be introduced if necessary to facilitate the drilling of the well or borehole, provided this does not result in pollution of the water environment;
- c) potable water may be introduced into the well or borehole to test the hydraulic properties of the aquifer;
- d) when any well or borehole is no longer required, it must be back-filled or sealed to the extent necessary to prevent loss of groundwater from any aquifer and to avoid the entry of pollutants or water of a different chemical composition into any body of groundwater; and
- e) the depth of any well or borehole beneath the surface of the ground must not exceed 200 metres.

GBR4: The abstraction from a borehole, and any subsequent discharge of abstracted water, if the total volume abstracted is less than 150m³ in any period of one year and the purpose of the abstraction is either-

- a) to test the yield of the borehole or well or the hydraulic properties of the aquifer; or
- b) to sample the water quality.

Rules:

- a) The abstraction must not cause the entry of pollutants or water of a different chemical composition into any body of groundwater; and
- b) when the borehole is not being used for abstraction, it must be back-filled or sealed to the extent necessary to avoid loss of groundwater from any aquifer.

GBR15: The temporary abstraction of groundwater at

- a) a construction site for roads, railways, buildings, pipelines, communication links or other built development; or
- b) or a site at which maintenance of such a development is being undertaken

by means of pumping groundwater:

- directly from any excavation(s) on the site; or
- from any well or borehole on the site, to help dewater any other excavation(s) on site,

and, where desired, the subsequent discharge of the abstracted groundwater to the water environment.

Rules:

- a) Groundwater may only be abstracted at the site within a period of 180 days beginning with the first day on which groundwater is abstracted at the site;
- b) Other than where paragraph (g)(i) applies, groundwater must not be abstracted from any excavations, wells or boreholes that are within 250 metres of any surface water unless the abstracted water is discharged into the surface water at the nearest part of the surface water to the point of abstraction and in accordance with paragraph (f) or g(ii), as applicable;
- c) Groundwater must not be abstracted from any excavations, wells or boreholes that are within 250m of a wetland;
- d) Groundwater must not be abstracted from any excavations, wells or boreholes that are within 250m of an abstraction that is not used solely for dewatering an excavation;
- e) All reasonable steps must be taken to ensure that the quantity of sediment in the abstracted water is minimised;
- f) If the abstracted groundwater is taken directly from an excavation and this water, and any precipitation or water run-off that has also collected in the excavation, is discharged to the water environment, it must be discharged via a surface water drainage system authorised under CAR subject to the consent of the person having operational control of the system;
- g) If the abstracted groundwater is taken from a borehole or well, and is discharged to the water environment, it must be—
 - i) discharged directly back to the same part of the geological formation or the mine workings from which it was abstracted, provided that the abstracted water does not contain any radioactive substance, and that no substances are added to, or otherwise allowed to enter, the abstracted water prior to its return, or

GBR 15 Rules continued:

- (ii) discharged via a surface water drainage system authorised under CAR subject to the consent of the person having control of the system; and
- h) All reasonable steps must be taken to ensure that the discharge of abstracted groundwater does not result in pollution of the water environment.

Authorisation by SEPA will be needed for dewatering operations not covered by GBR15.

GBR17: The abstraction and subsequent return of groundwater for the purposes of extracting geothermal energy from the abstracted water or for the purpose of transferring heat to geological formations as part of a cooling system.

Rules:

- a) The abstracted water must be returned to the same part of the geological formation or the mine workings from which it was abstracted;
- b) any volume of water may be abstracted but the volume of water abstracted and not returned must not exceed 10m³ per day;
- c) no substances may be added to, or otherwise allowed to enter, the abstracted water prior to its return to the geological formation or mine workings from with it was abstracted;
- d) there must be a means of demonstrating that the net abstraction is not more than 10m³ in any one day;
- e) water leakage must be kept to a minimum by ensuring that all pipe work, storage tanks and other equipment associated with the abstraction and use of the water are maintained in a good state of repair; and

GBR 17 Rules continued:

f) the activity must not be located within 250 metres of any abstraction of water intended for human consumption and must not prevent any abstraction of water which is authorised under CAR.

GBR17 applies to open loop geothermal systems (i.e. where an abstraction from the water environment occurs). A licence will be required where the borehole will be or is intended to be >200m in depth.

5. Impoundment regime

CAR requires authorisation for the:

- a) construction or alteration of impounding works in inland water (other than groundwater) or wetlands
- b) operation of impounding works in surface water or wetlands

'On-line' impounding works hold back flows in wetlands, rivers, lochs and estuaries. Consequently, they affect downstream water flows, sediment transport and migration of fish. 'Off-line' impoundments are built to store water (including surface run-off, groundwater, or land drainage) and are not on-line.

SEPA will use the impoundment regime to regulate the following aspects of on-line impoundments:

- engineering aspects involved in construction or alteration of a dam, weir or other works impounding inland water (other than groundwater) or wetlands;
- operation of a dam, weir or raised loch particularly in terms of water levels, downstream flows and fish passage in surface water or wetlands.

SEPA will not require authorisation for the following impoundment activities:

- The construction and operation of off-line impoundments. Examples include impoundments:
 - that receive their inflow from an authorised abstraction (including impoundments constructed by farmers to hold water used for irrigation and firewater ponds/impoundments used by industry);
 - o that form part of an artificial treatment system;

- in artificial water bodies e.g. canals and lades (including locks), which hold back flows within the canal or lade.
- The placement and operation of temporary impoundments solely for the purpose of pollution control associated with construction and development sites do not require authorisation.
- The construction of a weir, dam, or impoundment in inland waters (other than groundwater) or wetlands for the purpose of **peatland restoration or wetland** creation where:
 - a) The activity is carried out in artificial drainage channels; AND
 - b) The activity is not associated with an abstraction. AND
 - c) The impoundment is created in a watercourse less than or equal 1m wide.

Removal or modification of impoundments

Removal or modification of impoundments is a controlled activity and will require a new or varied authorisation in accordance with the categories set out within this table (i.e. its level of authorisation will be the same as a new structure of the same type and scale except for GBR1 weirs which will require simple licence). Please refer to charging guidance for details of reductions in application fee available for the removal of structures.

SEPA will only require authorisation for modifications to impounding works that have an impact on the water environment. For example, the addition of a gantry to a dam would not need authorisation. The retrospective fitting of a wave wall will also not require authorisation, as long as the overall height or volume of the water stored behind the dam is not increased. The new works must also not impact on any overflow structures or compensation flows.

Authorisation (new or variation) will be required for any works (either temporary or permanent) that alter the height of the dam or the maximum capacity impounded.

Authorisation is also required if there are any impacts on structures that are for the purpose of fish passage.

Off-line flood storage impoundments (e.g involving embankments) that collect water during flood conditions and then release this water when river levels fall, may require authorisation under the engineering regime (Section 6).

The removal of sediment behind a weir is covered in the engineering regime. GBR12 deals specifically with this activity (Section 6.2). Sediment management in rivers and lochs and other parts of the water environment is also dealt with in the engineering regime.

Dependent activities

Bed or bank reinforcement directly associated with and required for the structural integrity of impounding works is classed as a dependent activity. Engineering activities are classed as dependent where, in the opinion of SEPA, they are required for the structural integrity of the primary activity. Dependent engineering activities will be authorised as part of the primary activity. Details of dependent activities should be submitted with any application, however they will not be subject to additional application fees and will not require a separate authorisation.

