

Our Ref: CAR/L/1001681  
Your Ref:

Scottish Water  
Castle House  
6 Castle Drive  
Carnegie Campus  
Dunfermline  
Fife KY11 8GG



FAO: Belinda Oldfield

28 March 2013

Dear Madam

**WATER ENVIRONMENT (CONTROLLED ACTIVITIES) (SCOTLAND) REGULATIONS 2011  
("THE REGULATIONS")**

**NOTICE OF VARIATION OF AUTHORISATION**

**AUTHORISATION NUMBER: CAR/L/1001681**

**LOCATION: ARDERSIER SEWAGE TREATMENT WORKS, INVERESS**

Thank you for your application for variation of the authorisation above.

I enclose a notice under regulation 24(4) of the Regulations varying the authorisation. The notice of variation specifies the conditions being varied, how they are being varied, and the date on which the variations are to take effect.

In terms of regulation 50(f) of the Regulations, you may appeal to the Scottish Ministers against the removal, addition or amendment of any conditions pursuant to the variation. Please refer to the Regulations for precise details. Further details on making an appeal are contained in schedule 9 of the Regulations.

Any appeal should be sent, within two months beginning with the date of the notice, to:

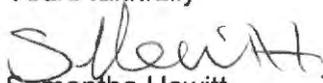
**Directorate for Planning and Environmental Appeals, 4 The Courtyard, Callendar  
Business Park, Callendar Road, Falkirk, FK1 1XR**

**Tel: 01324 696 400, Fax: 01324 696 444**

**Email: [DPEA@scotland.gsi.gov.uk](mailto:DPEA@scotland.gsi.gov.uk)**

If you require any further information regarding this letter or the enclosed notice, please contact Colin Mathieson at SEPA's Dingwall office, Graesser House, Fodderty Way, Dingwall, IV15 9XB, or telephone 01349 862021.

Yours faithfully

  
Samantha Hewitt  
Registry Officer

Enc



Chairman  
David Sigsworth

Chief Executive  
James Curran

Dingwall Office  
Graesser House, Fodderty Way  
Dingwall Business Park, Dingwall IV15 9XB  
tel 01349 862021 fax 01349 863987  
[www.sepa.org.uk](http://www.sepa.org.uk)

**SCOTTISH ENVIRONMENT PROTECTION AGENCY**

**WATER ENVIRONMENT AND WATER SERVICES (SCOTLAND) ACT 2003  
WATER ENVIRONMENT (CONTROLLED ACTIVITIES) (SCOTLAND)  
REGULATIONS 2011 ("THE REGULATIONS")**

**NOTICE OF VARIATION OF AUTHORISATION UNDER REGULATION 24(4)**

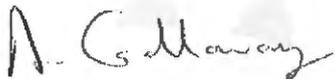
**To:** Scottish Water  
  
**Address:** Castle House  
6 Castle Drive  
Carnegie Campus  
Dunfermline  
Fife  
KY11 8GG

In accordance with regulation 24(4) of the Regulations, the Scottish Environment Protection Agency hereby gives you notice that it has decided, following application by you, to vary authorisation reference number CAR/L/1001681 in respect of the carrying on of controlled activity or activities at or near or in connection with

**Site or location of activity:** Ardersier Sewage Treatment Works  
Inverness

granted on 26 March 2007 ("the Authorisation").

The variations to the Authorisation are specified in the schedule attached to and forming part of this notice and shall take effect on 28 March 2013.

Signed:   
Authorised to sign on behalf of the  
Scottish Environment Protection Agency

Date: 28 March 2013

**Under the terms of regulation 50(f) of the Regulations, a person who has been granted the variation of an authorisation on request under regulation 24, but is aggrieved by the removal, addition or amendment of any condition, has a right of appeal. The procedures for making an appeal are set out in Schedule 9 of the Regulations.**

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## **SCHEDULE TO NOTICE OF VARIATION UNDER REGULATION 24(4)**

The Authorisation has been varied by amending, adding or deleting conditions or other provisions, as follows:

The 'Interpretation of Terms', 'Schedules of Conditions', and the 'Appendix' has been replaced by the following 'Interpretation of Terms', 'Schedules of Conditions', and 'Appendix'.

### **INTERPRETATION OF TERMS ASSOCIATED WITH THE OPERATION OF THE STW**

For the purposes of this licence and unless the context requires otherwise, the following definitions shall apply:

#### **Generic**

"the Act" means The Water Environment and Water Services (Scotland) Act 2003;

"controlled activity" means an activity to which the Regulations apply, in accordance with regulation 3(1) of the Regulations;

"incident" means:

- any accident which has had or could have an adverse impact on the water environment; or
- any malfunction, breakdown or failure of plant or techniques which has had or could have an adverse impact on the water environment; or
- any event, such as force majeure or action taken to save human life or limb, which results, or is likely to result, in a breach of any condition of this licence;

"responsible person" means the person who is responsible for securing compliance with the terms of this licence and has been identified as such by SEPA in accordance with regulation 8(6) of the Regulations, and in this context 'person' includes a body corporate, limited liability partnership and Scottish partnership;

"SEPA" means the Scottish Environment Protection Agency;

"SEPA officer" means a person authorised by SEPA under regulation 31(4) of the Regulations or, pursuant to paragraph 6(c) of Schedule 10 of the Regulations, under regulation 27(4) of the Water Environment (Controlled Activities) (Scotland) Regulations 2005;

"the Regulations" means the Water Environment (Controlled Activities) (Scotland) Regulations 2011;

"the water environment" means all surface water, groundwater and wetlands; and "surface water", "groundwater" and "wetlands" shall have the same meanings as in the Act;

Any reference to a numbered Condition, group of Conditions, Schedule, Table, Appendix, Figure or Paragraph is a reference to the condition, group of conditions, schedule, table, appendix, figure or paragraph bearing that number in this licence;

Except where specified otherwise in this licence:

- "day" means any period of 24 consecutive hours,
- "week" means any period of 7 consecutive days,
- "month" means a calendar month,
- "quarter" means a calendar quarter,
- "year" means any period of 12 consecutive months;

and any derived words (e.g. "monthly", "quarterly") shall be interpreted accordingly;

Except where specified otherwise in this licence, any reference to an enactment or statutory instrument includes a reference to it as amended (whether before or after the date of this licence) and to any other enactment, which may, after the date of this licence, directly or indirectly replace it, with or without amendment;

#### **Point Source**

"dry weather flow" means the average daily flow to or from the STW during a week without rain (excluding a week which includes public or local holidays), following a week during which the rainfall did not exceed 0.25mm on any one day. For sewage with a large industrial component, dry weather flow should be based on the flows during five working days if production is limited to that period;

"parameter" means any defined chemical constituent or measurable physico-chemical characteristic of a sample;

"point source discharge" means a discharge of an effluent or other matter to the water environment or land by a fixed installation, pipe, outlet or otherwise;

"pollution", in relation to the water environment, means the direct or indirect introduction, as a result of human activity, of substances or heat into the water environment, or any part of it, which may give rise to any harm, and "harm" shall have the same meaning as in the Act;

"sewage" shall have the same meaning as in section 59 of the Sewerage (Scotland) Act 1968;

"sewage fungus" means a visible microbiological growth usually consisting of a mixture of bacteria, fungus, protozoa and algae;

"STW" means sewage treatment works.

