

## SEPA Annual Report to the Water Industry Commission for Scotland

Table 1a: Pollution Incidents (Calendar year to end December 2011)

		Category 1	Category 2	Category 3	Total
<b>Sewage Related Premises</b>		Total Number	Total Number	Total Number	Total Number (Cat 1-3 incidents)
1	Sewage Treatment Works				0
2	Storm Tank				0
3	Combined Sewer Overflow				0
4	Foul Sewer				0
5	Pumping Station				0
6	Rising Mains				0
7	Other				0
8	<i>Number of incidents where site compliant with discharge consent</i>				0

		Category 1	Category 2	Category 3	Total
<b>Water and Surface Water Related Premises</b>		Total Number	Total Number	Total Number	Total Number (Cat 1-3 incidents)
9	Water Treatment Works				0
10	Water Distribution System				0
11	Surface Water Outfall				0
12	<i>Number of incidents where site compliant with discharge consent</i>				0

13	Total (Sewage and Water and Surface Water) related Premises (Automatically Calculated)	0	0	0
14	<i>Total (Sewage and Water and Surface Water) number of Incidents where site compliant with Discharge Consent (Automatically Calculated)</i>	0	0	0

15	Total Number of all Category 1-3 incidents (Automatically Calculated)	0
16	Total Number where site compliant with Consent (Automatically Calculated)	0
17	Total Number of Water Company self reported incidents	

Comments

Authorised by: ...Duncan Robertson.....

Date: .....7/6/12.....

## SEPA Annual Report to the Water Industry Commission for Scotland

**Table 1b: Pollution Incidents (Financial year 2011-12)**

		Category 1	Category 2	Category 3	Total
<b>Sewage Related Premises</b>		Total Number	Total Number	Total Number	Total Number (Cat 1-3 incidents)
1	Sewage Treatment Works		2	43	45
2	Storm Tank				0
3	Combined Sewer Overflow		3	36	39
4	Foul Sewer	3	4	262	269
5	Pumping Station	1	5	129	135
6	Rising Mains			9	9
7	Other				0
8	<i>Number of incidents where site compliant with discharge consent</i>			9	9

		Category 1	Category 2	Category 3	Total
<b>Water and Surface Water Related Premises</b>		Total Number	Total Number	Total Number	Total Number (Cat 1-3 incidents)
9	Water Treatment Works	1		7	8
10	Water Distribution System			2	2
11	Surface Water Outfall			2	2
12	<i>Number of incidents where site compliant with discharge consent</i>				0

13	Total (Sewage and Water and Surface Water) related Premises (Automatically Calculated)	5	14	490
14	<i>Total (Sewage and Water and Surface Water) number of Incidents where site compliant with Discharge Consent (Automatically Calculated)</i>	0	0	9

15	Total Number of all Category 1-3 incidents (Automatically Calculated)	509
16	Total Number where site compliant with Consent (Automatically Calculated)	9
17	Total Number of Water Company self reported incidents	

### Comments

Authorised by: Duncan Robertson

Date: 7/6/12.....

