

Annex 5 Controlled Activity Regulations (CAR) - STW and Trade

SEPA Compliance Assessment

SEPA licence no.:	
Site name:	
Annual summary sheet for year:	
Completed by:	
Date:	

Environmental Limits

ELC parameter	Licence condition #	Data source	No breaches	Minor breach	Repeated minor breach	Gross Breach	Significant breach	Comments
Scope ELC								
Nature of discharges		Inspection					Outwith scope of licence	Looking only at high level definition and location of the authorised controlled activities (e.g. discharges of treated sewage, screened sewage etc)
Dry Weather Flow (DWF) / Maximum daily flow		Inspection / Data returns	Compliant with licence	N/A	N/A	N/A	Exceeds the licence limit and has been assessed as causing an unacceptable environmental impact OR leads to a Cat 1 or 2 environmental event.	Refer to CAS-G-004 Flow recording and reporting at STWs and on the sewer network
Discharge points: location and design		Inspection / Data returns					Significantly out of specification and could lead to a category 1 or 2 environmental event. E.g. it may cause significant localised pollution due to poor dispersion and result in public complaint.	Assessment should focus on location and general design aspects in a broad assessment. A breach by itself may be discounted where modelling indicates that the licence can be varied and the status of the WB downstream is not adversely affected
Numeric ELC Statistical (Two tier):								
Parameters with lower tier limits (e.g. Biochemical Oxygen Demand)		Samples	Compliant with licence	N/A	Number of planned samples exceeding lower tier limit is greater than the maximum number of permitted exceedances specified in the look up table (usually Appendix 1 in licence).	N/A	N/A	
Parameters with upper tier limits (e.g. Biochemical Oxygen Demand)					N/A	First breach of the upper tier limit (but which does not give rise to a category 1 or 2 environmental event)	Second and subsequent breach of the upper tier limit, or the first breach of an upper tier limit which gives rise to a category 1 or 2 environmental event.	
UWWT Limits:								
Lower tier limits for BOD and COD (composite)					Number of planned samples exceeding lower tier limit is greater than the maximum number of permitted exceedances specified in the look up table (usually Appendix 1 in licence).		N/A	
Upper tier limits for BOD and COD (composite)					N/A		Any breach of the upper tier limit (except where sample compliance is achieved by meeting the minimum percentage reduction of influent load)	
Percentage reduction in BOD / COD (composite)		Samples	Compliant with licence	N/A	% reduction is less than licensed and not less than upper tier but the number of samples exceeds the permitted number of exceedances in look up table (Appendix 1 in licence)	N/A	% reduction is less than licensed and exceeds the upper tier numeric composite limit	
Annual Mean Concentration for Total Nitrogen					N/A		Exceeds licence limit and does not achieve minimum percentage reduction of influent load.	
Annual Mean concentration for Total Phosphorus					N/A		Exceeds licence limit and does not achieve minimum percentage reduction of influent load	
Numeric ELC (single threshold)								
Biochemical Oxygen Demand (BOD)				Exceeds the licensed limit but is less than twice the licensed limit.		Exceeds the licensed limit and is greater than twice the licensed limit.	Second gross breach (exceeds twice the limit); or any breach that leads to a category 1 or 2 environmental event.	
Suspended solids								
pH limits		Samples	Compliant with licence	Up to pH unit change from limit.	See look-up table (Table 4 in compliance guidance manual) for number of minor breaches constituting a repeated breach.	Breach of pH unit limit by more than 1 pH unit but does not lead to a category 1 or 2 environmental event	Second gross breach (exceeds pH limit by >1 unit) or any breach that leads to a category 1 or 2 environmental event.	
Temperature Limits				Exceeds the licensed limit by less than 5 degrees C		Exceeds the licensed limit by more than 5 degrees C	Second gross breach (exceeds temp limit by >5 degrees Centigrade) or any breach that leads to a category 1 or 2 environmental event.	These criteria apply to those sites with single tier temperature limits. SEPA may shortly be moving to introduce two tier temperature limits where environmental conditions require. New guidance and assessment methods are being introduced and these should be consulted to decide whether the current licence condition is appropriate, and requires variation.
Numeric ELC (Annual Mean Concentration)								
Annual Mean Concentration e.g. CAR iron, aluminium AMC limits (excluding UWWTD Total P and Total N AMCs)		Samples	AMC compliant with licence	AMC exceeds the licensed limit but is less than twice the licensed limit	N/A	AMC exceeds the licensed limit and is greater than twice the licensed limit	N/A	Annual mean concentration is the mean result of any series of samples taken in the preceding 12 month period. Note that this assessment is for AMC conditions within CAR licence schedules (typically spot samples for Iron and Aluminium). Note that AMCs for Total P and Total N under UWWTD are assessed separately
Process ELC (a)								