**SCHEDULE 1**

**1. CONTROLLED ACTIVITIES ASSOCIATED WITH THE OPERATION OF THE EXISTING ARDERSIER STW ('THE EXISTING STW')**

**1.1 Authorisation of Controlled Activities**

1.1.1. Until the New STW is commissioned the controlled activities at the existing STW shall be discharges of sewage effluent to the water environment.

**1.2 Locations of Authorised Activities**

1.2.1. Until the New STW is commissioned the following controlled activities described in Table 1.1 are authorised under licence.

1.2.2. The controlled activities referred to in Condition 1.2.1 will cease to be authorised under this licence on the date that the New STW is commissioned.

Table 1.1

NGR	Name / Reference	Associated Waters	Activity
NH 7649 5735	Discharge A1 Existing Ardersier STW Final Effluent	Moray Firth	Discharge of treated sewage
NH 7779 5478	Discharge B1 Ship Inn - Ardersier STW Inlet Pumping Station EO	Moray Firth	Discharge of screened sewage effluent from the Ship Inn Pumping Station collection system in event of an emergency
NH 7779 5478	Discharge C1 Ship Inn - Ardersier STW Inlet Pumping Station CSO	Moray Firth	Discharge of screened storm sewage effluent from the Ship Inn Pumping Station collection system
NH 7655 5665	Discharge D1 Fort George - Ardersier STW Inlet Pumping Station EO	Moray Firth	Discharge of screened sewage effluent from Fort George Pumping Station Collection System in event of an emergency

## SCHEDULE 2

### 2. GENERAL CONDITIONS ASSOCIATED WITH THE OPERATION OF THE EXISTING STW

#### 2.1 Responsible Person

2.1.1. The responsible person to whom this licence is issued shall secure compliance with the conditions contained in the licence.

#### 2.2 Records

2.2.1. A copy of this licence and, subject to Condition 2.2.2 below, every record made in compliance with a Condition of this licence, shall be kept such that they are readily accessible for examination by all relevant staff and shall be made available to a SEPA officer on request.

2.2.2. Unless otherwise specified in a condition of this licence, every record made in compliance with a condition of this licence shall be preserved for not less than five years from the date of its being made. Every such record shall be kept as set out in Condition 2.2.1 for not less than one year from the date of its being made and thereafter preserved at a location, previously notified to SEPA in writing, if that location is not the site or location of the Authorised Activities.

2.2.3. All records shall be legible, and any amendment made to any record made in compliance with a condition of this licence shall be made in such a way as to leave the original entry clear and legible. The reason for each amendment shall be explained in the said record.

#### 2.3 Reporting

2.3.1. Where any condition of this licence requires information to be reported, a report shall be forwarded, in a format agreed with SEPA (or, failing such agreement, as specified in writing by SEPA acting reasonably), to SEPA at the address for reports specified in the explanatory notes attached to this licence, on the date(s) or within the period or at the frequency specified in Table 2.1 and, where appropriate, the first report shall be due on the date specified in that table. All such reports shall include the reference number of this licence and the name of the responsible person.

Table 2.1 Reporting Requirements

Summary of Information to be Reported	Condition	Date/Within Period/ Frequency to be Reported	Date First Report Due
Incidents	2.4.2	Within 14 days of the incident, if requested	N/A

## **2.4 Incidents**

- 2.4.1. In the event of an incident, SEPA shall be notified without delay and in any case by the next working day after identification of the incident, using the contact details specified in the explanatory notes attached to this licence. This notification shall include: the time and duration of the incident, a description of the cause of the incident, any effect on the environment as a result of the incident and any measures taken to minimise or mitigate the effect and prevent a recurrence.
- 2.4.2. Where requested by SEPA, a written report shall be made following any incident notified to SEPA in accordance with Condition 2.4.1.

## **2.5 Maintenance of Monitoring and Measuring Equipment**

- 2.5.1. All monitoring and measuring equipment referred to within this licence shall be maintained in accordance with the manufacturer's instructions and/or to any relevant current certification standard where applicable, and in all cases to ensure the equipment is in good working order at all times.
- 2.5.2. All monitoring and measuring equipment referred to in this licence shall be calibrated regularly and in accordance with the recommendations of the manufacturer and/or to any relevant current certification standard. Evidence of calibration shall be maintained and available for inspection by a SEPA officer.

## **2.6 Environmental Harm**

- 2.6.1. Other than as specifically permitted or limited by any condition of this licence, none of the Authorised Activities shall have a significant adverse impact on, or cause pollution of, the water environment.

### **SCHEDULE 3**

#### **3. CONDITIONS APPLYING TO ALL SEWAGE DISCHARGES ASSOCIATED WITH THE OPERATION OF THE EXISTING STW**

##### **3.1 Nature of Discharge**

- 3.1.1. The discharges shall consist solely of tertiary treated sewage effluent, storm sewage and sewage discharged in the event of an emergency.
- 3.1.2. The dry weather flow of the influent sewage shall not exceed 735 cubic metres per day.

##### **3.2 Operation and Maintenance**

- 3.2.1. The Existing STW and associated inlet pumping stations shall be operated and maintained in accordance with best practice such that:
- (a) they remains fully operational, except at times of unavoidable mechanical or electrical breakdown; and
  - (b) following any such mechanical or electrical breakdown all reasonably practicable means shall be used to return the STW and/or associated inlet pumping stations to a fully operating condition.

##### **3.3 Descriptive Conditions**

- 3.3.1. The discharges shall not cause:
- 3.3.2. a significant visible impact on the receiving waters due to the presence of oil and/or grease; or
  - 3.3.3. the significant deposition of sewage solids on the bed or shore of the receiving waters; or
  - 3.3.4. significant discoloration of the receiving waters; or
  - 3.3.5. significant increased foaming in the receiving waters; or
  - 3.3.6. significant growth of sewage fungus in the receiving waters.
- 3.3.7. Any event involving one or more of the effects described in Condition 3.3.1 above shall be regarded as an incident and dealt with in accordance with the requirements of Condition 2.4.

##### **3.4 Flow Monitoring**

- 3.4.1. Flow measurement structures or pump rate flow meters shall be provided and maintained to enable determination of the instantaneous flow rates and daily volumes of the:
- (a) Treated sewage.

### 3.5 Listed or Hazardous Substances

- 3.5.1. SEPA shall be notified in writing, using the contact details for notifications specified in the explanatory notes attached to this licence, if any known material change occurs, or is proposed, in respect of discharges from trade premises to the sewerage system, that may increase or introduce into the influent sewage any List I or II substances as defined under EC Directive 76/464/EEC or Annex X Priority and Priority Hazardous Substances as defined under EC Directive 2000/60/EC, within 28 days of the responsible person identifying, or being informed of, any such change.

## **SCHEDULE 4**

### **4. TREATED SEWAGE ASSOCIATED WITH THE OPERATION OF THE EXISTING STW**

#### **4.1 Nature and Volume of Discharge**

4.1.1. The conditions contained in this schedule shall relate solely to the discharge of treated sewage.

#### **4.2 Discharge Point**

4.2.1. The outlet shall be a 250 millimetre diameter iron pipe.

#### **4.3 Sample Point**

4.3.1. A sample point shall be constructed, maintained and appropriately identified as a sample point so that a representative sample of the treated sewage may be safely obtained. All constituents of the sewage shall pass through the said sample point.

