Section: **E**   **Operating Costs and Efficiency**

Table: **E8**   **Wastewater explanatory factors - sewage treatment works**

E8.1	Size band 0	nr	0dp

Data Definition: The number of treatment works in each category should be entered in the appropriate column. Sea outfalls should be classified in the relevant column according to whether preliminary treatment or simple screening is provided.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | - | WICS 06 Ref: | E8.1 |

E8.2	Size band 1	nr	0dp

Data Definition: The number of treatment works in each category should be entered in the appropriate column. Sea outfalls should be classified in the relevant column according to whether preliminary treatment or simple screening is provided.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17c, L1 | WICS 06 Ref: | E8.2 |

E8.3	**Size band 2**		**nr**	**0dp**

Data Definition: The number of treatment works in each category should be entered in the appropriate column. Sea outfalls should be classified in the relevant column according to whether preliminary treatment or simple screening is provided.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17c, L2 | WICS 06 Ref: | E8.3

E8.4	**Size band 3**		**nr**	**0dp**

Data Definition: The number of treatment works in each category should be entered in the appropriate column. Sea outfalls should be classified in the relevant column according to whether preliminary treatment or simple screening is provided.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17c, L3 | WICS 06 Ref: | E8.4

E8.5	**Size band 4**		**nr**	**0dp**

Data Definition: The number of treatment works in each category should be entered in the appropriate column. Sea outfalls should be classified in the relevant column according to whether preliminary treatment or simple screening is provided.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17c, L4 | WICS 06 Ref: | E8.5

E8.6	Size band 5			nr	0dp

Data Definition: The number of treatment works in each category should be entered in the appropriate column.Sea outfalls should be classified in the relevant column according to whether preliminary treatment or simple screening is provided.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17c, L5 | WICS 06 Ref: | E8.6 |

E8.7	Size band 6 (large works)			nr	0dp

Data Definition: The number of treatment works in each category should be entered in the appropriate column. Sea outfalls should be classified in the relevant column according to whether preliminary treatment or simple screening is provided.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17c, L6 | WICS 06 Ref: | E8.7 |

E8.8	Total sewage treatment works			nr	0dp

Data Definition: The total numbers of sewage treatment works and sea outfalls (all sizes) providing each category of treatment.

Processing Rule: Sum of E8.1 to E8.7

Field Type: Calculated

Previous References: Ofwat 07 Ref: | T17c, L7 | WICS 06 Ref: | E8.8 |

E8.9	Small Sewage treatment works with ammonia consent 5 - 10 mg/l	nr	0dp

Data Definition: The number of small sewage treatment works with ammonia consents of between 5 and 10mg/l (including 10mg/l). Note that these works must also be included in the appropriate categories in lines 1-5 above, to ensure that the total numbers of works are correct.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: T17c, L8   WICS 06 Ref: E8.9

E8.10	Small Sewage treatment works with ammonia consent <= 5 mg/l	nr	0dp

Data Definition: The number of small sewage treatment works with ammonia consents of 5mg/l or less. Note that these works must also be included in the appropriate categories in lines 1-5 above, to ensure that the total numbers of works are correct.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: T17c, L9   WICS 06 Ref: E8.10

E8.11	Size band 0	kg BOD/day	0dp

Data Definition: The average daily road received (in kg of BOD5/day) by STWs of size band 0 (<=6kg BOD5/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: -   WICS 06 Ref: E8.11

E8.12	Size band 1		kg BOD/day	0dp

Data Definition: The average daily road received (in kg of BOD5/day) by STWs of size band 1 (6 - 15kg BOD5/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17d, L1 | WICS 06 Ref: | E8.12 |

E8.13	Size band 2		kg BOD/day	0dp

Data Definition: The average daily road received (in kg of BOD5/day) by STWs of size band 2 (15-30kg BOD5/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17d, L2 | WICS 06 Ref: | E8.13 |

E8.14	Size band 3		kg BOD/day	0dp

Data Definition: The average daily road received (in kg of BOD5/day) by STWs of size band 3 (30-120kg BOD5/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17d, L3 | WICS 06 Ref: | E8.14 |

E8.15	Size band 4	kg BOD/day	0dp

Data Definition: The average daily road received (in kg of BOD5/day) by STWs of size band 4 (120-600kg BOD5/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: T17d, L4   WICS 06 Ref: E8.15

E8.16	Size band 5	kg BOD/day	0dp

Data Definition: The average daily road received (in kg of BOD5/day) by STWs of size band 5 (600-1500kg BOD5/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: T17d, L5   WICS 06 Ref: E8.16

E8.17	Size Band 6 (large works)	kg BOD/day	0dp

Data Definition: The average daily road received (in kg of BOD5/day) by STWs of size band 6 (>1500kg BOD5/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: T17d, L6   WICS 06 Ref: E8.17

E8.18	Total load received	kg BOD/day	0dp

Data Definition: The total of the average daily road received (in kg of BOD5/day) by each type of sewage treatment works (for all sizes). The figures reported here should be consistent with those reported in line A3.21, X 1000/365, for the report year (366 if report year is a leap year).

Processing Rule: The sum of lines E8.1 1 to E8.17.