5.1 Impoundment – levels of authorisation

Use Table 4 to determine the level of authorisation applicable for impoundments. The notes below the table provide supporting information.

| GBR | Registration | Simple Licence | Complex Licence |
|--------------------|--------------|-------------------------|-------------------------|
| The operation of | | The operation of all | |
| existing passive | | other weirs, dams, | |
| weirs ≤1m high | | raised lochs and | |
| that do not affect | | other impounding | |
| the passage of | | works in surface | |
| salmon or sea | | water or wetlands | |
| trout [GBR1] | | | |
| | | Removal or | |
| | | modification of | |
| | | an impoundment | |
| | | authorised under | |
| | | GBR1 in inland water | |
| | | (other than | |
| | | groundwater) or | |
| | | wetlands | |
| | | Construction of new | The construction of all |
| | | impoundments ≤1m | other new |
| | | high that do not affect | impoundments in inland |
| | | passage of salmon or | water (other than |
| | | sea trout in inland | groundwater) or |
| | | water (other than | wetlands |
| | | groundwater) or | |
| | | wetlands | |
| | | | |

Table 4: Impoundment levels of authorisation

Points of note for table 4:

Simple licence activities

- 1. All existing weirs, dams, raised lochs and other impounding works other than those authorised under GBR1.
- 2. Removal or modification of an impoundment authorised under GBR1.
- Construction and operation of new impoundments ≤1m high which do not affect the passage of salmon or sea trout.

Complex licence activities

Construction and operation of new impoundments other than those ≤1m high which do not affect the passage of salmon or sea trout.

5.2 Impoundment – General Binding Rules

As described in Section 2, CAR contains General Binding Rules (GBRs) for specific low risk activities. When an activity complies with the relevant GBR, there is no need to contact SEPA or apply for formal authorisation. Compliance with the GBR is treated as compliance with an authorisation under CAR.

Note: If you will be unable to comply with one or more of the general binding rules applicable to your proposed activity, you may still be able to carry out the activity by obtaining an authorisation from SEPA in the form of a registration or water use licence.

The impoundment GBR is outlined below. For ease of interpretation, the format and language may differ slightly from the GBR presented in the CAR. If you are unclear about a particular GBR or GBR condition, you are advised to consult Schedule 3 of CAR.

GBR1: The operation of any weir that is not capable of being operated to control the water level upstream, does not create a height differential of more than 1m between the upstream and downstream water surfaces and was constructed before 1 April 2006.

Rule:

a) The weir must not impede the free passage of salmon and sea trout during periods within which, in the absence of the weir, the flow of the river would be at a level expected to permit their migration.

6. Engineering regime

CAR requires authorisation for the carrying out of building or engineering works in:

- Inland surface water or wetlands
- the vicinity of inland surface waters or wetlands and having, or likely to have, a significant adverse impact on the water environment.

For impoundments see section 5.

SEPA will not normally require an authorisation for the following activities:

- Engineering works below the surface of the ground only affecting groundwater.
- Engineering works in coastal and transitional waters, these are regulated by Marine Scotland.
- Engineering works not in the vicinity of inland surface water (>10m or 2 channel widths) which do not affect a surface dependant wetland, unless SEPA consider there is a likelihood of significant adverse impact on the water environment.
- Engineering activities on minor watercourses, except for culverting for land-gain, dredging and permanent diversions/realignments. A minor watercourse is one not shown on the 1:50,000 scale Ordnance Survey maps (Landranger series).
- Construction and maintenance of land drainage works (including road drains and field drains) that do not affect a natural watercourse. see guidance on <u>activities</u> <u>affecting drainage ditches</u>
- The removal or management of in-stream or bankside (riparian) vegetation and instream debris/rubbish including fallen trees. See Good Practice Guide –<u>Riparian</u> <u>Vegetation Management</u>.
- All works in inland wetlands, where the wetland is not directly associated with a river, loch or artificial water body. (also see box below)
- Activities the subject of, and carried out in accordance with a SEPA Regulatory Position Statement. See those for gold panning, pipelines, fences and placement of large wood <u>here</u>.
- Certain maintenance, repair, removal and replacements activities (see table below)

Note You must always ensure you do not cause pollution. If in doubt whether your activity requires authorisation under CAR, please contact your local SEPA office.

Maintenance, Repair, Removal and Replacement

Certain maintenance, repair, removal and replacements activities may require authorisation. Maintenance or repair means any work needed to keep structures in the state of repair necessary to ensure that they can continue to serve their normal, intended functions. It does not include fully replacing a natural bed with an artificial bed to prevent scour.

The table below sets out where authorisation is required:

| Maintenance, Repair, Removal & Replacement of Existing Structures* | | | | |
|---|--|---|---|--|
| Note this table does no | Note this table does not apply to impoundments or sediment management activities | | | |
| 1. Maintenance, repair or partial (<50%**) replacement: | | ** or complete or 50%**) replacement: | | |
| Where there is: No increase in footprint** No alteration in bank height No alteration in natural bed level No alteration in channel width which uses equivalent materials and remains same activity type | | Where there is: No increase in footprint** No alteration in bank height No alteration in natural bed level No alteration in channel width which uses equivalent materials and remains same activity type | | |
| 1a: all the criteria above apply*** | 1b: cannot comply with all criteria above | 2a: all the criteria above apply | 2b: cannot comply with all criteria above | |
| Must comply with any applicable GBR including GBR 9, no additional authorisation required. (must not cause pollution)Authorise at level in Table 5Authorise at level in Table 5Authorise at level in Table 5 | | | | |
| * includes failed and at | bandoned structures | no longer serving their i | ntended purpose. | |
| ** length of structure in its current, or recent, form. | | | | |
| *** except when bed reinforcement, which is no more than 1m from the base of that | | | | |
| structure or 10% of the b | bed width whichever | is the lesser, to protect | an existing structure is | |

being installed This activity will be considered maintenance.**** Please refer to charging guidance for details of reductions in application fees available for the removal of structures.

Guidance on activities in the vicinity of inland surface waters and activities affecting surface water dependent wetlands.

Building and development in the vicinity (within 10 metres or 2 channel widths whichever is shorter)) of inland surface waters and wetlands will not normally require authorisation, unless SEPA considers there is a likelihood of significant adverse impact on the water environment. Activities that may require authorisation include land-raising or lowering.

Activities that can directly affect the quality of surface water dependent wetlands that require authorisation include drainage operations (dredging or excavation of drainage channels), removal of sediment through excavation, or changing elevations using fill material.

Dependent activities

It is recognised that in certain circumstances a structure may have to be constructed before an authorised activity can be carried out (e.g. a new outfall pipe to facilitate a point source discharge or an intake structure to facilitate an abstraction). In these circumstances, SEPA treats the construction (an engineering activity) as secondary to the primary activity and will normally authorise the construction activity in the same authorisation document as the primary activity. This means that SEPA will not normally require two separate applications to be made or fees to be paid, however, SEPA will need details of any dependent activities to be submitted with the main application.

