

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

Table 1a: Pollution Incidents (Calendar year 2010)

		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	4	104	110
2	Storm Tank	0	0	0	0
3	Combined Sewer Overflow	1	3	89	93
4	Foul Sewer	0	10	378	388
5	Pumping Station	1	5	217	223
6	Rising Mains	0	0	0	0
7	Other	0	0	0	0
8	<i>Number of incidents where site compliant with discharge consent</i>	0	1	5	6

		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	0	11	11
10	Water Distribution System	0	0	0	0
11	Surface Water Outfall	0	0	4	4
12	<i>Number of incidents where site compliant with discharge consent</i>	0	0	0	0

13	Total (Sewage and Water and Surface Water) related Premises (Automatically Calculated)	4	22	803
14	<i>Total (Sewage and Water and Surface Water) number of Incidents where site compliant with Discharge Consent (Automatically Calculated)</i>	0	1	5

15	Total Number of all Category 1-3 incidents (Automatically Calculated)	829
16	Total Number where site compliant with Consent (Automatically Calculated)	6
17	Total Number of Water Company self reported incidents	324

Comments

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

Date: ...15 June 2011

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

**Table 1b: Pollution Incidents (Financial year 2010-11)**

		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	5	104	111
2	Storm Tank	0	0	1	1
3	Combined Sewer Overflow	1	3	82	86
4	Foul Sewer	0	11	397	408
5	Pumping Station	1	5	212	218
6	Rising Mains	0	0	0	0
7	Other	0	0	0	0
8	<i>Number of incidents where site compliant with discharge consent</i>	0	1	7	8

		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	0	11	11
10	Water Distribution System	0	0	0	0
11	Surface Water Outfall	0	0	0	0
12	<i>Number of incidents where site compliant with discharge consent</i>	0	1	0	1

13	Total (Sewage and Water and Surface Water) related Premises (Automatically Calculated)	4	24	807
14	<i>Total (Sewage and Water and Surface Water) number of Incidents where site compliant with Discharge Consent (Automatically Calculated)</i>	0	2	7

15	Total Number of all Category 1-3 incidents (Automatically Calculated)	835
16	Total Number where site compliant with Consent (Automatically Calculated)	9
17	Total Number of Water Company self reported incidents	330

### Comments

Authorised by: Duncan Robertson

Date: 15 June 2011

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

Table 2: Compliance

NUMERIC CONSENTS			Calendar Year 2010	Financial year 2010-11
<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	1261	1262
2	No. of discharges assessed for compliance	nr	605	591
3	No. of discharges confirmed failing in calendar year.	nr	31	31
4	% of discharges compliant with consent in the year	%	97.54%	97.54%
<b>B) Look-up Table Lower Tier Consents</b>				
5	No. of discharges on register during calendar year (in force).	nr	1261	1262
6	No. of discharges assessed for compliance	nr	605	591
7	No. of discharges confirmed failing in calendar year.	nr	11	11
8	% of discharges compliant with consent in the year	%	99.13%	99.13%
<b>C) Upper Tier Consents</b>				
9	No. of discharges on register during calendar year (in force).	nr	1261	1262
10	No. of discharges assessed for compliance	nr	605	591
11	No. of discharges confirmed failing in calendar year.	nr	24	24
12	% of discharges compliant with consent in the year	%	98.10%	98.10%
<b>D) Single Tier Consents</b>				
13	No. of discharges on register during calendar year (in force).	nr	1261	1262
14	No. of discharges assessed for compliance	nr	24	22
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		
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	%	#DIV/0!	#DIV/0!
<b>F) Discharges confirmed as failing (CAR)</b>				
21	Number of discharges confirmed as failing (CAR)	nr		
22	Total population equivalent confirmed as failing	nr		
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	1261	1262
26	No. of discharges assessed for compliance	nr	201	201
27	No. of discharges confirmed failing in calendar year.	nr	7	6
28	% of discharges compliant with consent in the year	%	99.44%	99.52%
<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 2010	Financial year 2010-11
<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: ...15/06/2011.....				

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Table 3a: Discharges Confirmed as Failing (Calendar year 2010)

SEWAGE TREATMENT WORKS (including septic tanks and crude outfalls)