Instantaneous flow limits (litres etc)				Any breach of licence condition which may result in no more than a category 3 (minor) environmental event.			*Exceeds the licensed limit and leads to or likely to lead to a deterioration in status of the stretch or waterbody; and/or leads to or likely to lead to a category 1 or 2 environmental event. Highly likely to require capital investment (O&S for SW) and development restraint (STWs) to resolve.	A breach by itself may be discounted where modelling indicates that the licence can be varied and the status of the WB downstream is not adversely affected Instantaneous flow limits are usually only specified in trade licences and would only be assessed where flow monitors allow during an inspection; are required to be reported and/or as a result of an investigation by SEPA (this which may involve examining any flow records that are required to be kept) Caution is required in deciding whether an instantaneous breach should be considered a breach or whether the licence should be varied. Cognisance of the time over which the instantaneous flow has been exceeded for should be taken into account.
Discharge points: location and design				Any breach of licence condition which may result in no more than a category 3 (minor) environmental event. Location and/or design is not as described in licence.			More than one location/design of discharge point is not as described. Significantly out of specification and could lead to a category 1 or 2 environmental event. E.g. it may cause significant localised pollution due to poor dispersion and result in public complaint.	Assessment should focus on location and general design aspects in a broad assessment.
Overflow settings including combined sewer overflows (CSOs) and emergency overflows (EOs)		Inspection	Compliant with licence	CSOs: Operating during settled dry weather (not as a consequence of rainfall / snowmelt), may give rise to a minor category 3 environmental event. Emergency Overflow (EOs): Operating and may give rise to a category 3 minor environmental event and not due to power failure, rising main failure, blockage or actions of third party, and/or Overflows operating before the pass forward rate has been exceeded.	4 or more minor breaches. Note: for Sewer Network Licences minor breaches are assessed against each discharge point and are not cumulative across the network, e.g. two events occurring one overflow and two at another would be two separate minor breaches, not a repeat minor breach.	N/A (Failure to monitor or produce a report which would allow the licence holder to demonstrate compliance with a process ELC)	CSOs: One or more overflows operating during settled dry weather (not as a consequence of rainfall / snowmelt) and likely to cause to a category 1 or 2 environmental event. EOs: One or more EOs operating not due to power failure, rising main failure, blockage or actions of third party and liable to result in a category 1 or 2 environmental event.	
Provision of Screens				Screens not provided with potential or actual minor unauthorised releases.			Screens not provided and resulting in, or likely to result in, a category 1 or 2 environmental event.	e.g. provision 6mm screen is key to ensuring a certain effluent quality
Provision of specific effluent treatment plant & equipment				Effluent treatment equipment/ plant not provided with potential or actual minor unauthorised releases.			Not provided and resulting in, or likely to result in, a category 1 or 2 environmental event.	
Process ELC (b)								
Discharge shall not be comminuted or macerated to achieve screening requirements		Inspection	maceration or comminution not used to achieve screening standards	any breach of licence: e.g. evidence of use of comminution and/or maceration to achieve screening standards	4 or more minor breaches	(Failure to monitor or produce a report which would allow the licence holder to demonstrate compliance with a process ELC)	comminution and/or maceration used to achieve screening standards and results in, or potentially results in, a category 1 or 2 environmental event.	linked to requirements to provide screening
No Environmental Harm Conditions			No environmental harm	Minor environmental event (category 3) which is not caused by discharge in full compliance with licensed conditions (e.g. due to a spillage on site etc) and which is not accounted for elsewhere.	4 or more minor breaches	N/A	Major (category 1) or Significant (category 2) environmental event which is not caused by discharge in full compliance with licensed conditions and not accounted for elsewhere	catch all condition relating to impacts to water environment.
Process ELC (c)								
No significant oil			No significant oil				Equivalent to a category 1 or 2 environmental event. Continuous oil sheen in discharge and downstream, or presence of oil in stones and vegetation downstream (for a significant distance).	
No significant sewage solids			No significant sewage solids				Equivalent to a category 1 or 2 environmental event. Smothering of stream bed around outfall and/or significant solids identifiable downstream.	
No significant discoloration		Inspection	No significant discoloration		N/A	N/A	Equivalent to a category 1 or 2 environmental event. Discoloration visible for a distance of greater than one river width downstream.	
No significant foaming			No significant foaming				Equivalent to a category 1 or 2 environmental event. Significant difference downstream compared to upstream.	
No significant sewage fungus			No significant sewage fungus				Equivalent to a category 1 or 2 environmental event. Bed of stream blanketed with sewage fungus or tufts of fungus visible over greater than one river width downstream.	
Environmental Events (classified according to table 5)								
Environmental harm		Inspection / environmental events	No environmental harm	Minor environmental event (category 3) which is not caused by discharge in full compliance with licensed conditions (e.g. due to a spillage on site etc) and which is not accounted for elsewhere.	4 or more minor breaches	N/A	Major (category 1) or Significant (category 2) environmental event which is not caused by discharge which is in full compliance with licensed conditions and not accounted for elsewhere	
Overall ELC band								