The construction of a flood by-pass channel will be authorised as an engineering activity. When authorising the construction of a flood by-pass channel, the diversion of flood water into the by-pass channel will also be authorised. However, this will not be subject to additional abstraction application fees (or abstraction subsistence charges) and will not require a separate authorisation.

Other Agencies and Requirements

Note that before carrying out any engineering activity additional consents may be required from other authorities, such as planning permission or permission associated with conservation areas or protected species.

A list of other agencies and their roles and responsibilities is summarised here.

6.1 Engineering – levels of authorisation

Use Table 5 to determine the level of authorisation applicable for engineering activities. The notes below the table provide supporting information.

Table 5: Engineering levels of authorisation

| GBR | Registration | Simple licence | Complex licence |
|--------------------|-------------------------|---------------------|----------------------|
| Sediment manage | ement | | |
| Dredging in | Removal of sand, | | |
| a previously | silt or clay from the | | |
| straightened | bed of previously | | |
| river, | straightened rivers | | |
| burn or ditch with | and burns which are | | |
| an average bed | ≥1m and <5m | | |
| width of <1m | wide*. Up to 500m | | |
| along the stretch | length along the bed | | |
| to be worked | may be removed | | |
| [GBR5] | (Activity L) | | |
| | Sediment | All other sediment | All other sediment |
| | management | management ≤50m | management >50m in |
| | in canals, lades and | in length in rivers | length in rivers >3m |
| | other artificial inland | >3m wide* | wide* |
| | surface water | | |
| | (Activity A) | | |

| GBR | Registration | Simple licence | Complex licence |
|-------------------|----------------------|----------------------|-------------------------------|
| Sediment | Sediment | All other sediment | |
| management | management | management in | |
| within | within 10m of a | rivers ≤3m wide* | |
| 10m upstream of | bridge | and wetlands | |
| а | (Activity B) | | |
| Weir [GBR12] | | | |
| Sediment | Sediment | All other sediment | All other sediment |
| management | management in | management | management >500m ² |
| within | open culverts ≤2m | ≤500m² in total area | in total area on lochs |
| 10m of a closed | wide* | on lochs | |
| culvert [GBR13] | (Activity C) | | |
| | | | |
| Sediment | Removal of | | |
| management | sediment from | | |
| within 5m of an | individual and | | |
| outfall or intake | discrete areas of | | |
| [GBR13] | exposed sediment | | |
| | such as gravel bars | | |
| | within a length of | | |
| | river or burn not | | |
| | exceeding 1 | | |
| | kilometre | | |
| | (Activity K) | | |
| Bank reinforceme | nt, embankments, flo | odwalls and other ba | nk modifications |
| Green bank | Green bank | All other green bank | |
| reinforcement or | reinforcement | reinforcement or | |
| reprofiling ≤10m | (Activity D) | reprofiling | |
| or | or re-profiling | | |
| ≤ one channel | (Activity E) ≤50m in | | |
| width in length | length | | |
| | | | |

| GBR | Registration | Simple licence | Complex licence |
|---------------------|----------------------------|-----------------------------|------------------------------------|
| (whichever is | | | |
| greater) [GBR8] | | | |
| The placement of | Grey bank | Grey bank | All other grey bank |
| trees or parts of | reinforcement ≤20m | reinforcement, | reinforcement, |
| trees in any river, | associated with an | floodwalls and | floodwalls and |
| burn or ditch to | existing manmade | embankments ¹ | embankments ¹ in rivers |
| protect eroding | structure | ≤100m in length in | >3m wide* and lochs |
| banks [GBR25] | (Activity O) | rivers >3m wide* | |
| | | and lochs | |
| | | | |
| | | All grey bank | |
| | | reinforcement, | |
| | | floodwalls and | |
| | | embankments ¹ in | |
| | | rivers ≤3m wide* | |
| | | | |
| Bridges and other | r types of crossing st | ructures | |
| Minor bridges | Bridges with no | All other bridges, | |
| with no | construction on bed | fords and | |
| construction on | and ≤20m of total | causeways | |
| bed | bank affected ² | | |
| or banks [GBR6] | (Activity F) | | |
| Temporary | Closed culverts | All other closed | |
| bridges in | used for footpaths, | culverts used for | |
| rivers <5m wide | cycle route, single | crossings | |
| [GBR6] | track roads or single | | |
| | track railways in | | |
| | rivers ≤2m wide*. | | |
| | (Activity G) | | |

| GBR | Registration | Simple licence | Complex licence |
|---------------------|--------------------|-----------------------|-------------------------------|
| Pipeline or cable | Pipeline or cable | All other pipeline or | |
| crossings by | crossings beneath | cable crossings, e.g. | |
| boring | bed by isolated | by direct open cut or | |
| beneath the bed | open-cut or mole | laid on channel bed | |
| of | plough. | | |
| inland surface | (Activity H) | | |
| water | | | |
| [GBR7] | | | |
| In-stream or in-loo | ch structures | | |
| Boulder | Bed reinforcement | All other in-stream | All other in-stream |
| placement | ≤10m in length | structures in rivers | structures in rivers >3m |
| in a river or burn | downstream of | >3m wide* affecting | wide* affecting >50m of |
| (occupying <10% | closed culverts | ≤50m of river length | river length |
| of | (Activity I) | | |
| channel width) | | | |
| [GBR14] | | | |
| | | All other in-stream | |
| | | structures in rivers | |
| | | ≤3m wide* | |
| | In-loch structures | In-loch structures | In-loch structures with |
| | with total area | with total area | total area >500m ² |
| | ≤50m² | ≤500m² | |
| | (Activity J) | | |
| Channel modifica | tions | | |
| | | All diversions, | All diversions, |
| | | realignment, flood | realignment, flood |
| | | by-pass channels | by-pass channels and |
| | | and culverting for | culverting for land gain |
| | | land gain on rivers | on rivers >3m wide* |
| | | ≤3m wide* | |
| | | | |
| | 1 | 1 | 1 |

| GBR | Registration | Simple licence | Complex licence |
|--------------------|--------------|------------------|-----------------|
| Other activities | | | |
| Construction and | | | |
| maintenance of a | | | |
| surface water | | | |
| drainage system | | | |
| outfall [GBR6] | | | |
| | | | |
| Operating | | Other controlled | |
| vehicles, plant or | | engineering | |
| machinery in or | | activities | |
| near surface | | not defined | |
| water or wetland | | elsewhere | |
| for purpose of | | in the table | |
| carrying out any | | | |
| other GBR | | | |
| activity and /or | | | |
| maintenance of | | | |
| an existing | | | |
| structure [GBR 9] | | | |

Points of note for table 5:

* This width is the straight line distance measured between the toe of the banks of any watercourse, which spans the bed of the watercourse, including any exposed bars and vegetated islands.

¹ for further information on authorisation requirements for embankments please refer to Table 7 on Page 44 of WAT-RM-02

² For river crossings the total length of bank affected includes the total length of structures on both banks, this includes the length of bridge abutments and any dependant bank reinforcement. For example, for a registration bridge (≤ 20m total bank affected) the maximum length for each bridge abutment would be 10m.

Refer to the glossary for definitions of terms used in this section.

Registration activities

Letter references (A to O) used in the above table and notes below correspond to those used in the registration application form.