#### **4.4 Screening**

4.4.1. The sewage shall be subject to a process designed and operated to be at least equivalent to a 6 millimetre square mesh screen in its removal of solid matter.

4.4.2. The sewage shall not be comminuted or macerated to achieve the standard in Condition 4.4.1.

#### **4.5 Discharge Quality Standards**

4.5.1. Subject to Condition 4.5.2 below, any instantaneous sample of treated sewage shall contain no more than:

(a) 50 milligrams per litre of biochemical oxygen demand (determined in the presence of excess allyl-thiourea after 5 days at 20°C).

4.5.2. The limit for any of the parameters set out in Condition 4.5.1 may be exceeded where, in any series of treated sewage samples, taken at regular but randomised intervals over a year, comprising a number within a range listed in the first column of the table at Appendix 1 to this licence, no more than the corresponding number of samples in the second column of the said table exceed the applicable limit for that parameter.

4.5.3. Notwithstanding Condition 4.5.2 above, any instantaneous sample of treated sewage shall contain no more than:

(a) 100 milligrams per litre of biochemical oxygen demand (determined in the presence of excess allyl-thiourea after 5 days at 20°C).

- 4.5.4. Any instantaneous sample of treated sewage shall contain no more than 100 milligrams per litre of suspended solids (measured after drying at 105°C).
- 4.5.5. The pH of any sample of treated sewage shall be not less than 4.0 or greater than 10.0.

#### **4.6 Unusual Weather Conditions**

- 4.6.1. Subject to SEPA receiving notification as required under Condition 4.6.3 or 4.6.4, no sample of treated sewage taken at a time when unusual weather conditions are adversely affecting the operation of the STW shall be taken into account in deciding whether Condition 4.5 has been complied with. For the purposes of this condition "unusual weather conditions" means:-
- (a) low ambient temperatures as evidenced by treated sewage temperatures of 5°C or less, or by the freezing of mechanical equipment in the STW; or
  - (b) snow deposits sufficient to affect the normal operation of the STW; or
  - (c) tidal or fluvial flooding; or
  - (d) weather conditions causing unforeseen loss of mains power supply to the STW which could not reasonably be remedied by the provision and operation of standby power generation facilities.
- 4.6.2. On any occasion where unusual weather conditions as defined by Condition 4.6.1 adversely affect the operation of the Existing STW, all reasonably practicable means shall be used to mitigate that adverse effect.
- 4.6.3. SEPA shall be notified as soon as reasonably practicable, using the contact details for notifications in the explanatory notes attached to this licence, when unusual weather conditions as defined by Condition 4.6.1 have adversely affected the STW operations to the extent that compliance with the discharge quality standards could not be maintained.
- 4.6.4. In the event of the responsible person receiving notification from SEPA of a non-compliant sample, SEPA shall be notified within 14 days, using the contact details for notifications in the explanatory notes attached to this licence, if any unusual weather conditions as defined in Condition 4.6.1 applied.
- 4.6.5. Any notification to SEPA in accordance with Condition 4.6.3 or 4.6.4 shall include a full description of the unusual weather conditions in question and their impact on the operation of the Existing STW.

## **SCHEDULE 5**

### **5. EMERGENCY OVERFLOWS AT THE SHIP INN PUMPING STATION ASSOCIATED WITH THE OPERATION OF THE EXISTING STW**

#### **5.1 Nature of Discharge**

- 5.1.1. The Conditions contained in this Schedule relate solely to the discharge of screened sewage effluent in an emergency from the Ship Inn Pumping Station.
- 5.1.2. The sewage referred to in condition 5.1.1 shall have originated solely from the Ship Inn collection system.

#### **5.2 Discharge Point**

- 5.2.1. The outlet shall be a 550 mm internal diameter iron pipe.
- 5.2.2. The outfall soffit shall be located below the level of low water mark of mean spring tides.

#### **5.3 Sample Point**

- 5.3.1. A sample point shall be constructed, maintained and appropriately identified as a sample point so that a representative sample of the discharge of sewage effluent made in an emergency may be safely obtained. All constituents of the discharge shall pass through the said sample point.

#### **5.4 Screening**

- 5.4.1. The discharge shall be subject to a process designed and operated to be at least equivalent to a 6 millimetre 2 dimensional screen in its removal of solid matter.

#### **5.5 Limitations on Discharge**

- 5.5.1. The discharge shall occur only when the existing sewage treatment works is inoperative as a result of one or more of the following:
- electrical power failure;
  - rising main failure;
  - blockage of the downstream sewer; and
  - it is not due to the act or default of the discharger, its agents, representatives, officers, employees and it is not reasonably practicable to dispose of the sewage otherwise.

## **5.6 Response Time**

- 5.6.1. On any occasion where an emergency overflow occurs, all reasonably practicable means shall be used to restore the operation of the existing sewage treatment works and pumping station as soon as practicable.

## **5.7 Tankering/Pumping Away**

- 5.7.1. A tanker access facility at an appropriate location shall be provided and maintained to enable removal of sewage from the existing sewage treatment works or pumping station when necessary.

## SCHEDULE 6

### 6. COMBINED SEWER OVERFLOWS FROM THE SHIP INN PUMPING STATION ASSOCIATED WITH THE OPERATION OF THE EXISTING STW

#### 6.1 Nature of Discharge

- 6.1.1. The Conditions contained in this Schedule shall relate solely to the discharge of screened storm sewage effluent from the Ship Inn Inlet Pumping Station.
- 6.1.2. The sewage referred to in Condition 6.1.1 shall have originated solely from the Ship Inn collection system.

#### 6.2 Discharge Point

- 6.2.1. The outlet shall be a 550 mm internal diameter iron pipe.
- 6.2.2. The outfall shall be located below the level of low water mark of mean spring tides.

#### 6.3 Sample Point

- 6.3.1. A sample point shall be constructed, maintained and appropriately identified as a sample point so that a representative sample of the storm sewage effluent may be safely obtained. All constituents of the discharge shall pass through the said sample point.

#### 6.4 Screening

- 6.4.1. The discharge shall be subject to a process designed and operated to be at least equivalent to a 6 millimetre 2 dimensional screen in its removal of solid matter.
- 6.4.2. The discharge shall not be comminuted or macerated to achieve the standard in 6.4.1.

#### 6.5 Overflow Setting

- 6.5.1. The discharge of storm sewage effluent shall:
- occur only as a result of the pumping station pumps being inhibited, and
- occur only as a consequence of rainfall and/or snow melt within the sewered catchment.

#### 6.6 Flow Monitoring

- 6.6.1. Facilities shall be provided to enable the installation of flow monitoring devices in the sewer upstream and downstream of the overflow.

## **SCHEDULE 7**

### **7. EMERGENCY OVERFLOWS AT THE FORT GEORGE PUMPING STATION ASSOCIATED WITH THE OPERATION OF THE EXISTING STW**

#### **7.1 Nature of Discharge**

- 7.1.1. The Conditions contained in this Schedule relate solely to the discharge of screened sewage effluent in an emergency.
- 7.1.2. The sewage referred to in Condition 7.1.1 shall have originated solely from the Fort George collection system.