Environmental Management

EMC attribute	License conditions	Compliant	Minor non-compliance	Major non-compliance	Comments
<i>The EMC aspects below should be assessed at a level of detail appropriate to the scale and risk of the licensed activities.</i>					
Management					
Knowledge of licence by appropriate staff	Appropriate staff have a good broad knowledge of the licence and/or its requirements. This may be demonstrated through written procedures and the operation of these procedures to ensure compliance with the licence. Compliance with all, or most (4 or more) of the broad knowledge areas (see points 1-5 in comments section).	Appropriate staff have a good broad knowledge of the licence and/or its requirements. (compliance with some (1-3) but not all of knowledge areas (see points 1-5 in comments)).	Limited knowledge of licence by operator. (compliance with some (1-3) but not all of knowledge areas (see points 1-5 in comments)).	No knowledge of licence or its requirements by the operator	Awareness of licence requirements and purpose of / licence Appropriate staff for Scottish Water includes: Team Leader, Senior Operators and Operators. For Trade sites it would be those personnel with day to day responsibility for the treatment system and associated line management. Good knowledge of the licence should be assessed against the operators knowledge and awareness of the following broad areas: 1. the existence of a licence for the site; 2. the overall purpose of the licence e.g. it specifies conditions to protect the water environment and water users from harm; 3. to be aware of the main ELC limits in the licence e.g. nutrient limits on quality & volume & in some cases timing of discharges; 4. where the discharge goes and the implications and potential effects on the receiving waters of treatment plant malfunction; 5. the requirement to report incidents to relevant line management / SEPA regarding incidents which may lead to unauthorised releases. It should be assessed at a broad not overly detailed level.
Process Control: Systems and Procedures	Written procedures or instructions in place and are used effectively for the process control of critical aspects of the effluent treatment plant (including monitoring systems). This may include minor deviations from written procedures with no potential or actual breach of an ELC. No Env harm.	Written procedures or instructions in place for the process control of critical aspects of the effluent treatment plant (inc monitoring systems); and/or Minor deviations from written procedures with minor actual or potential breach of an ELC sufficient to cause minor environmental harm (cat 3 environmental event)	Written procedures or instructions in place for the process control of critical aspects of the effluent treatment plant (inc monitoring systems); and/or Significant deviations from written procedures with actual or potential significant breaches of an ELC sufficient to cause significant environmental harm (Cat 1 or 2 Environmental Event)	No written procedures or instructions in place for the process control of critical aspects of the effluent treatment plant (inc monitoring systems); and/or No list of actions to take to mitigate potential occurrences and / or impacts.	Are there procedures for the day to day operation of the plant? Systems and procedures can usually only be assessed if a condition is present in the licence which refers to 'operating and maintaining the plant in accordance with best practice' (unless a licence contains specific reference for the requirement to have written procedures).
Emergency procedures / accident plans	Emergency procedures, with testing regime, in place for main foreseeable scenarios. Main foreseeable scenarios have been risk assessed. Comprehensive list of actions to be taken to mitigate potential occurrences and/or impacts.	Limited emergency procedures in place. Limited risk assessment of foreseeable scenarios. Limited/ inadequate list of actions to be taken to mitigate potential occurrences and/or impacts.	No written emergency procedures in place. No risk assessment of foreseeable scenarios. No list of actions to take to mitigate potential occurrences and / or impacts.	No written emergency procedures in place. No risk assessment of foreseeable scenarios. No list of actions to take to mitigate potential occurrences and / or impacts.	Have emergencies been considered? are there procedures/ plans in place? This attribute can usually only be assessed if a condition is present in the licence which refers to 'operating and maintaining the plant in accordance with best practice'. Common foreseeable emergencies which SEPA would expect assessments to have been done include: loss of power supply, dealing with unauthorised discharges into the system, flooding etc. Other site specific scenarios may arise and it is up to the operator to consider what significant situations are most likely to arise.