- Activity A Sediment management in canals, lades and other artificial inland surface water. This category covers dredging works required for the efficient operation of the canal, lade or other artificial water. This category does not include works within heavily engineered natural watercourses.
- 2. Activity B Sediment management within 10m of a bridge. This covers dredging works required to maintain the flood capacity or structural integrity of bridges.
- Activity C Sediment management of open culverts ≤2m wide. Open culverts are defined as river channels which have beds and banks constructed of artificial and consolidated material such as concrete, block stonework or brickwork.

- 4. Activity D & E Green bank protection or re-profiling no more than 50m in total length along banks/shore, that are not captured under the conditions of GBR8 (Section 6.2). Green bank protection includes the use of materials such as rip-rap and log revetments restricted to the bank toe (i.e. should be submerged during normal flow conditions), and biodegradable geo-textiles.
- Activity F Bridges across rivers and lochs where no part of the structure encroaches on the bed (e.g. no piers or in-channel supports). In addition, the total length of structures on both banks should not be more than 20m. This category includes bottomless arch culverts.
- Activity G Pipe and box culverts used for single-track roads and single track railways, footpaths and/or cycle routes, where the affected watercourse is not more than 2m wide.
- Activity H Pipeline or cable crossings by isolated open-cut. This requires a trench to be excavated across the bed of the watercourse, and the area of working to be isolated (kept dry), using techniques involving over pumping and gravity-fed pipes.

Mole plough cable or pipe laying (Mole ploughing)-A technique using a specialised pipe and cable laying plough to cut a temporary narrow channel into which pipes or cables are fed and simultaneously pushes the spoils removed back into the cut channel, eliminating the need to backfill.

- Activity I Bed reinforcement not more than 10m in length immediately downstream of a pipe or box culvert using rip-rap. This covers reinforcement work that is deemed necessary to prevent scour immediately downstream of an existing culvert.
- Activity J Loch structures where the total surface area of the structure is not more than 50m². This category includes small boat slips, piers, jetties and platforms.
- 10. Activity K Removal of sediment from individual and discrete areas of exposed sediment such as gravel bars within a length of river or burn not exceeding 1 kilometre. Dry gravel can be removed from a third of the gravel bars over the 1km stretch; other restrictions include only 50% of the surface area being removed and a maximum of 30m length on any bar.
- 11. Activity L Removal of sand, silt and clay from the bed of artificially straightened or canalised rivers and burns which are ≥1 m and <5 m wide. Up to a total of 500m length along the bed may be removed (a single length of 500m or shorter lengths totalling 500m). Such rivers will have parallel or near parallel banks with unrippled and smooth water flow and a bed dominated by sand, silt or clay. The works must include measures to prevent pollution. They must not damage wetlands or lochs, widen the river channel, heighten the river banks, leave a step in the river bed or cause erosion.</p>
- 12. Activity O Grey bank reinforcement no more than 20m in total length along the banks/shore associated with erosion protection for existing man-made structures.

Simple licence activities

Sediment management

- Sediment management over a length of no more than 50m in watercourses greater than 3m wide. This includes sediment removal such as dredging, gravel extraction and sediment movement within the channel (e.g. pool maintenance works).
- 2. Sediment management in lochs within an area no more than 500m².
- 3. Sediment management over any length in watercourses no more than 3m wide.

Bank reinforcement, embankments, floodwalls and other bank modifications

- 4. Green bank protection or re-profiling along banks/shore for more than 50m. Green bank protection includes the use of materials such as rip-rap and log revetments restricted to the bank toe (i.e. should be submerged during normal flow conditions) and biodegradable geo-textiles.
- 5. Grey bank protection, floodwalls and embankments no more than 100m in total length in watercourses greater than 3m wide and lochs. Grey bank protection 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 nonbiodegradable geo-textiles.

6. All grey bank protection, floodwalls and embankments in watercourses no more than 3m wide. Grey bank protection 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.

Bridges and other types of crossing structures

- 7. All other bridges, fords and causeways. This category will include bridges affecting more than 20m total bank lengths, or bridges with in-stream supports. This category also includes all fords and causeways constructed across lochs and wetlands. Where multiple crossings of a ford are required within a short space of time a temporary bridge should be considered.
- 8. All other pipe or box culverts used for crossings. This category will include all pipe or box culverts used for multiple track/lane roads, and pipe or box culverts used for minor bridges on watercourses greater than 2m wide.
- 9. All other pipeline or cable crossings, e.g. by direct open cut or laid on the bed of the inland surface water. Direct open cutting requires a trench to be excavated across the bed of the watercourse and deals with situations where techniques such as over-pumping are not feasible and the working area therefore remains under water.

In-stream or in-loch structures

- 10. All other in-stream structures on watercourses no more than 3m wide. This includes bed reinforcement croys, groynes and other flow deflectors, and other in-stream structures (such as boulder placements not satisfying the GBR conditions). Where a structure impounds water, this will require authorisation according to the table set out in Section 5.
- 11. All other in-stream structures on watercourses greater than 3m wide affecting no more than 50m of total river length.
- 12. Loch structures with a surface area greater than 50m² but no more than 500m². This includes boat slips, piers, jetties, platforms, etc.

Channel modifications

13. All forms of permanent diversion, channel straightening, channelisation, re-sectioning, re-meandering or culverting for land gain on watercourses no more than 3m wide.

Other activities

14. Other engineering activities on or in the vicinity of inland surface water and wetlands not described elsewhere in the levels of authorisation table.

Complex licence activities

Sediment management

- 1. Sediment management in watercourses greater than 3m wide over a length of more than 50m. This includes sediment removal such as dredging, gravel extraction and sediment movement within the channel (e.g. pool maintenance works).
- 2. Sediment management in lochs greater than 500m² in total area.

Bank reinforcement, embankments, floodwalls and other bank modifications

3. Grey bank protection, floodwalls and embankments greater than 100m in total length in watercourses greater than 3m wide and lochs. Grey bank protection 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 geo-textiles.

In-stream or in-loch structures

- 4. In-stream structures on watercourses greater than 3m wide affecting more than 50m of total channel length. This would include large areas of bed reinforcement. Where a structure impounds water, this will require authorisation according to the table set out in Section 5 of this document.
- Loch structures where the total surface area of the structure is more than 500m² e.g. large boat slips, piers, jetties, platforms, etc.

Channel modifications

6. All forms of permanent diversion, channel straightening, channelisation, re-sectioning, re-meandering or culverting for land gain on watercourses greater than 3m wide.

6.2 Engineering – General Binding Rules

As described in Section 2, CAR contains General Binding Rules (GBRs) for specific low risk activities. When an activity complies with the relevant GBR, there is no need to contact SEPA or to apply for a formal authorisation. Compliance with the GBR is treated as compliance with an authorisation under CAR.

Note: If you will be unable to comply with one or more of the general binding rules applicable to your proposed activity, you may still be able to carry out the activity by obtaining an authorisation from SEPA in the form of a registration or water use licence.

The engineering GBRs are outlined below. For ease of interpretation, the format and language may differ slightly from the GBRs presented in the CAR. If you are unclear about a particular GBR or GBR condition, you are advised to consult Schedule 3 of CAR.

It should be noted that GBR9 must be followed when operating a vehicle, plant or equipment for the purposes of undertaking any other engineering GBR activity.