DECEMBER 2010										
ASSET No.	CAR CONSENT NUMBER	ASSET NAME	CONSENT TYPE	CAR		UWWTD	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				
STW001494	CAR/L/1001715	Oldmeldrum	2 Tier	F	C	C	NH3 (LT)	F	2,726	
STW001504	CAR/L/1001717	Clinterty	2 Tier	C	F	C	pH (UT)	C	248	
STW001529	CAR/L/1001724	Udny Station	2 Tier	C	F	C	BOD (UT)	C	258	
STW001453	CAR/L/1003858	Sauchen	2 Tier	C	F	C	pH (UT)	C	337	
STW001545	CAR/L/1003861	Ellon	2 Tier	C	F	C	pH (UT)	C	10,865	
STW001543	CAR/L/1003845	Nigg	2 Tier	C	F	C	Cu (UT) & Hg (UT)	C	292,629	
STW000670	CAR/L/1003264	Stevenston	2 Tier	C	F	C	Zn (UT)	C	88,497	
STW000671	CAR/L/1003405	Stewarton	2 Tier	C	F	C	NH3 (UT)	C	7,386	
STW002269	CAR/L/1000975	Eccles	2 Tier	F	C	C	NH3 (LT)	F	87	
STW002274	CAR/L/1001521	Eyemouth	2 Tier	C	C	F	BOD (UT) & COD (UT)	C	12,806	
STW001242	CAR/L/1001672	Tain	2 Tier	C	F	C	FC (UT) & FS (UT)	F	5,407	Faecal coliforms and Faecal streps
STW001144	CAR/L/1002065	Cannich Village	2 Tier	C	F	C	SS (UT)	C	238	
STW000680	CAR/L/1003619	Stranraer (Port Rodie)	2 Tier	C	C	F	BOD (UT & LT) & COD (LT)	F	16,081	
STW000012	CAR/L/1003555	Johnstone Park	2 Tier	C	F	C	BOD (UT)	C	70	
STW002093	CAR/L/1000412	Inversnaid	2 Tier	C	F	C	BOD (UT) & SS (UT)	C	136	
STW000033	CAR/L/1003274	Ardoch	2 Tier	C	C	F	BOD (UT), & COD (UT)	C	68,997	
STW002149	CAR/L/1010828	Rosewell	2 Tier	F	C	C	BOD (LT)	F	1,631	
STW001312	CAR/L/1003971	Forres	2 Tier	C	C	F	BOD (UT)	C	11,362	
STW001309	CAR/L/1001740	Grantown on Spey	2 Tier	C	F	F	SS (UT), BOD (UT & LT) & COD (UT & LT)	F	5,991	
STW001289	CAR/L/1001747	Carrbridge	2 Tier	C	F	C	pH (UT)	C	988	
STW003492	CAR/L/1004186	Dyke	2 Tier	C	F	C	SS (UT)	C	201	
STW001345	CAR/L/1004123	Oakenhead	2 Tier	C	F	C	BOD (UT) & SS (UT)	C	42,100	
STW001299	CAR/L/1008790	Nethy Bridge	2 Tier	F	C	C	NH3 (LT)	F	728	
STW002260	CAR/L/1001581	Bonnybridge	2 Tier	F	F	C	NH3 (LT) & SS (UT)	F	14,702	
STW000361	CAR/L/1003791	Harthill	2 Tier	C	F	C	Fe (UT)	C	3,976	
STW002141	CAR/L/1001073	Peat Inn	2 Tier	F	C	C	BOD (LT)	F	141	
STW000642	CAR/L/1003303	Shieldhall	2 Tier	C	F	C	Cu (UT) & Zn (UT)	C	498,898	
STW000921	CAR/L/1002174	Dunnet	2 Tier	F	F	C	FC (UT & LT)	F	231	Faecal coliforms
STW003713	CAR/L/1002984	St Margarets Hope	2 Tier	C	F	C	BOD (UT)	C	387	
STW001931	CAR/L/1016489	Stromness	2 Tier	C	F	C	BOD (UT) & SS (UT)	C	2,241	
STW001731	CAR/L/1001033	Coupar Angus	2 Tier	F	F	C	BOD (LT) & SS (UT)	F	14,699	
STW000076	CAR/L/1003429	Blackwood	2 Tier	F	C	F	BOD (LT)	F	4,085	
STW000138	CAR/L/1011152	Cartland Village	2 Tier	F	F	C	BOD (UT & LT)	F	85	
STW002052	CAR/L/1001411	Dollar	2 Tier	F	C	C	BOD (LT)	F	2,888	
STW000973	CAR/L/1001633	Daliburgh North	2 Tier	C	F	C	SS(UT)	C	142	
STW002065	CAR/L/1000921	Falim	2 Tier	C	C	F	BOD (LT)	F	2,523	

\* 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) **72,007**  
 TOTAL NUMERICALLY CONSENTED PE (OPA) **15**

%PE FAILING (OPA)	<b>480045.64%</b>
LOWER TIER FAILING	<b>11</b>
UPPER TIER FAILING	<b>24</b>
SINGLE TIER FAILING	<b>0</b>
TOTAL FAILING	<b>31</b>

Comments

Authorised by: Elaine Hamilton..... Date: ...15/06/2011.....