#### **7.2 Discharge Point**

- 7.2.1. The outlet shall be a 100 mm internal diameter cast iron pipe.
- 7.2.2. The outfall soffit shall be located below the level of low water mark of mean spring tides.

#### **7.3 Sample Point**

- 7.3.1. A sample point shall be constructed, maintained and appropriately identified as a sample point so that a representative sample of the discharge of sewage effluent made in an emergency may be safely obtained. All constituents of the discharge shall pass through the said sample point.

#### **7.4 Limitations on Discharge**

- 7.4.1. The discharge shall occur only when the emergency storage capacity is fully utilised and the existing sewage treatment works is inoperative as a result of one or more of the following:
- electrical power failure;
  - rising main failure;
  - blockage of the downstream sewer; and
  - it is not due to the act or default of the discharger, its agents, representatives, officers, employees and it is not reasonably practicable to dispose of the sewage otherwise.

## **7.5 Response Time**

7.5.1. On any occasion where an emergency overflow occurs, all reasonably practicable means shall be used to restore the operation of the sewage treatment works as soon as practicable.

## **7.6 Tankering/Pumping Away**

7.6.1. A tanker access facility at an appropriate location shall be provided and maintained to enable removal of sewage from the STW or pumping station when necessary.

**SCHEDULE 8**

**8. CONTROLLED ACTIVITIES ASSOCIATED WITH THE OPERATION OF THE NEW ARDERSIER STW**

**8.1 Description of Controlled Activities**

8.1.1. From the date the New STW is commissioned the controlled activities shall be discharges of sewage effluent to the water environment.

8.1.2. Within 5 days of the flows being turned the Responsible Person shall notify SEPA in writing that the New STW is commissioned.

**8.2 Location of Controlled Activities**

8.2.1. From the date the New STW is commissioned the following controlled activities described in Table 3.1 are authorised under licence.

Table 3.1

NGR	Name/Reference/Description	Associated Waters	Activity
NH 7649 5735	Discharge A2 Ardersier STW Final Effluent	Moray Firth	Discharge of tertiary treated sewage effluent
NH 7779 5478	Discharge B2 Ship Inn - Ardersier STW Inlet Pumping Station EO	Moray Firth	Discharge of screened sewage effluent from the Ship Inn Pumping Station collection system in event of an emergency
NH 7779 5478	Discharge C2 Ship Inn - Ardersier STW Inlet Pumping Station CSO	Moray Firth	Discharge of screened storm sewage effluent from the Ship Inn Pumping Station collection system
NH 7655 5665	Discharge D2 Fort George - Ardersier STW Inlet Pumping Station EO	Moray Firth	Discharge of screened sewage effluent from Fort George Pumping Station Collection System in event of an emergency

**SCHEDULE 9**

**9. GENERAL CONDITIONS ASSOCIATED WITH THE OPERATION OF THE NEW/PROPOSED STW**

**9.1 Responsible Person**

9.1.1. The responsible person to whom this licence is issued shall secure compliance with the Conditions contained in the licence.

**9.2 Records**

9.2.1. A copy of this licence shall be kept at Ardersier STW and shall be made readily accessible for examination by all relevant staff.

9.2.2. Unless otherwise specified in a Condition of this Licence, every record made in compliance with a Condition of this Licence shall be preserved for not less than five years from the date of its being made. Every such record shall be kept on the site specified in Condition 9.2.1 above for not less than one year from the date of its being made and thereafter preserved at a location, previously notified to SEPA in writing, if that location is not the above site.

9.2.3. All records shall be legible, and any amendment made to any record made in compliance with a Condition of this Licence shall be made in such a way as to leave the original entry clear and legible. The reason for each amendment shall be explained in the said record.

**9.3 Reporting**

9.3.1. Where any Condition of this Licence requires information to be reported, a report shall be forwarded in a format agreed with SEPA, to SEPA at the address specified in the explanatory notes attached to this Licence, on the date(s) or within the period or at the frequency specified in Table 4.1 and, where appropriate, the first report shall be due on the date specified in that Table. All such reports shall include the Licence number and the name of the responsible person.

Table 4.1 Reporting Requirements

Summary of Information to be Reported	Condition	Date/Within Period/Frequency to be Reported	Date First Report Due
Incidents	9.4.1	Within 14 days	N/A
Flow statistics	10.6.3	January -December	As agreed in writing with SEPA
Increase or introduction of listed substances	10.7.1	Within 28 days of occurrence	N/A
Unusual Weather Conditions affecting compliance.	10.7.2	As soon as practicable	N/A

Unusual weather Conditions & impact on STW (SEPA notification of non compliant sample)	10.7.3	Within 14 days	N/A
Confirmation of balancing tank levels during the periods that Fort George and/or The Ship Inn Pumping Station are inhibited.	10.4.1	January -December, Annually	To be made available at time of inspection.
UV Calibration Test Results	As Per Operating Plan		On Request
Total and Faecal coliform sample results in coliform units per 100ml.	11.6.3	Monthly	Within 28 days of commissioning

9.3.2. Where the controlled activity has not operated for the duration of any reporting period specified in Table 4.1 the responsible person shall provide written notification to SEPA. This shall confirm that no reports have been made in terms of 9.3.1 because the controlled activity has not operated during said period. Notifications shall be submitted within one month of the end of the reporting period concerned.

#### **9.4 Incidents**

- 9.4.1. In the event of an incident, the responsible person shall notify SEPA without delay and in any case by the next working day after identification of the incident, using the contact details in the Explanatory Notes. This notification shall include: the time and duration of the incident, a description of the cause of the incident, any effect on the environment as a result of the incident and any measures taken to minimise or mitigate the effect and prevent a recurrence.
- 9.4.2. Where requested by SEPA, written report following any incident notified to SEPA should be sent to SEPA at the contact address in the Explanatory Notes within 14 days of the occurrence of the incident.

#### **9.5 Maintenance of Monitoring and Measuring Equipment**

- 9.5.1. All monitoring/measuring equipment referred to within this licence shall be maintained in accordance with the manufacturers instructions and to any relevant current certification standard where applicable, and in all cases to ensure the equipment is in good working order at all times.
- 9.5.2. All monitoring/measuring equipment referred to in this licence shall be calibrated regularly and in accordance with the recommendations of the manufacturer and to any relevant current certification standard. Evidence of calibration shall be maintained and available for inspection by a SEPA Officer.

#### **9.6 Environmental Harm**

- 9.6.1. Other than as specifically permitted or limited by any Condition of this authorisation, the authorised activities shall not have a significant adverse impact on, or cause pollution of, the water environment.

## **SCHEDULE 10**

### **10. CONDITIONS APPLYING TO POINT SOURCE DISCHARGES AS A WHOLE AT THE NEW STW**

#### **10.1 Nature of Discharges**

10.1.1. The discharges shall consist solely of tertiary treated sewage effluent, storm sewage and sewage discharged in the event of an emergency.