GBR5: Dredging of a river, burn or ditch that has an average bed width of less than 1m along the stretch to be worked and has been artificially straightened or canalised along the length which is to be worked. *(Please also check GBR9)*

- a) Vegetation on any bank of the river, burn or ditch may be removed or modified only to the extent that the works cannot reasonably be carried out without such removal or modification.
- b) Any vegetation removed must not be disposed of into the channel.

GBR5 rules continued:

- c) The activity must not result in the widening of the bed width of the river, burn or ditch.
- d) All reasonable steps must be taken to prevent the transport of sediments or other matter disturbed by the works into waters beyond the worked stretch.
- e) Works must not be undertaken during periods in which fish are likely to be spawning in the river, burn or ditch, nor in the period between any such spawning and the subsequent emergence of juvenile fish.¹⁴
- f) All reasonable steps must be taken to avoid increased erosion of the banks or bed of the river, burn or ditch as a result of the works.
- g) The bed of the worked stretch must be graded at a shallow angle to tie in with the bed level upstream and downstream and there must be no steps or sudden changes in the angle of the bed slope.
- h) The removed sediment must not be left on the banks such that its placement heightens the banks.

SEPA does not intend to apply this GBR to man-made ditches formed where there was not previously a natural watercourse. However, during such works, operators should use best practice to ensure that pollution of the water environment downstream from the works (including silt pollution) is prevented. Similarly, SEPA does not intend to regulate engineering maintenance operations in road drainage ditches or equivalent but does expect such work to be undertaken in a way which prevents pollution of downstream waters.

¹⁴ If in doubt about these times, you are advised to go to <u>Fisheries Management Scotland</u> for contact details of the local District Salmon Fishery Board (*which has statutory powers in relation to the protection and improvement of salmon and sea trout fisheries within their district*) and/or Fishery Trust.

GBR6: Construction and maintenance: (Please also check GBR9)

- of a minor bridge over a river, burn or ditch;
- (or removal) of a temporary bridge over a river, burn or ditch that has a bed width of less than 5 metres; or
- of a surface water drainage system outfall which discharges into a river, burn or ditch.

- a) Vegetation on any bank of the river, burn or ditch must be removed or modified only to the extent necessary to carry out the works.
- b) Any vegetation removed must not be disposed of into the channel.
- c) The works must not prevent the free passage of migratory fish.
- d) The works must not result in the narrowing of the channel width nor the heightening of either bank.
- e) Where the activity requires any work in the wetted part of the channel, the works must not be undertaken during periods in which fish are likely to be spawning in the river, burn or ditch nor in the period between any such spawning and the subsequent emergence of juvenile fish.¹⁴
- f) If necessary, a temporary culvert may be installed to facilitate the works but the culvert must not extend more than 10m along the length of the river, burn or ditch and must be removed on completion of the works.
- g) All reasonable steps must be taken to ensure that the works do not result in increased erosion of the bed or banks of the river, burn or ditch.

GBR6 rules continued:

- h) As far as reasonably practicable, within 12 months of the work starting, the bed and banks of the river, burn or ditch must be reinstated at least to their condition before the works started.
- For temporary bridges, as far as reasonably practicable, and within 12 months of the removal of the bridge, the bed and banks must be reinstated at least to their condition before the works started.
- j) The activity must not result in pollution of the water environment.
- k) Any outfall and associated works must be designed and constructed to be no larger than is necessary for the proper operation of the outfall, and in any case must not extend more than 20 metres along the length of the river, burn or ditch.

GBR7: Pipeline or cable laying by boring underneath a watercourse.

Please also check GBR9

- a) The works must not result in any alterations to the bed and banks of the watercourse, except as permitted in rule (b) and (d) below.
- b) Vegetation may be removed from the banks only if the works cannot otherwise be reasonably carried out.
- c) Vegetation that is removed must not be disposed of into the channel.
- d) As far as reasonably practicable, within 12 months of the works starting, the bed and banks must be reinstated at least to their condition before the works started.

GBR8: Controlling bank erosion by green bank reinforcement or re-profiling.

Please also check GBR9

- a) All reasonable steps must be taken to ensure that the works do not result in increased erosion of the banks.
- b) The works must not result in the destabilisation of the bed upstream or downstream of the works.
- c) Vegetation may be removed from the banks only if the works cannot otherwise be reasonably carried out.
- d) Vegetation that is removed must not be disposed of into the channel.
- e) The revetment can only be constructed from vegetation, biodegradable geotextiles, untreated wood, or non-grouted stone rip rap.
- f) The length of any revetment must not exceed 10m or if the channel width is more than 10m, one channel width.
- g) Where wood or stone rip-rap is used, use is limited to the toe of the bank.
- h) Except for the purposes of repairing an existing revetment, bank protection works must not be carried out within five channel widths or 50m (whichever is the greater) of any existing bank protection works on either bank of the river, burn or ditch.
- i) The work must not result in the heightening or lowering of the banks.
- j) Work must not be carried out when fish are likely to be spawning in the affected surface water, or in the period between spawning and the subsequent emergence of juvenile fish¹⁵.
- k) The revetments must be maintained in a good state of repair to avoid erosion of the banks or destabilisation of the bed.

¹⁵ If in doubt about these times, you are advised to go to <u>Fisheries Management Scotland</u> for contact details of the local District Salmon Fishery Board (*which has statutory powers in relation to the protection and improvement of salmon and sea trout fisheries within their district*) and/or Fishery Trust.

GBR9: Operating any vehicle, plant or other equipment (machinery) in or near any surface water or wetland for the purpose of undertaking any other GBR activity or for the purpose of maintaining an existing man-made structure in or near any surface water or wetland.

- a) Machinery should only operate in water where it is impracticable for it to operate on dry land.
- b) Refuelling must take place at least 10m away from any surface water.
- c) Any static plant or equipment used within 10m of surface water must be positioned on a suitable drip tray with capacity for 110% of the fuel tank supplying the static plant or equipment.
- d) Machinery used in or near surface water must not leak any oil.
- e) Washing of any machinery must take place at least 10m away from any surface water and the washings must not be allowed to enter any surface water.
- f) Machinery must not be operated in rivers, burns and ditches when fish are likely to be spawning in the affected surface water, or in the period between spawning and the subsequent emergence of juvenile fish¹⁵.
- g) Machinery must not be operated in rivers, burns and ditches if there is a reasonable likelihood that there are freshwater pearl mussels within 50m of such operation.
- h) Machinery must not be operated in rivers, burns and ditches during forestry operations.
- Following the operation of the machinery, any damage caused by the operation to the bed and banks of the surface water must be repaired, including re-establishing vegetation on any areas of bare earth on the banks resulting from the operation, either by covering the area with grass turfs or lining them with a biodegradable geotextile and seeding.

GBR12: Removal of sediment from the area of impounded water upstream of a weir authorised under CAR, and where desired, return of that sediment to the watercourse.