Response to incidents (short term)	Incident response was appropriate in preventing, minimising and mitigating the impacts of the releases arising from an incident (e.g. emergency overflows).	Limited / ineffective practical response to the impacts of the releases arising from an incident (e.g. emergency overflows).	No practical response taken to stop or mitigate effects of incidents or discharge of effluent during an emergency (e.g. emergency overflows).	No practical response taken to stop or mitigate effects of incidents or discharge of effluent during an emergency (e.g. emergency overflows).	How well did the operator respond to incidents? This attribute should be assessed if a condition is present in the licence which refers to operating and maintaining the plant in accordance with best practice (e.g. STW condition 3.2.1/ Trade 3.5.1) or if specified in the licence (e.g. emergency overflows response). For Scottish Water much of this should be complied with by following their own EPI, Environmental Pollution Incident, system.
Plant and Infrastructure					
Operational condition of plant & infrastructure	Critical Plant: No or infrequent breakdown without unauthorised releases. Non Critical Plant: No, infrequent or frequent breakdown without unauthorised releases; Infrastructure: Site infrastructure fit for purpose.	Critical plant: Frequent breakdown with no or potential unauthorised minor releases; Non Critical Plant: Infrequent or frequent breakdown which leads to, or is likely to lead to, a minor breach of an ELC (verified by investigative not routine sampling); Infrastructure: Site infrastructure has minor defects which may contribute to a minor pollution event (cat 3).	Critical plant: Frequent breakdown of critical plant with minor unauthorised releases; and/or Critical and Non Critical Plant: Infrequent or frequent breakdown of any plant (critical and non critical) which leads to, or may lead to, a significant breach of an ELC (verified by investigative not routine sampling); Infrastructure: Site infrastructure (e.g. bunding, drains, interceptors, etc) not fit for purpose and may lead to a major or significant pollution event (cat 1 or 2).	Is it working? are operating procedures being followed? Assessment of this aspect this is largely associated with the presence of a condition relating to operating the plant in accordance with best practice and/or specified conditions within a licence. The main focus should be on plant considered to be a critical part of an effluent treatment system. Although persistent failure of non critical aspects leading to releases outside the scope of the licence will be taken into account. Critical plant is defined as those parts of a treatment system that have a significant and immediate role in ensuring discharge effluent quality standards and whose failure is difficult to mitigate without there being a significant effect on effluent quality (eg biological treatment stage, final settlement stage, CSO screens, etc). They will be a significant part of the treatment system and/or close to the end of the treatment chain. Infrastructure such as bunds, impermeable areas (which contain the effects of certain unplanned releases) should be provided as required and fit for purpose. Further guidance on critical plants is available within SEPA's inspection guidance for the relevant sector / discharge type. In assessing performance over the whole year SEPA will take into account an operators adherence to any company/SEPA protocol on maintaining compliance during maintenance; construction and adverse operating conditions.	
Provision and operation of monitoring equipment	Monitoring equipment required by licence installed. Installed equipment operating with few if any breakdowns. Breakdowns up to a total of 36 days over the year.	Monitoring equipment required by licence installed, but installed equipment unreliable and subject to frequent breakdowns. Breakdowns between 37 and 108 days over the year.	Monitoring equipment required by licence not installed; or installed equipment not working for extended periods of time. Breakdowns exceed a total of 108 days over the year.	Monitoring equipment required by licence not installed; or installed equipment not working for extended periods of time. Breakdowns exceed a total of 108 days over the year.	Has monitoring equipment been provided, is it working? Monitoring equipment includes: - Sampling points for treated final effluent:CSOs, storm tanks, emergency overflows; - Auto sampling facilities only for sewage treatment works with over 10,000 population equivalent; - Flow monitoring structures; - Flow recorders (influent & treated); - Event recorders (CSO and storm overflows); - Telemetry. This provision part of this aspect will apply to all licences, as all will require sampling provision. Assessment of the operational condition of monitoring equipment can usually only be assessed where there is a licence condition relating to operating the plant in accordance with best practice. For sewage discharges reference to agreed requirements in SEPA document WAT-SG-13 should be made to determine whether current conditions are fit for purpose. For the provision of flow monitors for Scottish Water STW's use guidance document (CAS-G_003) on provision of flow event monitors.