10.1.2. The dry weather flow of the influent sewage to the New/proposed STW shall not exceed 1785 cubic metres per day.

#### **10.2 Operation of Works**

10.2.1. The STW and associated inlet pumping stations shall be operated and maintained in accordance with best practice such that:

they remain fully operational, except at times of unavoidable mechanical or electrical breakdown; and

following any such mechanical or electrical breakdown all reasonably practicable means shall be used to return the STW and inlet pumping stations to a fully operating Condition, and

facilities shall be provided so that a mobile standby generator may readily be installed at the STW in the event of electrical failure and such a generator shall be installed and operated as soon as practicable after an electrical failure.

10.2.2. A telemetry alarm system, connected to a 24-hour response system, shall be provided and maintained which ensures notification of failure or breakdown of the sewage treatment system or pumping station inhibits.

#### **10.3 Installation and Operation of the Inlet Balancing/Storm/Emergency Tank**

10.3.1. An Inlet Balancing/Storm/Emergency Tank ('the Tank') with 254 cubic metres of storage will be constructed as shown in Scottish Water design drawing 046362-0000-20-DRG-9029-0C.

10.3.2. The Ship Inn and Fort George pumping station pumps will not be inhibited until the level in the tank exceeds the 'storm level max' level as shown in Scottish Water design drawing 046362-0000-20-DRG-9029-0C.

#### **10.4 Balancing Tank Level Recording Facilities and Reporting**

10.4.1. Facilities shall be provided which enable the operator to record the tank level during times that Fort George and/or The Ship Inn Pumping Stations are inhibited.

10.4.2. The tank levels during times that Fort George and/or The Ship Inn Pumping Stations are inhibited shall be recorded.

#### **10.5 Descriptive Conditions**

10.5.1. The discharges shall not cause:

a significant visible impact on surface waters due to the presence of oil and / or grease;

the significant deposition of sewage solids on the bed or shore of the receiving waters;

significant discoloration of the receiving waters;

significant increased foaming in the receiving waters;

significant growth of sewage fungus in the receiving water.

10.5.2. Any event involving one or more of the circumstances described in Condition 10.5.1 above shall be regarded as an "Incident" and dealt with in accordance with the requirements of Condition 9.4.

## **10.6 Flow Monitoring**

10.6.1. Flow measurement structures shall be provided and maintained to enable determination of the instantaneous flow rates and daily volumes of the:

- influent sewage;
- treated sewage effluent;

10.6.2. A continuous flow recorder with on-site visual display from which readings can be readily obtained and an associated data storage facility, shall be provided and maintained to record the instantaneous flow rates and daily volumes of the:

- influent sewage;
- treated sewage effluent;

10.6.3. The discharger shall provide annually, in a format to be agreed with SEPA, a summary of flow statistics for the period January to December for:

- the Dry Weather Flow of the incoming sewage and the treated effluent;
- the mean daily flow and the standard deviation of daily flow of the incoming sewage and treated effluent;

## **10.7 Unusual Situations**

10.7.1. Subject to the provision of the information required under Condition 10.7.2, no samples of treated sewage effluent, taken at a time when unusual weather conditions are adversely affecting the operation of the STW, shall be taken into account in deciding whether Conditions 11.4 and 11.5 of this licence has been complied with. For the purposes of this Condition "unusual weather conditions" means:-

low ambient temperatures as evidenced by effluent temperatures of 5°C or less, or by the freezing of mechanical equipment in the New STW;

snow deposits sufficient to affect the normal operation of the New STW;

tidal flooding

weather conditions causing unforeseen loss of power supply to the treatment plant which could not be ameliorated by the reasonable provision and operation of standby generation facilities.

10.7.2. On any occasion where unusual weather conditions adversely affect the operation of the STW, all reasonably practicable means shall be used to mitigate that adverse effect.

## **10.8 Records Required**

10.8.1. SEPA shall be notified in writing if any known material change occurs, or is proposed, in respect of discharges from trade premises to the sewerage system, that may increase or introduce into the sewage effluent any List I or II substances as defined under EC Directive 76/464/EEC or Annex X Priority and Priority Hazardous substances as defined under EC Directive 2000/60/EC. SEPA shall be notified within 28 days of the discharger identifying, or being informed of, any such change.

10.8.2. SEPA shall be notified as soon as practicable, if unusual weather conditions, as defined by Condition 10.6.1 have adversely affected the New STW operations to the extent that compliance with the discharge quality standards could not be maintained.

10.8.3. In the event of the responsible person receiving notification from SEPA of a non-compliant sample, the Responsible person shall notify SEPA within 14 days if any unusual weather conditions defined in Condition 10.6.1 applied. The notification to SEPA shall include a full description of the said unusual weather conditions and their impact on the operation of the New STW.

10.8.4. Records of the readings obtained from all flow and event recorders specified in this licence shall be maintained. The information shall be recorded in a format agreed with SEPA.

## **SCHEDULE 11**

### **11. TREATED SEWAGE EFFLUENT ASSOCIATED WITH THE OPERATION OF THE NEW STW**

#### **11.1 Nature of Discharge**

11.1.1. The Conditions contained in this Schedule shall relate solely to the discharge of treated sewage effluent.

#### **11.2 Discharge Point**

11.2.1. The design and size of the outfall shall be agreed in writing with SEPA prior to being installed.

11.2.2. The outfall soffit shall be located below the level of Lowest Astronomical Tide.

#### **11.3 Sample Point**

11.3.1. A sample point shall be constructed, maintained and appropriately identified as a sample point so that a representative sample of the treated sewage effluent may be safely obtained. All constituents of the discharge shall pass through the said sample point.

11.3.2. An as-built plan of the New STW showing the sampling point location shall be submitted to SEPA prior to the New STW being commissioned.

#### **11.4 Discharge Quality Standards**

11.4.1. No instantaneous sample of treated sewage effluent shall contain more than:  
100 milligrams per litre of suspended solids; and

11.4.2. No instantaneous sample of treated sewage effluent shall contain more than:  
100,000 total coliform units per 100 ml  
20,000 faecal coliform units per 100 ml

11.4.3. The pH of any sample of treated sewage effluent shall be not less than 4.0 or greater than 10.

#### **11.5 Screening**

11.5.1. The discharge shall be subject to a process designed and operated to be at least equivalent to a 6 millimetre 2 dimensional screen in its removal of solid matter.

11.5.2. The discharge shall not be comminuted or macerated to achieve the standard in 11.5.2.

## **11.6 Operation of the Ultraviolet Disinfection System**

- 11.6.1. The discharge shall be subject to ultraviolet disinfection.
- 11.6.2. The discharger shall on a monthly basis sample the final effluent for total coliforms and faecal coliforms, at the sampling point specified in Condition 11.3.1, unless otherwise agreed with SEPA in writing.
- 11.6.3. The analysis results of the samples referred to in 11.6.2 above shall be reported to SEPA in accordance with the requirements of Condition 9.3.1
- 11.6.4. A telemetry system, connected to a 24-hour response system, shall be provided and maintained which ensures immediate notification of individual UV bulb failure.
- 11.6.5. In the event that the dose rate specified in the Operating Plan is not achieved this shall be reported to SEPA as an incident in accordance with the requirements of Condition 9.3.1
- 11.6.6. The discharger shall monitor the performance of the Ultraviolet Disinfection system to ensure it is operated in accordance with best practice. The results of the monitoring shall be made available to SEPA on request.
- 11.6.7. Without prejudice to Conditions 11.6.1 to 11.6.6, the ultraviolet disinfection system shall be operated in accordance with an Operating Plan.
- 11.6.8. The Operating Plan referred to in Condition 11.6.7 shall be agreed in writing with SEPA prior to the discharge taking place.