Please also check GBR9

- a) Sediment or other matter can only be removed within the stretch 10m upstream of the weir.
- b) Only sediment which has recently been deposited (i.e. that which is reasonably expected to have been deposited within the three years preceding the date of removal) can be removed.
- c) Unless it is not reasonably practicable to do so, any gravel and course sediment that has been removed must be returned to the watercourse from which it was taken.
- d) The return of sediment must:
 - be placed at the edge of the watercourse downstream of the weir in a location where high flows are able to redistribute it;
 - it does not cause sediment to accumulate in a manner likely to impede the free passage of migratory fish;
 - be placed in such a way and such a location that the risk of the placement resulting in increased erosion of the bed or banks of the watercourse is minimised.
 - not be placed in a wetted part of the watercourse during periods in which fish are likely to be spawning, nor in the period between spawning and the subsequent emergence of the juvenile fish.
 - not contain man-made matter or result in pollution.
- e) The removed sediment must not be deposited in the channel or on the banks of any watercourse except in accordance with (d) above.
- f) The removal of sediment must not result in pollution of the water environment.

GBR12 rules continued:

- g) Vegetation may be removed from the banks only if the works cannot otherwise be reasonably carried out.
- h) Vegetation that is removed must not be disposed of into the channel.

GBR13: Removal of sediment from the inside of a closed culvert or within 10m upstream or downstream of a closed culvert or within 5m of an outfall or inlet and if desired, its subsequent return.

Please also check GBR9

- a) The removal or return of sediment must not result in the bed of the watercourse upstream of the culvert being lower than the upper surface of the base of the culvert.
- b) The removal or return of sediment must not result in a vertical step between the upper surface of the base of the culvert and the bed of the watercourse into which it discharges.
- c) Work must not be carried out when fish are likely to be spawning in the affected surface water, or in the period between spawning and the subsequent emergence of juvenile fish¹⁶.
- d) Vegetation may be removed from the banks only if the works cannot otherwise be reasonably carried out.
- e) Vegetation that is removed must not be disposed of into the channel.

¹⁶ If in doubt about these times, you are advised to go to <u>Fisheries Management Scotland</u> for contact details of the local District Salmon Fishery Board (*which has statutory powers in relation to the protection and improvement of salmon and sea trout fisheries within their district*) and/or Fishery Trust.

GBR13 rules continued:

- f) The removed sediment and other matter must not be placed on the bank of any watercourse.
- g) Sediment that has been removed may be returned to the same watercourse, provided that:
 - it is returned as close to the location of its removal as is practicable;
 - its return does not result in an accumulation of sediment that impedes the free passage of migratory fish; and
 - all reasonable steps are taken to avoid increased erosion of the bed or the banks.
- h) The activity must not result in pollution of the water environment.

GBR14: Boulder placement in a river or burn.

Please also check GBR9

- a) Individual boulders or groups of boulders must not occupy more than 10% of the bed width.
- b) Boulders must not be placed within 20m of any other natural or placed boulder or any other instream structure (croy, jetty, bridge pier etc.) which occupies more than 10% of the bed width.
- c) Boulders must not be placed in a manner that results in the width occupied by in stream structures extending to greater than 10% of the bed width.
- d) Boulders must not be placed against the banks unless the placement forms part of revetment works authorised under CAR.
- e) The tops of the boulders must be submerged, except during periods of low flows.
- f) Work must not be carried out when fish are likely to be spawning in the affected surface water, or in the period between spawning and the subsequent emergence of juvenile fish¹⁷.
- g) All reasonable steps must be taken to ensure that the boulder placement will not result in increased erosion of the bed or banks.
- h) Boulders must not be placed at any location where there is a likelihood that freshwater pearl mussels are located within 50m of that specific location.

¹⁷ If in doubt about these times, you are advised to go to <u>Fisheries Management Scotland</u> for contact details of the local District Salmon Fishery Board (*which has statutory powers in relation to the protection and improvement of salmon and sea trout fisheries within their district*) and/or Fishery Trust.

GBR25:

The placement of trees or parts of trees in any river, burn or ditch to protect eroding banks.

Please also check GBR9

- a) Other than in accordance with paragraph (e), the trees or parts of trees must be placed only in or along eroding banks;
- b) the placement must result in an arrangement of live or dead tree steams, branches or roots which, as the water flows through the arrangement, flex or bend and impede its flow with the effect of cushioning the bank from the force of the river, burn or ditch;
- c) the placed trees or parts of trees must be tied, keyed or staked into the bank or bed of the river, burn or ditch so as to secure them in place;
- d) the placed trees or parts of trees must:
 - i. follow the line of the toe of the eroded bank at the time of placement; and
 - ii. be graded into the existing lines of the banks at either end of the eroded bank;
- e) the placement may extend beyond the upstream and downstream ends of an eroding bank only to the extent necessary to:
 - i. prevent any part of the river, burn or ditch from going around the placements and eroding the bank behind them; or
 - ii. ensure the line of the placements is graded smoothly into the existing lines of the bank at either end of the eroded bank;
- f) in protecting eroding banks:
 - i. the angle of an eroding bank may only be reduced for the purpose of enabling the establishment and growth of trees or the placement of trees or parts of trees; and

GBR25 rules continued:

- ii. stones may be placed at the toe of the bank for the purpose of preventing the bank being undercut before the trees have become established, provided that any stones used are no larger than the largest stones that have been deposited on the channel bed within 500 metres of the eroding bank;
- g) all reasonable steps must be taken whilst placing trees or parts of trees to:
 - i. prevent any exposed soil or other sediments from entering the river, burn or ditch; and
 - ii. where soil or other sediments do enter the river, burn or ditch, prevent these from being transported beyond the part of the bank being protected;
- h) once the trees or parts of trees have been placed, any areas of bare earth on the banks resulting from the works must be re-vegetated to minimise the risk of soil erosion, either by covering with grass turfs or lining with biodegradable geotextile and seeding; and
- where the trees or parts of trees need to be placed on the wetted part of the bed of the river, burn or ditch or their placement would otherwise be likely to disturb the wetted part of the bed of the river, burn or ditch they must not be placed if there is a reasonable likelihood that there are freshwater pearl mussels in the part of the river, burn or ditch that would be affected.

7. Glossary of terms and acronyms

| Abstraction | In relation to a body of surface water or groundwater, |
|-----------------------|---|
| | means the doing of anything |
| | whereby any water is removed by mechanical means |
| | from that body of water, whether temporarily or |
| | permanently, including anything whereby the water is so |
| | removed for the purpose of being transferred to another |
| | body of water within the water |
| | environment. |
| Artificial water body | A body of surface water created by human activity in a |
| | location where no significant |
| | water body existed before and which has not been |
| | created by the direct physical alteration, movement or |
| | realignment of an existing water body. |
| Bank re-profiling | Changing the slope of a river or loch bank but the |
| | planform/course of the river is maintained. Does not |
| | include heightening of the bank. This can include a |
| | creation of a |
| | 2-stage channel. |
| Bank top | The first major break in the slope of the bank of any body |
| | of inland surface water, beyond which cultivation or |
| | development would be possible. |
| Bank height | The height of the bank of any body of inland surface |
| | water measured vertically from the bank toe to the bank |
| | top, excluding any artificial heightening of the bank (e.g. |
| | embankments, retaining walls). |
| Bank toe | The lowest point on the bank of any body of inland |
| | surface water where the bank meets the bed of the body |
| | of inland surface water. |
| Bed reinforcement | Reinforcement of bed only, for minimising bed erosion. |