Maintenance of plant, infrastructure and monitoring equipment (including calibration)	Fully maintained. Maintenance procedures in place and adhered to. Full calibration/ calibration checks of monitoring equipment.	Evidence of lack of maintenance of effluent treatment works and/or monitoring equipment. Maintenance procedures incomplete or inadequate; and/or Deviation from maintenance procedures which have not been notified to and/or agreed by SEPA and/or which are liable to cause a minor environmental event. (Cat. 3) Partial calibration/calibration checks of monitoring equipment.	Significant lack of maintenance of effluent treatment works and/or monitoring equipment. No maintenance procedures in place; or Significant deviation from maintenance procedures, which are liable to cause a significant or major environmental event (Cat. 1 or 2) and/or No calibration/ calibration checks of monitoring equipment.	Is it being maintained? are maintenance procedures being followed? This attribute is assessed where there is a requirement in a licence for maintenance of plant, infrastructure and monitoring systems (e.g. the plant will be operated and maintained in accordance with best practice condition and conditions relating to monitoring equipment). The focus should be on maintenance of critical plant and equipment. For calibration of meters esp flow meters use guidance document on calibrations of monitoring and measuring equipment as a guide (CAS-G-002) For Scottish Water use SEPA/Scottish Water protocol document for ensuring compliance during maintenance; construction and adverse operating conditions as a guide.	
Reporting and recording	All records and data kept and/or collected as stipulated and available for last five years (or as specified). Licence freely available to view. (but note it does not have to be held on site).	Most data collected and recorded as stipulated. A small proportion of records missing and unavailable. Licence difficult to obtain.	Failure to collect and record a significant proportion of data. All or a significant number of records are missing and/or unavailable.	SEPA generally requires records to be kept for five years. This aspect include licence availability. If a licence can be readily obtained readily electronically and/or physically it would not matter if the licence is not actually held on site.	
Reports to SEPA required under licence	Reports submitted (where required) to the agreed standard and format and within agreed timescale. Summary statistics, eg DWF and mean daily flow should be calculated from data collected over the year with up to a total of 36 days data missing.	All or majority of reports submitted and/or some are outwith timescales, incomplete or inadequate quality. Summary statistics, eg DWF and mean daily flow calculated from data collected over the year with between 37 and 108 days data missing.	All, or majority of, reports not submitted and/or majority incomplete or inadequate quality. Summary statistics, eg DWF and mean daily flow calculated from data with more than a total of 108 days data missing.	Have reports required been submitted? Note - if the reason why reports have not been submitted or are incomplete is due to malfunction of monitoring equipment, this should be assessed under the appropriate Plant and Infrastructure attribute, not Reporting and Recording. Notification of malfunction should be reported and assessed under Notification of Incidents attribute. Reports may be required for: - flow statistics); (e.g. incoming sewage and treated effluent: dry weather flow, mean daily flow and standard deviation of daily flow and max flow) (note agreements may be in place to submit these to SEPA centrally esp. Scottish Water) - frequency and duration arising from overflow events (those affecting sensitive waters such as bathing waters only) (note agreements may be in place to submit these to SEPA centrally); - the increase of introduction of listed substances; - unusual weather conditions affecting compliance; notification if a non-compliant sample could be due to unusual weather conditions and effect on the effluent treatment system. Refer to CAS-G-004 for guidance on flow reporting and recording	
Reports to SEPA required under licence. OSM: requirement to carry out monitoring and provide data to SEPA (licence conditions A2 and A4)	UWWTD, CAR (including OSPAR) discharges where all (100%) of planned determinand results received (no shortfall)	UWWTD discharge determinands other than BOD, COD, Total N and Total P and all CAR/OSPAR discharge determinands where < 10% shortfall in results received	UWWTD discharge determinands where ANY result shortfall for BOD, COD, Total P or Total N (where required) All CAR/OSPAR discharge determinands where >10% shortfall in results received	Failure to submit a UWWTD BOD, COD, Total P or Total N result (where required) is an automatic major non-compliance The shortfall assessment excludes 'influent samples' (which are optional), 'weather' and 'observation' results.	
Notification of incidents	All incidents notified within timescales and include the required information specified in the licence. Operator is proactive in discussing incidents and events.	Some but not all incidents notified. Some of the incident notifications do not comply with the timescale and/or information requirements specified.	No incidents notified; or Significant number of notifications do not comply with the timescale and/or information requirements specified.	Has the operator notified SEPA of all incidents? Applies to all licences	

Overall EMC band

Overall compliance band