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Table 3b: Discharges Confirmed as Failing (Financial year 2010-11)

SEWAGE TREATMENT WORKS (including septic tanks and crude outfalls)

MARCH 2011										
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				
STW001504	CAR/L/1001717	Clinterty	2 Tier	C	F	C	pH (UT)	C	248	
STW001453	CAR/L/1003858	Sauchen	2 Tier	C	F	C	pH (UT)	C	337	
STW001545	CAR/L/1003861	Eilon	2 Tier	C	F	C	pH (UT)	C	10,865	
STW001476	CAR/L/1001719	Daviot	2 Tier	F	C	C	NH3 (LT)	F	436	
STW001522	CAR/L/1003857	Newmachar	2 Tier	F	C	C	NH3 (LT)	F	3,007	
STW001543	CAR/L/1003845	Nigg	2 Tier	C	F	C	Cu (UT) & Hg (UT)	C	292,629	
STW000670	CAR/L/1003264	Stevenson	2 Tier	C	F	C	Zn (UT)	C	88,497	
STW000671	CAR/L/1003405	Stewarton	2 Tier	C	F	C	NH3 (UT)	C	7,386	
STW002269	CAR/L/1000975	Eccles	2 Tier	F	C	C	NH3 (LT)	F	87	
STW002274	CAR/L/1001521	Eyemouth	2 Tier	C	C	F	BOD (UT) & COD (UT)	C	12,806	
STW001242	CAR/L/1001672	Tain	2 Tier	C	F	C	FC (UT) & FS (UT)	F	5,407	Faecal coliforms and Faecal streps
STW001223	CAR/L/1001896	Allanfean	2 Tier	C	C	F	BOD (UT)	C	86,237	
STW000680	CAR/L/1003619	Stranraer (Port Rodie)	2 Tier	C	C	F	BOD (UT)	C	16,081	
STW002093	CAR/L/1000412	Inversnaid	2 Tier	C	F	C	BOD (UT) & SS (UT)	C	136	
STW002149	CAR/L/1010828	Rosewell	2 Tier	F	C	C	BOD (LT)	F	1,631	
STW001312	CAR/L/1003971	Forres	2 Tier	C	C	F	BOD (UT)	C	11,362	
STW001309	CAR/L/1001740	Grantown on Spey	2 Tier	C	F	F	SS (UT), BOD (UT & LT) & COD (UT & LT)	F	5,991	
STW001289	CAR/L/1001747	Carrbridge	2 Tier	C	F	C	pH (UT)	C	988	
STW003492	CAR/L/1004186	Dyke	2 Tier	C	F	C	SS (UT)	C	201	
STW001345	CAR/L/1004123	Oakenhead	2 Tier	C	F	C	BOD (UT) & SS (UT)	C	42,100	
STW001299	CAR/L/1008790	Nethy Bridge	2 Tier	F	C	C	NH3 (LT)	F	728	
STW002260	CAR/L/1001581	Bonnybridge	2 Tier	F	F	C	SS (UT) & NH3 (LT)	F	14,702	
STW000361	CAR/L/1003791	Harthill	2 Tier	C	F	C	Fe (UT)	C	3,976	
STW002182	CAR/L/1001314	Westfield Village	2 Tier	F	C	C	NH3 (LT)	F	425	
STW000642	CAR/L/1003303	Shieldhall	2 Tier	C	F	C	Cu (UT) & Zn (UT)	C	498,898	
STW000921	CAR/L/1002174	Dunnnet	2 Tier	F	F	C	FC (UT & LT)	F	231	Faecal coliforms
STW003713	CAR/L/1002984	St Margarets Hope	2 Tier	C	F	C	BOD (UT)	C	387	
STW001931	CAR/L/1016489	Stromness	2 Tier	C	F	C	BOD (UT) & SS (UT)	C	2,241	
STW001731	CAR/L/1001033	Coupar Angus	2 Tier	F	F	C	BOD (LT) & SS (UT)	F	14,699	
STW000138	CAR/L/1011152	Cartland Village	2 Tier	F	F	C	BOD (UT & LT)	F	85	
STW000355	CAR/L/1005030	Hamilton	2 Tier	C	F	C	SS (UT)	C	63,972	
STW000576	CAR/L/1063681	Philipshill	2 Tier	C	F	C	NH3 (UT)	C	56,932	
STW000085	CAR/L/1003431	Bothwellbank	2 Tier	F	C	C	BOD (LT)	F	24,514	
STW002065	CAR/L/1000921	Fallin	2 Tier	C	C	F	BOD (LT)	F	2,523	
STW000973	CAR/L/1001633	Daliburgh North	2 Tier	C	F	C	SS (UT)	C	142	
STW001602	CAR/L/1001654	Acharacle	2 Tier	C	F	C	pH (UT)	C	396	

FAILING PE (OPA) **74,467**  
 TOTAL NUMERICALLY CONSENTED PE (OPA) **14**

%PE FAILING (OPA)	<b>531906.69%</b>
LOWER TIER FAILING	<b>11</b>
UPPER TIER FAILING	<b>24</b>
SINGLE TIER FAILING	<b>0</b>
TOTAL FAILING	<b>31</b>

Comments

Authorised by: .....Baine Hamilton..... Date: ...15/06/2011.....

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

#### 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