| Bed width | the straight line distance that is between the opposite |
|--------------------------|--|
| | bank toes of a river burn or ditch, and which spans the |
| | bed of the river, burn or ditch, including any exposed bars |
| | and vegetated islands |
| Boulder placements | Boulders placed in rivers or lochs to manipulate flow. |
| | Usually for fisheries |
| | enhancement, can be used in restoration. |
| Bridge | Includes all span structures where a transport route (e.g. |
| | foot path, cycle path, road) |
| | crosses a watercourse, it should not impact the bed of the |
| | watercourse. Includes single |
| | span structures (including pre-cast culverts with no |
| | artificial floor/invert) and span |
| | structures with piers (in stream supports). |
| Bridging culvert | Closed culverts with artificial floor/invert where a transport |
| | route (e.g. foot path, cycle |
| | path, road) crosses a watercourse, but not for land gain. |
| | Impacts the bed and banks of |
| | watercourses. Please note, pre-cast culverts with no |
| | artificial floor/invert are classed as |
| | span structures and are included in the bridge category. |
| Causeway | Elevated transport route constructed across lochs or |
| | wetlands. |
| Closed culvert (bridging | Closed culverts with artificial floor/invert where a transport |
| culvert for river | route (e.g. foot path, cycle |
| crossing) | path, road) crosses a watercourse, but not for land gain. |
| | Impacts the bed and banks of |
| | watercourses. Please note, pre-cast culverts with no |
| | artificial floor/invert are classed as |
| | span structures and are included in the bridge category. |

| Coastal water | Water (other than groundwater) within the area extending |
|----------------------------|---|
| | landward from the three 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. |
| Coastal water abstractions | Abstractions of water from coastal water. |
| Constructed Farm Wetland | Means a series of ponds for the treatment of slurry or |
| | silage effluent consisting mainly of rainwater, which have |
| | been constructed in such a manner that any discharge |
| | from the ponds does not pollute the water environment |
| Croys/groynes/ flow | Structures placed in rivers or lochs can manipulate flow. |
| deflectors | Can have many purposes e.g. fisheries enhancement, |
| | bank protection. |
| CSO | Combined sewer overflow. |
| Cultivated | Land prepared and used for raising crops. |
| Culverting for land gain | Permanent under-grounding of watercourses for land gain |
| | e.g. building a housing |
| | development on top of a watercourse. Excludes culverts |
| | for river crossings (e.g. where a transport route crosses a |
| | watercourse). |
| Domestic Sewage | Has the same meaning as in section 59 of the Sewerage |
| | (Scotland) Act 1968 |
| Draff | The residue of grain after fermentation of the grain in a |
| | brewing or distilling process |
| Draw off pipe | A pipe used to withdraw oil from a container |
| Dredging | Removal of bed material from watercourses from >50% of |
| | the channel width - usually |
| | the entire channel width. Generally results in channel |
| | deepening and/or widening |
| | (sometimes called resectioning). |

| Effluent | Any liquid, including particles of matter and other |
|-------------------------|--|
| | substances in suspension in liquid, |
| | usually derived from sewage or a trade process. |
| Embankment/land raising | Artificial raising of the natural bank height or land |
| | adjacent to the inland surface water |
| EO | Emergency overflow. |
| Farm | Land occupied as a unit for agricultural purposes |
| Fertiliser | Any substance containing nutrients that is utilised on land |
| | to enhance plant growth |
| | (i.e. manures, slurries and inorganic fertiliser). |
| Field drains | Field drains are an underground system of pipes and |
| | channels designed to remove |
| | surface and sub-surface water from a given area of land. |
| | Field drains should only run |
| | intermittently, primarily after prolonged periods of rainfall. |
| | Field drains do not include |
| | ditches. |
| Fill pipe | A pipe used to deliver oil into a container |
| Flood by-pass channel | Additional flow route that diverts high flows from one |
| | location and returns them |
| | to a different location to reduce overbank flows; normally |
| | associated with flood |
| | management projects. |
| Forage crop | Any crop grown as food for livestock or for use in energy |
| | production |
| Fords | River or loch crossing but is not raised, is at bed level. |
| | May be natural substrate or |
| | reinforced with artificial material. |
| Geothermal energy | Energy derived from the heat in the interior of the Earth. |
| | |

| Green bank reinforcement | Soft bank reinforcement. Includes the use of vegetation |
|----------------------------|--|
| | and biodegradable geotextiles |
| | over the full height of the bank. Also includes the use of |
| | rip rap and log/ timber restricted to the bank toe. |
| Grey bank reinforcement | Hard bank reinforcement. Includes the use of non- |
| | biodegradable materials over the |
| | whole height of the bank including rip rap, gabion |
| | baskets, concrete, grouted stone, |
| | brick or block stonework, sheet piling, wood piling and |
| | non biodegradable geotextiles. |
| | Does not include heightening of bank. |
| Groundwater | Water below the surface of the ground in the saturation |
| | zone and in direct contact with the ground or subsoil. |
| Housed | Kept permanently or overwintered, indoors or outside, on |
| | a collection based slurry system |
| Impermeable Sheet Material | Means: |
| | (a) synthetic rubbers, EPDM (ethylene propylene diene |
| | monomer rubber) and butyl, |
| | (b) plastics, including polyvinyl chloride, low density |
| | polyethylene and high density polyethylene, and |
| | (c) reinforced geomembranes |
| | |
| Impounding works/ | Means: |
| Impoundment | (a) construction or alteration of any dam, weir, or other |
| | works by which inland water (other than |
| | groundwater) or wetlands may be impounded; or |
| | (b) Any works diverting surface water in connection with |
| | the construction or alteration of any dam, weir or |
| | other works falling within (a) above. |
| | C) operation of any dam, weir or other works by which |
| | surface water or wetlands may be impounded |
| | |

| | Raising the level of an existing natural loch is also |
|---------------------------|--|
| | considered an impoundment. A pond or lake created by |
| | excavation below the pre-existing ground level (e.g. a dug |
| | pond or flooded quarry) is not included. |
| | |
| Inland abstraction | This includes both inland surface water and groundwater |
| | abstractions. |
| Inland water | (a) all standing or flowing water on the surface of the land |
| | (other than transitional water) (e.g. rivers, lochs, canals, |
| | reservoirs), and (b) all groundwater, within the landward |
| | limits of coastal water. |
| Inorganic effluent | Effluent that primarily does not contain matter from an |
| | animal or vegetable origin and does not exert a notable |
| | biochemical oxygen demand (BOD). Such effluent |
| | includes discharges from mines, quarries, water treatment |
| | works, etc. |
| In-stream structures | All structures that occupy a portion of the channel. |
| | Includes bed reinforcement, jetties, platforms, marinas, |
| | croys, groynes and other flow deflectors |
| In-loch structures | All structures that occupy a portion of a loch includes bed |
| | reinforcement, jetties, platforms, marinas, croys, groynes |
| | and other flow deflectors. |
| Jetties/platforms/marinas | This includes jetties (piers), fishing platforms, marinas |
| | and boat slips that extend into |
| | surface water, can include solid and stilted structures. |
| 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. |
| Liquid Digestate | Means: |
| | (a) whole digestate, |
| | (b) the liquid fraction, or |