## **SCHEDULE 12**

### **12. EMERGENCY OVERFLOWS FROM THE SHIP INN PUMPING STATION ASSOCIATED WITH THE OPERATION OF THE NEW STW**

#### **12.1 Nature of Discharge**

12.1.1. The Conditions contained in this Schedule relate solely to the discharge of screened sewage effluent in an emergency

12.1.2. The sewage referred to in Condition 12.1.1 shall have originated solely from the Ship Inn collection system.

#### **12.2 Discharge Point**

12.2.1. The outlet shall be a 550 mm internal diameter iron pipe.

12.2.2. The outfall soffit shall be located below the level of low water mark of mean spring tides.

#### **12.3 Sample Point**

12.3.1. A sample point shall be constructed, maintained and appropriately identified as a sample point so that a representative sample of the discharge of sewage effluent made in an emergency may be safely obtained. All constituents of the discharge shall pass through the said sample point.

#### **12.4 Screening**

12.4.1. The discharge shall be subject to a process designed and operated to be at least equivalent to a 6 millimetre 2 dimensional screen in its removal of solid matter.

12.4.2. The discharge shall not be comminuted or macerated to achieve the standard in 12.4.1

#### **12.5 Storage**

12.5.1. An emergency storage tank with a functional capacity as specified in Condition 10.3.1 shall be provided at the New STW to accommodate flows from the network areas serving both the Ship Inn area of Ardersier, and Fort George.

#### **12.6 Limitations on Discharge**

12.6.1. The discharge shall occur only when the pump stations pumps are inhibited, and

only for as long as the storm storage capacity allocated to that influent in Condition 10.3.2 is fully utilised; and

the STW is inoperative as a result of one or more of the following:

- electrical power failure;
- rising main failure;

- blockage of the downstream sewer; and

it is not due to the act or default of the discharger, its agents, representatives, officers, employees and it is not reasonably practicable to dispose of the sewage otherwise.

## **12.7 Response Time**

12.7.1. On any occasion where an emergency overflow occurs, all reasonably practicable means shall be used to restore the operation of the New STW as soon as practicable.

## **12.8 Tankering/Pumping Away**

12.8.1. A tanker access facility at an appropriate location shall be provided and maintained to enable removal of sewage from the pumping station or New STW when necessary.

## **12.9 Event Recording**

12.9.1. Facilities shall be provided which enable the balancing tank level to be recorded.

12.9.2. Facilities shall be provided which enable the operator to confirm the balancing tank level during the times the pumping station is inhibited.

## SCHEDULE 13

### 13. COMBINED SEWER OVERFLOW FROM THE SHIP INN PUMPING STATION ASSOCIATED WITH THE OPERATION OF THE NEW ARDESIER STW

#### 13.1 Nature of Discharge

13.1.1. The Conditions contained in this Schedule shall relate solely to the discharge of screened storm sewage effluent from the Ship Inn Inlet Pumping Station.

#### 13.2 Discharge Point

13.2.1. The outlet shall be a 550 mm internal diameter iron pipe.

13.2.2. The outfall shall be located below the level of low water mark of mean spring tides.

#### 13.3 Sample Point

13.3.1. A sample point shall be constructed, maintained and appropriately identified as a sample point so that a representative sample of the storm sewage effluent may be safely obtained. All constituents of the discharge shall pass through the said sample point.

#### 13.4 Screening

13.4.1. The discharge shall be subject to a process designed and operated to be at least equivalent to a 6 millimetre 2 dimensional screen in its removal of solid matter.

13.4.2. The discharge shall not be comminuted or macerated to achieve the standard in 13.4.1.

#### 13.5 Overflow Setting

13.5.1. A storage facility with a functional capacity as specified in Condition 10.3.1 shall be provided at the New STW.

13.5.2. The discharge of storm sewage effluent shall:

occur only when the pump stations pumps are inhibited, and

only for as long as, the storm storage capacity allocated to that influent is fully utilised; and

occur only as a consequence of rainfall and/or snow melt within the sewered catchment.

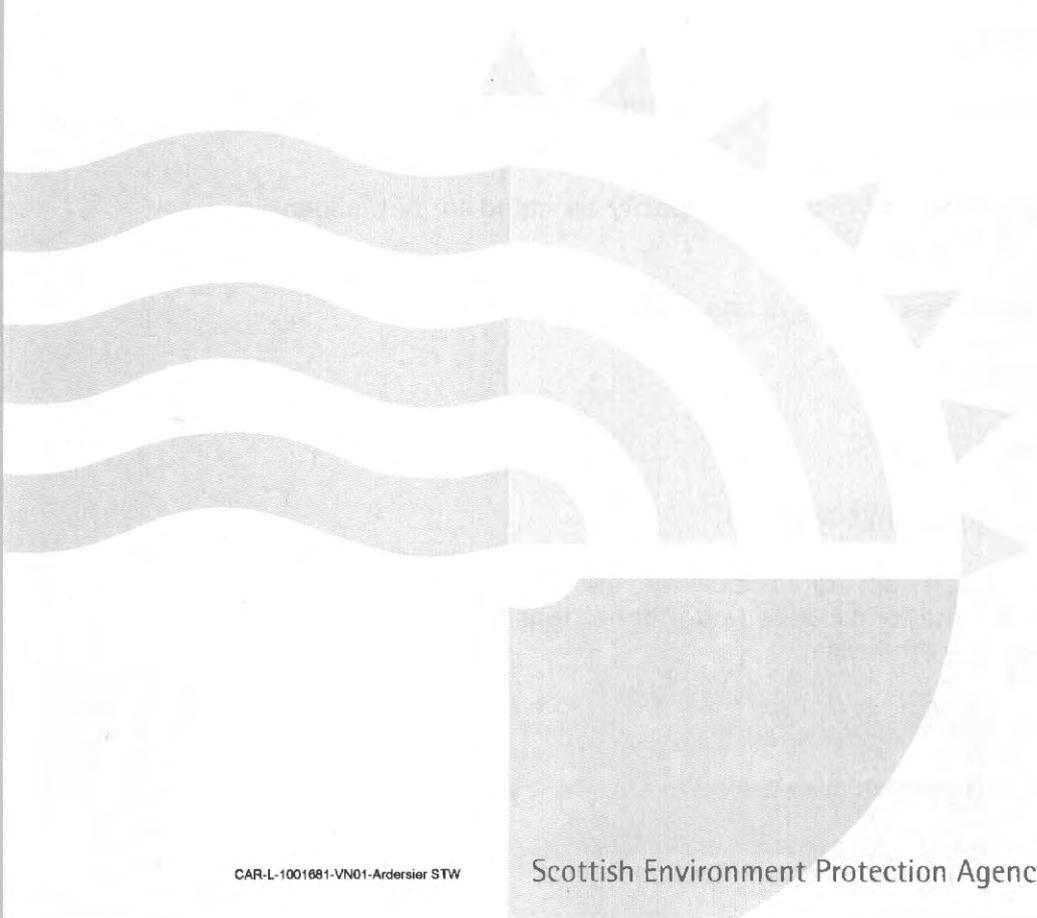
13.5.3. The storage facility shall be emptied automatically and its contents forwarded for full treatment as soon as practicable.