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Table 2: Compliance

NUMERIC CONSENTS			Calendar Year 2011	Financial year 2011-12
<b>Water Environment (Controlled Activities) Regulations 2005 (CAR)</b>				
<b>A) Sewage treatment works: Total number</b>				
1	No. of discharges on register during calendar year (in force).	nr	1370	1373
2	No. of discharges assessed for compliance	nr	596	576
3	No. of discharges confirmed failing in calendar year.	nr	30	34
4	% of discharges compliant with consent in the year	%	97.81%	97.52%
<b>B) Look-up Table Lower Tier Consents</b>				
5	No. of discharges on register during calendar year (in force).	nr	1370	1373
6	No. of discharges assessed for compliance	nr	596	576
7	No. of discharges confirmed failing in calendar year.	nr	6	10
8	% of discharges compliant with consent in the year	%	99.56%	99.27%
<b>C) Upper Tier Consents</b>				
9	No. of discharges on register during calendar year (in force).	nr	1370	1373
10	No. of discharges assessed for compliance	nr	596	576
11	No. of discharges confirmed failing in calendar year.	nr	27	29
12	% of discharges compliant with consent in the year	%	98.03%	97.89%
<b>D) Single Tier Consents</b>				
13	No. of discharges on register during calendar year (in force).	nr	1370	1373
14	No. of discharges assessed for compliance	nr	22	21
15	No. of discharges confirmed failing in calendar year.	nr	0	0
16	% of discharges compliant with consent in the year	%	100.00%	100.00%
<b>E) Absolute non-Sanitary Consents</b>				
17	No. of discharges on register during calendar year (in force).	nr	1370	1373
18	No. of discharges assessed for compliance	nr		
19	No. of discharges confirmed failing in calendar year.	nr		
20	% of discharges compliant with consent in the year	%	100.00%	100.00%
<b>F) Discharges confirmed as failing (CAR)</b>				
21	Number of discharges confirmed as failing (CAR)	nr	30	34
22	Total population equivalent confirmed as failing	nr	182,468	198,053
23	Total population equivalent served by STWs (resident) (numeric consents)	nr		
24	Percentage population equivalent confirmed as failing	%	#DIV/0!	#DIV/0!
<b>Urban Wastewater Treatment Directive (UWWTD)</b>				
<b>G) UWWTD</b>				
25	No. of discharges on register during calendar year (in force).	nr	1370	1373
26	No. of discharges assessed for compliance	nr	203	201
27	No. of discharges confirmed failing in calendar year.	nr	8	6
28	% of discharges compliant with consent in the year	%	99.42%	99.56%
<b>Overall Performance Assessment (OPA) consent measure</b>				
<b>H) Discharges confirmed as failing (OPA criteria only)</b>				
29	Number of discharges confirmed as failing (OPA)	nr		
30	Total population equivalent confirmed as failing	nr		
31	Total population equivalent served by STWs (resident) (numeric consents)	nr		
32	Percentage population equivalent confirmed as failing	%	#DIV/0!	#DIV/0!
NON-NUMERIC CONSENTS			Calendar Year 2011	Financial year 2011-12
<b>I) Non-numeric Consent</b>				
33	No. of discharges on register during calendar year (in force).	nr		
34	No. of discharges assessed for compliance	nr		
35	No. of discharges confirmed failing in calendar year.	nr		