| | (c) any run-off from the storage of fibrous residue, |
|---|---|
| | resulting from an anaerobic digestion process of a |
| | consistency that allows it to be pumped or discharged by |
| | gravity at any stage in the handling process |
| Liquid digestate storage | Means: |
| system | (a) a liquid digestate tank, |
| | (b) any feedstock tank used in connection with the liquid |
| | digestate tank, and |
| | (c) any channels and pipes used in connection with the |
| | liquid digestate tank or feedstock tank |
| Liquid digestate tank | Includes a lagoon or tower used for the storage of liquid |
| | digestate |
| Livestock | Any animal kept for use or profit as part of a commercial |
| | enterprise |
| Loch | A body of standing inland surface water. |
| Moled | A cultivation method where an implement is used to open |
| | a conduit within the soil along which water may flow. |
| Mole plough | A technique using a specialised pipe and cable laying |
| | plough to cut a temporary narrow channel into which |
| | pipes or cables are fed and simultaneously pushes the |
| | spoils removed back into the cut channel, eliminating the |
| | need to backfill. |
| Nitrate vulnerable zone | Any area of land designated as a nitrate vulnerable zone |
| | he regulation 0 of the Decimation of Nitrate Male and Ia |
| | by regulation 2 of the Designation of Nitrate Vulnerable |
| | Zones (Scotland) Regulations 2015 |
| Off-line impoundment | Zones (Scotland) Regulations 2015 See Impoundment. |
| Off-line impoundment On-line impoundment | Zones (Scotland) Regulations 2015 See Impoundment. See Impoundment. |
| Off-line impoundment On-line impoundment Open culvert | by regulation 2 of the Designation of Nitrate VulnerableZones (Scotland) Regulations 2015See Impoundment.See Impoundment.River channels where the bed and banks are constructed |
| Off-line impoundment On-line impoundment Open culvert | by regulation 2 of the Designation of Nitrate Vulnerable Zones (Scotland) Regulations 2015 See Impoundment. See Impoundment. River channels where the bed and banks are constructed of artificial consolidated material e.g. concrete, brickwork, |

| Organic effluent | Effluent that primarily contains matter from an animal or |
|-------------------------|--|
| | vegetable origin and exerts a notable biochemical oxygen |
| | demand (BOD). This includes all sewage effluents, |
| | effluents from food and drinks manufacture, etc. |
| Other effluents | Effluents that may have a mixture of organic and |
| | inorganic content and/or which |
| | do not fit neatly into categories defined elsewhere within |
| | this document (i.e. landfill leachate contains |
| | both a significant organic and inorganic content). |
| p.e. | Population equivalent. A measure of the organic |
| | biodegradable load of an effluent |
| | prior to treatment. One population equivalent (1pe) has a |
| | five-day biochemical oxygen demand (BOD5) of 60 grams |
| | 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. |
| Pipeline/cable crossing | Location where a pipeline or cable crosses a surface |
| | water. Can be laid below the bed, |
| | submerged, or spanned above a surface water. |
| Point source discharge | A discharge of an effluent or other matter to the water |
| | environment or land by means of a fixed installation, pipe, |
| | outlet or otherwise. |
| Precision equipment | Equipment capable of low emission, accurate application |
| | techniques including a dribble bar or band spreader, |
| | trailing hose, trailing shoe or direct injection |
| Private dwelling | Any part of a building used or intended to be used as a |
| | dwelling |
| Radioactive substance | Line the same meaning as in nerrograph 4 of eshedule 9 |
| | Has the same meaning as in paragraph 4 of schedule 8 |
| | of the Environmental Authorisations (Scotland) |
| | of the Environmental Authorisations (Scotland) Regulations 2018 |

| 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 has |
| | raised the natural level of the outflow from the loch. |
| | |
| Realignment/diversion | is any alteration to the course, planform, cross section, or |
| | gradient of a watercourse. |
| | |
| | Includes any alteration to a rivers course or planform, |
| | from a natural state to a less natural state e.g. |
| | straightening of a watercourse. Any alteration to a rivers |
| | course or planform where the natural state of the river is |
| | maintained or improved. e.g. restoration of modified river |
| | to more natural channel pattern or diverting a channel |
| | and maintaining channel naturalness. |
| Reception pit | A pit used for the collection of slurry before it is |
| | transferred into a slurry storage tank or for the collection |
| | of slurry discharged from such a tank |
| Reservoir | Reservoirs are artificial storage places for water (e.g. |
| | ponds, impoundments and |
| | raised lochs) from which the water may be withdrawn for |
| | such purposes as electricity |
| | generation, irrigation or water supply. |
| Rip-rap | Large coarsely broken rock placed on stream banks to |
| | reduce erosion by flowing water, |
| | or to support a slope embankment. |
| Sediment management | Any works which involve moving, introducing or removing |
| | sediment from the channel |
| | of a watercourse or bed of a loch (includes dredging). |

| Sediment removal | Removal of bed material from watercourses from <50% of |
|-----------------------|--|
| | the channel width. Includes any removal of bed material |
| | from lochs. |
| Sewage effluent | Any effluent from sewage disposal or a sewerage works. |
| Silage | Any forage crop (including draff) which is being, or has |
| | been, conserved by fermentation or preservation |
| | (including the use of additives), or both |
| Silage effluent | Means: |
| | (a) effluent produced from any forage crop which is |
| | being made or has been made, into silage, |
| | (b) a mixture consisting wholly of or containing such |
| | effluent, rainwater or groundwater emanating from a |
| | silo, silage effluent collection system or drain |
| | |
| Silo | Any structure used for making or storing silage |
| Slurry | Includes: |
| | (a) excreta, including any liquid fraction, produced by |
| | livestock whilst in a yard or building (including |
| | woodchip corrals), and |
| | (b) a mixture consisting wholly of or containing such |
| | excreta, bedding, feed residues, rainwater and |
| | washings from a building or yard used by livestock, |
| | dungsteads or middens, high level slatted buildings |
| | and weeping wall structures or any combination of |
| | these, provided such excreta is present |
| | |
| Slurry storage system | Means: |
| | |
| | (a) a slurry storage tank, |
| | (a) a slurry storage tank,(b) any reception pit and any effluent tank used in |

| | (c) any channels and pipes used in connection with the |
|-------------------------|--|
| | slurry storage tank, any reception pit or any effluent |
| | tank, |
| | |
| Slurry storage tank | Includes a lagoon, pit (other than a reception pit) or tower |
| | used for the storage of slurry |
| SUDS | Sustainable Urban Drainage System |
| Surface water | Inland water (other than groundwater), transitional water |
| | (e.g. estuaries) and coastal water |
| Trade effluent | Any effluent produced in the course of any trade or |
| | industry. |
| Transitional water | Means 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 |
| Trunk road | Has the same meaning as in section 151 of the Roads |
| | (Scotland) Act 1984 |
| Waterbound road | A road constructed of coarse stone and fine aggregate to |
| | form a tightly bound semi-impervious surface. |
| (The) Water environment | Includes all surface water, groundwater and wetlands |
| Weir | An on-line overflow structure (i.e. an impoundment across |
| | a watercourse) that is used for controlling upstream water |
| | level. |
| | Passive weir - any weir that is not capable of being |
| | operated to control the water level |
| | upstream of the weir. |
| 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. |
| | |

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