### **13.6 Flow Monitoring**

13.6.1. Facilities shall be provided to enable the installation of flow monitoring devices in the sewer upstream and downstream of the overflow.

### **13.7 Event Recording**

13.7.1. Facilities shall be provided to enable the frequency and duration of overflow events resulting from inhibits to be recorded.



## **SCHEDULE 14**

### **14. EMERGENCY OVERFLOWS FROM FORT GEORGE PUMPING STATION ASSOCIATED WITH THE NEW ARDERSIER STW**

#### **14.1 Nature of Discharge**

14.1.1. The Conditions contained in this Schedule relate solely to the discharge of screened sewage effluent in an emergency.

14.1.2. The sewage referred to in Condition 14.1.1 above shall have originated solely from the Fort George collection system.

#### **14.2 Discharge Point**

14.2.1. The outlet shall be a 100 mm internal diameter cast iron pipe.

14.2.2. The outfall soffit shall be located below the level of low water mark of mean spring tides.

#### **14.3 Sample Point**

14.3.1. A sample point shall be constructed, maintained and appropriately identified as a sample point so that a representative sample of the discharge of sewage effluent made in an emergency may be safely obtained. All constituents of the discharge shall pass through the said sample point.

#### **14.4 Storage**

14.4.1. An emergency storage facility with a functional capacity as specified in Condition 10.3.1 shall be provided at the New STW to accommodate flows from the network areas serving both the Ship Inn area of Ardersier, and Fort George.

#### **14.5 Limitations on Discharge**

14.5.1. The discharge shall occur only when the pump station pumps are inhibited, and

only for as long as the storm storage capacity allocated to that influent in Condition 10.3.2 is fully utilised; and

the STW is inoperative as a result of one or more of the following:

- electrical power failure;
- rising main failure;
- blockage of the downstream sewer; and

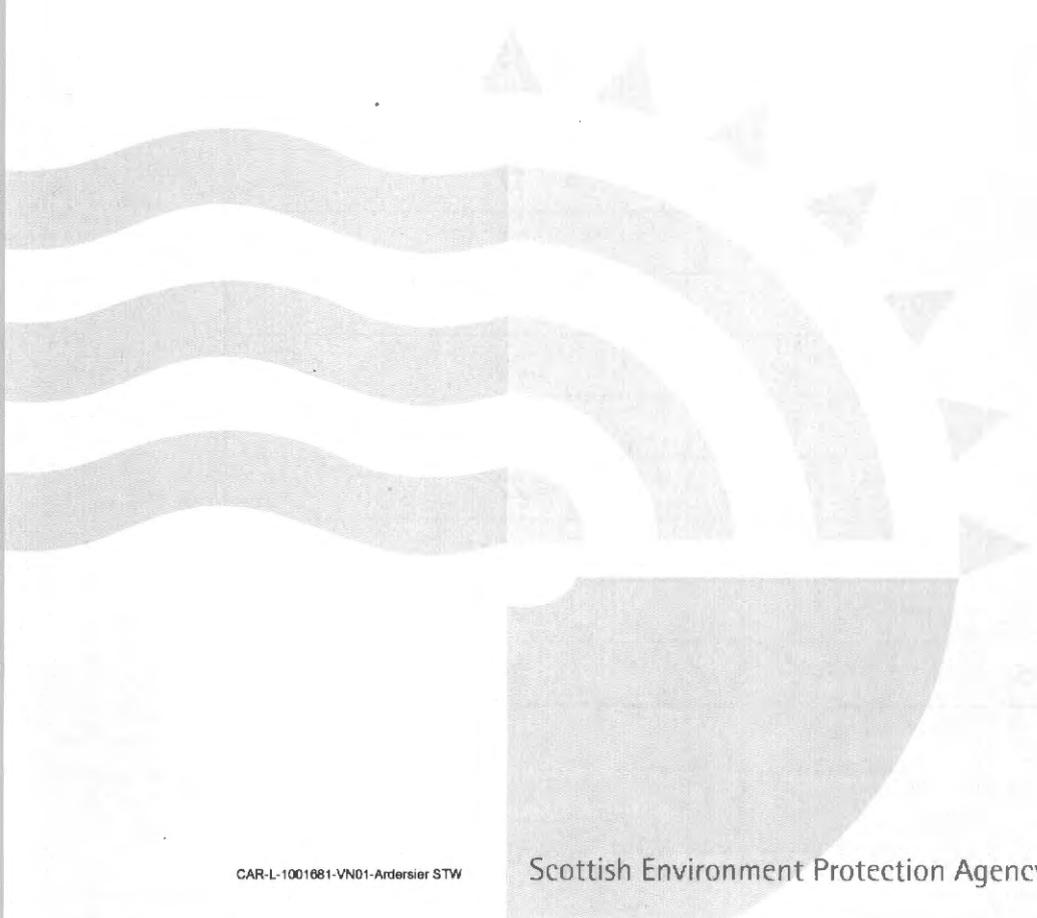
it is not due to the act or default of the discharger, its agents, representatives, officers, employees and it is not reasonably practicable to dispose of the sewage otherwise.

#### **14.6 Response Time**

14.6.1. On any occasion where an emergency overflow occurs, all reasonably practicable means shall be used to restore the operation of the New STW treatment works as soon as practicable.

#### **14.7 Tankering/Pumping Away**

14.7.1. A tanker access facility at an appropriate location shall be provided and maintained to enable removal of sewage from the pumping station or New STW when necessary.



**15. APPENDIX 1 : TABLE OF PERMITTED EXCEEDENCES**

Number Of Samples Comprising A Series In Any Period Of 12 Consecutive Months	Maximum Permitted Number Of Samples Which Exceed The Applicable Limit
1 – 7	1
8 – 16	2
17 – 28	3
29 – 40	4
41 – 53	5
54 – 67	6
68 – 81	7
82 – 95	8
96 – 110	9
111 – 125	10
126 – 140	11
141 – 155	12
156 – 171	13
172 – 187	14
188 – 203	15
204 – 219	16
220 – 235	17
236 – 251	18
252 – 268	19
269 – 284	20
285 – 300	21
301 – 317	22
318 – 334	23
335 – 350	24
351 – 365	25

## **EXPLANATORY NOTES**

### **1. THE WATER FRAMEWORK DIRECTIVE**

The Water Framework Directive (WFD) is a wide-ranging piece of European environmental legislation which became law in Scotland at the end of 2003 through the Water Environment and Water Services (Scotland) Act 2003 and in April 2006 through the Water Environment (Controlled Activities) (Scotland) Regulations 2005 (the "Controlled Activities Regulations").

The WFD establishes a legal framework for the protection, improvement and sustainable use of the water environment across Europe by requiring member states to:

- Prevent deterioration and enhance status of aquatic ecosystems, including groundwater;
- Promote sustainable water use;
- Reduce pollution; and
- Contribute to the mitigation of floods and droughts.