36	% of discharges compliant with consent in the year	%	#DIV/0!	#DIV/0!
<b>Comments</b>				
Authorised by: .....Baine Hamilton..... Date: .....15/06/2012.....				

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Table 3a: Discharges Confirmed as Failing (Calendar year to end of December 2011)

SEWAGE TREATMENT WORKS (including septic tanks and crude outfalls)

DECEMBER 2011										
ASSET No.	CAR CONSENT NUMBER	ASSET NAME	CONSENT TYPE ("2 Tier", "1 Tier", "Other")	CAR Compliant / Failed (C or F)		UWWTD Compliant / Failed (C or F)	Parameter(s) failed*	OPA** Compliant / Failed (C or F)	PE	Comments
				LT	UT	ALL				
STW001472	CAR/L/1001721	Kemnay	2 Tier	C	F	C	pH (UT)	C	3,715	
STW001483	CAR/L/1001731	Fyvie	2 Tier	C	F	C	BOD (UT)	C	545	
STW001487	CAR/L/1001612	Inverurie	2 Tier	C	F	C	BOD (UT) & SS (UT)	C	15,399	
STW001545	CAR/L/1003861	Ellon	2 Tier	C	F	C	pH (UT)	C	11,162	
STW001543	CAR/L/1003845	Nigg	2 Tier	C	C	F	COD (UT)	C	276,748	
STW001823	CAR/L/1002749	Inchmarlo Care Centre	2 Tier	C	F	C	BOD (UT)	C	422	
STW000461	CAR/L/1017664	Largs	2 Tier	C	C	F	BOD (UT & LT)	F	13,690	
STW001242	CAR/L/1001672	Tain	2 Tier	C	F	C	FC (UT) & FS (UT)	F	5,780	
STW001223	CAR/L/1001896	Allanfearn	2 Tier	C	C	F	BOD (UT)	C	84,765	
STW001265	CAR/L/1001670	Cawdor	2 Tier	C	F	C	TC (UT) & FC (UT)	C	279	
STW002296	CAR/L/1002928	Gairloch	2 Tier	C	F	C	pH (UT)	C	931	
STW001249	CAR/L/1001671	Croy	2 Tier	C	F	C	TC (UT) & FC (UT)	F	391	
STW001293	CAR/L/1001665	Portmahomack	2 Tier	C	F	C	pH (UT)	C	567	
STW001251	CAR/L/1008717	Dornoch	2 Tier	C	F	C	FC (UT) & FS (UT)	C	2,597	
STW000680	CAR/L/1003619	Stranraer (Port Rodie)	2 Tier	C	C	F	BOD (UT & LT)	F	12,174	
STW000230	CAR/L/1003548	Dalscone (Old)	2 Tier	F	C	C	BOD (LT)	F	3,605	
STW002093	CAR/L/1000412	Inversnaid	2 Tier	F	F	C	BOD (UT & LT)	F	108	
STW000488	CAR/L/1003422	Luss	2 Tier	C	F	C	pH (UT)	C	509	
STW001401	CAR/L/1001739	Kennethmont	2 Tier	C	F	C	SS (UT)	C	138	
STW001309	CAR/L/1001740	Grantown on Spey	2 Tier	C	F	F	SS (UT), BOD (UT) & COD (UT)	C	4,372	
STW001289	CAR/L/1001747	Carrbridge	2 Tier	C	F	C	pH (UT)	C	868	
STW003492	CAR/L/1004186	Dyke	2 Tier	F	C	C	BOD (LT)	F	200	
STW001312	CAR/L/1003971	Forres	2 Tier	C	C	F	BOD (UT) & COD (UT & LT)	C	11,276	
STW003754	CAR/L/1001451	Upperton Village	2 Tier	F	F	C	BOD (UT & LT)	F	143	
STW000921	CAR/L/1002174	Dunnet	2 Tier	F	C	C	FC (LT)	F	297	
STW001931	CAR/L/1016489	Stromness	2 Tier	C	F	C	SS (UT)	C	2,617	
STW001727	CAR/L/1000993	Burrelton	2 Tier	C	F	C	SS (UT)	C	665	
STW000483	CAR/L/1000666	Lochwinnoch	2 Tier	C	F	F	BOD (UT), SS (UT) & COD (UT)	C	2,759	
STW000707	CAR/L/1003315	Thankerton	2 Tier	C	F	C	SS (UT)	C	475	
STW000138	CAR/L/1011152	Cartland Village	2 Tier	F	F	C	BOD (UT & LT)	F	84	
STW000355	CAR/L/1005030	Hamilton	2 Tier	C	F	C	SS (UT)	C	63,106	
STW000576	CAR/L/1063681	Philipshill	2 Tier	C	F	C	NH3 (UT)	C	58,835	
STW000039	CAR/L/1003399	Ashgill	2 Tier	C	F	C	BOD (UT) & SS (UT)	C	1,445	
STW001979	CAR/L/1003819	Alloa	2 Tier	C	C	F	BOD (UT)	C	43,493	
STW000418	CAR/L/1000371	Kilmartin	2 Tier	C	F	C	BOD (UT) & SS (UT)	C	158	
STW001602	CAR/L/1001654	Acharacle	2 Tier	C	F	C	pH (UT)	C	298	

\* BOD, COD, SS, NH3, pH, Scheme in breach of statutory deadlines, etc. For UWWTD failures specify: Reporting, Audit, Insufficient samples, BOD UT, BOD LUT, COD UT, COD LUT or Annual average (or a combination of these).  
 \*\* Please follow OPA criteria as described in the "Ofwat OPA guidance" worksheet

Levels of Service analysis

- 1) The Levels of Service analysis only includes BOD LUT and P failures for UWWT reporting
- 2) In the Levels of Service analysis, where a STW failures both the LUT part of its CAR consent and the BOD LUT or P UWWT consent condition, the failure is reported against the CAR consent only

FAILING PE (OPA)	36,472
TOTAL NUMERICALLY CONSENTED PE (OPA)	10
%PE FAILING (OPA)	364722.71%
LOWER TIER FAILING	6
UPPER TIER FAILING	27
SINGLE TIER FAILING	0
TOTAL FAILING	30

Comments

Authorised by: .....Eaine Hamilton..... Date: ...15/06/2012.....

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Table 3b: Discharges Confirmed as Failing (Financial year 2011-12)

SEWAGE TREATMENT WORKS (including septic tanks and crude outfalls)

MARCH 2012										
ASSET No.	CAR CONSENT NUMBER	ASSET NAME	CONSENT TYPE	CAR		UWWT	Parameter(s) failed*	OPA**	PE	Comments
				Compliant / Failed (C or F)	Compliant / Failed (C or F)	Compliant / Failed (C or F)		Compliant / Failed (C or F)		
			(2 Tier, 1 Tier, Other)	LT	UT	ALL				
STW001472	CAR/L/1001721	Kemnay	2 Tier	C	F	C	pH (UT)	C	3,715	
STW001483	CAR/L/1001731	Fyvie	2 Tier	C	F	C	BOD (UT)	C	545	
STW001487	CAR/L/1001612	Inverurie	2 Tier	C	F	C	BOD (UT) & SS (UT)	C	15,399	
STW001545	CAR/L/1003861	Ellon	2 Tier	C	F	C	pH (UT)	C	11,162	
STW001543	CAR/L/1003845	Nigg	2 Tier	C	C	F	COD (UT)	C	276,748	
STW001823	CAR/L/1002749	Inchmarlo Care Centre	2 Tier	C	F	C	BOD (UT)	C	422	
STW000461	CAR/L/1017664	Largs	2 Tier	C	C	F	BOD (UT & LT)	C	13,690	
STW001242	CAR/L/1001672	Tain	2 Tier	C	F	C	FC (UT) & FS (UT)	F	5,780	
STW001265	CAR/L/1001670	Cawdor	2 Tier	C	F	C	TC (UT) & FC (UT)	C	279	
STW002296	CAR/L/1002928	Gairloch	2 Tier	C	F	C	pH (UT)	C	931	
STW001249	CAR/L/1001671	Croy	2 Tier	C	F	C	TC (UT) & FC (UT)	C	391	
STW001293	CAR/L/1001665	Portmahomack	2 Tier	C	F	C	pH (UT)	C	567	
STW001251	CAR/L/1008717	Dornoch	2 Tier	C	F	C	FC (UT) & FS (UT)	C	2,597	
STW000680	CAR/L/1003619	Stranraer (Port Rodie)	2 Tier	C	C	F	BOD (UT & LT)	F	12,174	
STW000230	CAR/L/1003548	Dalscone (Old)	2 Tier	F	C	C	BOD (LT)	F	3,605	
STW002093	CAR/L/1000412	Inversnaid	2 Tier	F	F	C	BOD (UT & LT)	F	108	
STW000488	CAR/L/1003422	Luss	2 Tier	C	F	C	pH (UT)	C	509	
STW001401	CAR/L/1001739	Kennethmont	2 Tier	F	F	C	SS (UT) & BOD (LT)	F	138	
STW001289	CAR/L/1001747	Carrbridge	2 Tier	C	F	C	pH (UT)	C	868	
STW003492	CAR/L/1004186	Dyke	2 Tier	F	C	C	BOD (LT)	F	200	
STW001312	CAR/L/1003971	Forres	2 Tier	C	C	F	BOD (UT) & COD (UT & LT)	C	11,276	
STW003754	CAR/L/1001451	Upperton Village	2 Tier	F	F	C	BOD (UT & LT)	F	143	
STW000921	CAR/L/1002174	Dunnet	2 Tier	F	C	C	FC (LT)	F	297	
STW001931	CAR/L/1016489	Stromness	2 Tier	C	F	C	SS (UT)	C	2,617	
STW001727	CAR/L/1000993	Burrelton	2 Tier	C	F	C	SS (UT)	C	665	
STW000483	CAR/L/1000666	Lochwinnoch	2 Tier	C	F	F	BOD (UT), SS (UT) & COD (UT)	C	2,759	
STW000707	CAR/L/1003315	Thankerton	2 Tier	C	F	C	SS (UT)	C	475	
STW000138	CAR/L/1011152	Cartland Village	2 Tier	F	F	C	BOD (UT & LT)	F	84	
STW000576	CAR/L/1063681	Philipshill	2 Tier	C	F	C	NH3 (UT)	C	58,835	
STW000039	CAR/L/1003399	Ashgill	2 Tier	C	F	C	BOD (UT) & SS (UT)	C	1,445	
STW001979	CAR/L/1003819	Alloa	2 Tier	C	C	F	BOD (UT)	C	43,493	
STW000418	CAR/L/1000371	Kilmartin	2 Tier	C	F	C	BOD (UT) & SS (UT)	C	158	
STW001780	CAR/L/1009517	Monikie	2 Tier	C	F	C	BOD (UT) & SS (UT)	C	449	
STW002268	CAR/L/1001375	Stirling	2 Tier	C	F	C	pH (UT)	C	69,026	
STW002011	CAR/L/1003386	Balmaha	2 Tier	C	F	C	BOD (UT)	C	195	
STW001491	CAR/L/1001718	Inverurie (New)	2 Tier	C	F	C	BOD (UT) & SS (UT)	C	10,528	
STW001348	CAR/L/1001764	Craigellachie	2 Tier	F	C	C	SS (LT)	F	558	
STW001325	CAR/L/1001754	Dallas	2 Tier	F	F	C	SS (UT & LT)	F	106	
STW000295	CAR/L/10006756	Forth	2 Tier	F	C	C	BOD (LT)	F	2,498	

FAILING PE (OPA) **25,691**  
 TOTAL NUMERICALLY CONSENTED PE (OPA) **12**

%PE FAILING (OPA)	<b>214088.03%</b>
LOWER TIER FAILING	<b>10</b>
UPPER TIER FAILING	<b>29</b>
SINGLE TIER FAILING	<b>0</b>
TOTAL FAILING	<b>34</b>

Comments

Authorised by: .....Baine Hamilton..... Date: .....15/06/2012.....