The Controlled Activities Regulations establish the regulatory framework for achieving some of the aims of the WFD in Scotland, by creating a regime for authorising "controlled activities", e.g. point source discharges, abstractions, impoundments and engineering activities. They provide for three levels of authorisation, dependent on the risks associated with a controlled activity. A licence is the highest level of authorisation.

Having differing levels of authorisation allows for proportionate and cost-effective controls, so that environmental protection can be achieved whilst minimising the regulatory burden.

### **2. WATER EFFICIENCY**

Regulation 6 of the Regulations imposes a general duty to use water efficiently:

*"It shall be the duty of any person carrying out a controlled activity authorised under these Regulations to take all reasonable steps to secure efficient and sustainable water use."*

Water efficiency is the management of the total quantity of water abstracted from a source of supply using measures to minimise wastage, optimise use and reduce consumption.

The means of achieving this can be varied but may include good housekeeping, management systems and procedures, reusing and recycling water and the redesign of operations.

Water audits are the first step to using water efficiently. Water audits develop an understanding of the water system, enable detection of leakages and areas of water wastage and are a means of identifying opportunities for reduced water use.

### 3. APPEALS

If you are aggrieved by any of the Conditions of the licence or the level of authorisation, you may appeal to the Scottish Ministers. Further information on your right of appeal and the appeals procedure is contained in regulations 46 to 49 and Schedule 9 of the Regulations.

Formal notice of appeal under regulation 46(b) or (c) is to be given within three months of the date that the licence is issued. Paragraph 2 of Schedule 9 lists the documents that the appellant has to submit to the Scottish Ministers.

### 4. SUBSISTENCE CHARGES

An annual subsistence charge may be payable in respect of the licence in terms of the Water Environment (Controlled Activities) Fees and Charges (Scotland) Scheme 2006, copies of which are available from SEPA. Where a subsistence charge is payable, an invoice will be sent to you.

### 5. GENERAL STATUTORY REQUIREMENTS

A licence under the Controlled Activities Regulations does not disapply any other statutory requirements applicable to the licence holder or his/her operations, such as any need to obtain planning permission or a building warrant, or any responsibilities under legislation for health, safety and welfare in the workplace.

### 6. ADDRESS AND TELEPHONE NUMBERS

The contact address for all information to be **reported** in terms of Condition 2.3.1 of the licence, is as follows: -

Scottish Environment Protection Agency  
Graesser House  
Fodderty Way  
Dingwall Business Park  
DINGWALL  
IV15 9XB

The contact address and telephone number for **notifications** in terms of the licence, is as follows:-

Scottish Environment Protection Agency  
Graesser House  
Fodderty Way  
Dingwall Business Park  
DINGWALL  
IV15 9XB

During office hours  
Tel: 01349 862 021  
Fax: 01349 863 987  
Out of office hours and public holidays  
Tel No: 0800 80 70 60

## **7. SEPA REVIEW AND VARIATION OF CONDITIONS**

The Conditions of the licence will be periodically reviewed by SEPA and may be varied under regulation 19 of the Regulations as a result of that review.

## **8. OPERATOR-INITIATED VARIATION OF CONDITIONS**

The responsible person may apply to SEPA under regulation 21 for a variation of the Conditions of the licence.

## **9. TRANSFER OF AUTHORISATION**

A responsible person may apply to transfer the licence to another person under regulation 22 by making a joint application with the other person.

## **10. SURRENDER OF AUTHORISATION**

Where the controlled activities authorised by the licence have ceased, or it is intended that the controlled activities will cease, the responsible person may apply to SEPA to surrender the licence under regulation 24.

## **11. SUSPENSION AND REVOCATION OF AUTHORISATION**

SEPA may at any time suspend or revoke an authorisation (in whole or in part) by serving a notice on the responsible person under regulation 26.

## **12. ENFORCEMENT NOTICES**

Where SEPA is of the opinion that an activity

- a) has contravened, is contravening or is likely to contravene any condition of the licence or
- b) has caused, is causing or is likely to cause significant adverse impacts on the water environment or
- c) has caused, is causing or is likely to cause a direct or indirect discharge into groundwater of substances listed in Schedule 2 of the Regulations .

SEPA may serve an enforcement notice on the responsible person under regulation 28.

This notice will specify the steps to be taken by the responsible person which SEPA considers to be necessary or appropriate to prevent, mitigate or remedy the contravention, the impact on the environment or the discharge into groundwater.

## **13. OFFENCES**

It is an offence to carry on, or cause or permit others to carry on, any controlled activity except insofar as it is authorised under the Regulations and carried on in accordance with that authorisation.

It is an offence to fail to comply with or contravene, or cause or permit others to fail to comply with or contravene, a water use licence, including any condition imposed.

It is an offence to fail to comply with, or cause or permit others to fail to comply with, the requirements of an enforcement notice.

It is an offence to intentionally make, or cause or permit others to make, a false entry in any record required to be kept under a condition of an authorisation.

Further details on these and other offences and on penalties liable to be imposed upon conviction for an offence are provided in regulation 40 of the Regulations.

Directors, managers and other individuals within a company may be held personally liable for offences under the Regulations.

All personnel who are responsible for fulfilling any condition of the licence should be made aware of these facts.

Please note that your licence authorises you to carry out the activity or activities outlined in your application to SEPA in accordance with the licence and its conditions. Be aware however, that any activity outwith the terms of the licence is prohibited under regulation 5 of the Regulations. Should you undertake any activity which does not conform to the terms of your licence, you may be subject to criminal proceedings in accordance with regulation 40(1)(a) of the Regulations. This prohibition encompasses any 'accidental' activity which is liable to cause pollution of the water environment, as "*activities liable to cause pollution of the water environment*" are controlled activities within the definition of section 20 of the Water Environment and Water Services (Scotland) Act 2003, even if SEPA would not grant an authorisation for such an activity.

The statutory definition of pollution, as set out in that section, is as follows:-

*"Pollution", in relation to the water environment, means the direct or indirect introduction, as a result of human activity, of substances or heat into the water environment, or any part of it, which may give rise to any harm, and "harm" means –*

- (a) harm to the health of human beings or other living organisms,*
- (b) harm to the quality of the water environment, including-*
  - (i) harm to 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.'*

#### **14. POPULATION EQUIVALENT (PE)**

The discharge quality and flow conditions attached to this licence are based on (a) the existing STW with a design P.E. of 3000, and (b) the proposed design of the New STW which has a design P.E. of 8831 as stated in the licence application.

In this context, "population equivalent" means a measure of the organic biodegradable load calculated on the basis of the maximum weekly load entering the STW during the year, excluding unusual events such as those due to high rainfall, where one population equivalent is the organic bio degradable load that has a 5 day biochemical oxygen demand (BOD<sub>5</sub>) of 60g oxygen per day..

## **15. Ultraviolet Disinfection System**

In recognition of the concerns SNH's have regarding the potential for sewage related pathogens to impact on the bottlenosed dolphins within the Moray Firth SAC, SEPA have applied the precautionary principle and required Scottish Water to ensure the final effluent meets the current mandatory Bathing Water standard. To achieve this secondary treated effluent is required to be further treated by an Ultraviolet Disinfection system with a minimum dose rate of 60mJ/cm<sup>2</sup>.