Date: Mar 2012  
 Revision: 15.0

## Overall Performance Assessment (OFWAT environmental measures)

### 1) Sewage treatment works consent compliance

An assessment of sewage treatment works (STWs) with the conditions of their discharge consents.

#### Unit of assessment

An assessment of the percentage population equivalent (pe) served by STWs that do not comply with the conditions of their discharge consents. The measure addresses compliance with conditions covering the following.

- Sanitary determinands of 1991 Water Resources Act numeric consents.
- Bio-chemical oxygen demand and phosphorus determinands of Urban
- Waste Water Treatment Directive (UWWTD) consents.
- Phosphorus determinands of 1991 Water Resource Act numeric consents.
- Disinfection conditions of 1991 Water Resource Act consents.

#### Sewage treatment works compliance conditions included in the OPA

Parameter	Legislation	Compliance condition
Biochemical oxygen demand (BOD)	WRA <sup>1</sup>	Compliance with the look up table (LUT) effluent consent condition limits
	UWWT <sup>2</sup>	Compliance with LUT consent condition limit requiring percentage removal of BOD across the works, as assessed by influent and effluent BOD concentrations.
Suspended solids (SS)	WRA	Compliance with the LUT effluent consent condition limit
Ammonia (NH4)	WRA	Compliance with the LUT effluent consent condition limit
Phosphorus (P)	WRA	Compliance with the effluent consent condition limit
	UWWT <sup>2</sup>	Compliance with the consent condition limit requiring percentage removal of P across the works, as assessed by influent and effluent P concentrations.
UV Disinfection	WRA	Compliance with the required UV dose for 99% of the time (where the period of time is annual or seasonal as specified in the consent conditions <sup>3</sup> ).

<sup>1</sup> WRA – Water Resources Act

<sup>2</sup> UWWT – Urban Waste Water Treatment Regulations

The UWWT regulations provide two approaches for BOD and P: A works is considered to have met compliance conditions if it passes either of these conditions.

<sup>3</sup> Some works are required to apply UV disinfection year round, others during the bathing

#### Calculation

pe of STWs failing their consent conditions for sanitary determinands, phosphorus determinands and disinfection conditions x100

Relevant pe served (resident) (numeric consents)

#### Performance range

The performance range against which individual company OPA scores are calculated will be:

Max 4.93

Min 0

### 2) Category 1 and 2 pollution incidents (sewage)

#### Description

An assessment of the number of category 1 and 2 pollution incidents resulting from sewage collection and treatment activities.

#### Unit of assessment

The number of category 1 and 2 pollution incidents resulting from sewage collection and treatment activities per million population equivalent (pe) served. See table for details of which pollution incidents are included.

#### Classification of pollution incidents according to each OPA measure

Source/premises	Category 1 & 2	Category 3
Sewage treatment works	Included in OPA. Category 1 & 2 pollution incidents (sewage).	Included in OPA. Category 3 pollution incidents (sewage).
Combined sewer overflow		
Storm tank		
Rising main		
Water treatment works	Included in OPA. Category 1 & 2 pollution incidents (sewage).	Not included in the OPA.
Water distribution system		
Surface water outfall		
Pumping station	Included in OPA. Category 1 & 2 pollution incidents (sewage).	Included in OPA. Category 3 pollution incidents (sewage).
Foul sewers		
Other		

#### Calculation

Category 1 and 2 pollution incidents

Population equivalent served resident / 1,000,000

#### Performance range

The performance range against which individual company OPA scores are calculated will be:

Max 6.17

Min 1.06

### 3) Category 3 pollution incidents (sewage)

#### Description

An assessment of the number of category 3 pollution incidents resulting from sewage collection and treatment activities.

#### Unit of assessment

The number of category 3 pollution incidents resulting from sewage collection and treatment activities per million population equivalent (pe) served. See table in (2) for details of which pollution incidents are included.

#### Calculation

Category 3 pollution incidents

Population equivalent served resident / 1,000,000

**Performance range**

The performance range against which individual company OPA scores are calculated will be:

Max 145.07

Min 9.44

**4) Category 1 and 2 pollution incidents (water)**

**Description**

An assessment of the number of category 1 and 2 pollution incidents resulting from water treatment and distribution activities.

**Unit of assessment**

The number of category 1 and 2 pollution incidents resulting from water treatment and distribution activities per million winter population served. See

table in (2) for details of which pollution incidents are included.

**Calculation**

Category 1 and 2 pollution incidents

Winter population / 1,000,000

**Performance range**

The performance range against which individual company OPA scores are calculated will be:

Max 1.7

Min 0