Field Type: Calculated

Previous References: Ofwat 07 Ref: | T17d, L7 | WICS 06 Ref: | E8.18 |

E8.19	Small sewage treatment works with ammonia consent 5 - 10 mg/l	kg BOD/day	0dp

Data Definition: The average daily load (in kg BOD5/day) received by small sewage treatment works (those receiving <=1500 kg BOD5/day) with ammonia consents which are less than (or equal to) 10mg/l but greater than 5mg/l.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17d, L8 | WICS 06 Ref: | E8.19 |

E8.20	Small sewage treatment works with ammonia consent <= 5 mg/l	kg BOD/day	0dp

Data Definition: The average daily load (in kg BOD5/day) received by small sewage treatment works (those receiving <=1500 kg BOD5/day) with ammonia consents of 5mg/l or less.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17d, L9 | WICS 06 Ref: | E8.20 |

E8.21	**Size band 0**		%	1dp

Data Definition: The average percentage of compliance with discharge consents for STWs of size band 0 (<=6kg BOD5/day) for each treatment category. This should be calculated as the unweighted mean for works in each particular treatment category. The convention outlined under the common definitions should be used to calculate the STW size.

Sea outfalls should include those discharging untreated sewage and sewage subject to preliminary treatment in the relevant column. The figure reported must be the compliance figures determined by the Scottish Environmental Protection Agency, not as interpreted by SW.

Processing Rule: Input field

Field Type: Input

Previous References: Ofwat 07 Ref: | - | WICS 06 Ref: | E8.21 |

E8.22	**Size band 1**		%	1dp

Data Definition: The average percentage of compliance with discharge consents for STWs of size band 1 (6-15kg BOD5/day) for each treatment category. This should be calculated as the unweighted mean for works in each particular treatment category. The convention outlined under the common definitions should be used to calculate the STW size.

Sea outfalls should include those discharging untreated sewage and sewage subject to preliminary treatment in the relevant column. The figure reported must be the compliance figures determined by the Scottish Environmental Protection Agency, not as interpreted by SW.

Processing Rule: Input field

Field Type: Input

Previous References: Ofwat 07 Ref: | - | WICS 06 Ref: | E8.22 |

E8.23	Size band 2		%	1dp

Data Definition: The average percentage of compliance with discharge consents for STWs of size band 2 (15-30kg BOD5/day) for each treatment category. This should be calculated as the unweighted mean for works in each particular treatment category. The convention outlined under the common definitions should be used to calculate the STW size.

Sea outfalls should include those discharging untreated sewage and sewage subject to preliminary treatment in the relevant column. The figure reported must be the compliance figures determined by the Scottish Environmental Protection Agency, not as interpreted by SW.

Processing Rule: Input field

Field Type: Input

Previous References: Ofwat 07 Ref: | - | WICS 06 Ref: | E8.23

E8.24	Size band 3		%	1dp

Data Definition: The average percentage of compliance with discharge consents for STWs of size band 3 (30-120kg BOD5/day) for each treatment category. This should be calculated as the unweighted mean for works in each particular treatment category. The convention outlined under the common definitions should be used to calculate the STW size.

Sea outfalls should include those discharging untreated sewage and sewage subject to preliminary treatment in the relevant column. The figure reported must be the compliance figures determined by the Scottish Environmental Protection Agency, not as interpreted by SW.

Processing Rule: Input field

Field Type: Input

Previous References: Ofwat 07 Ref: | - | WICS 06 Ref: | E8.24

E8.25	**Size band 4**	%	1dp

Data Definition: The average percentage of compliance with discharge consents for STWs of size band 4 (120-600kg BOD5/day) for each treatment category. This should be calculated as the unweighted mean for works in each particular treatment category. The convention outlined under the common definitions should be used to calculate the STW size.

Sea outfalls should include those discharging untreated sewage and sewage subject to preliminary treatment in the relevant column. The figure reported must be the compliance figures determined by the Scottish Environmental Protection Agency, not as interpreted by SW.

Processing Rule: Input field

Field Type: Input

Previous References: Ofwat 07 Ref: | - | WICS 06 Ref: | E8.25 |

E8.26	**Size band 5**	%	1dp

Data Definition: The average percentage of compliance with discharge consents for STWs of size band 5 (600-1500kg BOD5/day) for each treatment category. This should be calculated as the unweighted mean for works in each particular treatment category. The convention outlined under the common definitions should be used to calculate the STW size.

Sea outfalls should include those discharging untreated sewage and sewage subject to preliminary treatment in the relevant column. The figure reported must be the compliance figures determined by the Scottish Environmental Protection Agency, not as interpreted by SW.

Processing Rule: Input field

Field Type: Input

Previous References: Ofwat 07 Ref: | - | WICS 06 Ref: | E8.26 |

E8.27	Size band 6 (large works)	%	1dp

Data Definition: The average percentage of compliance with discharge consents for STWs of size band 6 (>1500kg BOD5/day) for each treatment category. This should be calculated as the unweighted mean for works in each particular treatment category. The convention outlined under the common definitions should be used to calculate the STW size.

Sea outfalls should include those discharging untreated sewage and sewage subject to preliminary treatment in the relevant column. The figure reported must be the compliance figures determined by the Scottish Environmental Protection Agency, not as interpreted by SW.

Processing Rule: Input field

Field Type: Input

Previous References: Ofwat 07 Ref: -   WICS 06 Ref: E8.27

E8.28	Average compliance by works - all sizes	%	1dp

Data Definition: The total average percentage of compliance with discharge consents for all STWs in each treatment category. This should be calculated as the unweighted mean of percentage compliance for all sizes of works of each particular treatment type.

Sea outfalls should include those discharging untreated sewage and sewage subject to preliminary treatment in the relevant column. The figures reported must be the compliance figures determined by the Scottish Environmental Protection Agency, not as interpreted by SW.

Processing Rule: Input field

Field Type: Input

Previous References: Ofwat 07 Ref: -   WICS 06 Ref: E8.28

E8.29	Small sewage treatment works with ammonia consent 5 - 10 mg/l	%	1dp

Data Definition: The average percentage of compliance with discharge consents for all types of small STWs (receiving <=1500kg by BOD5/day load) with ammonia (NH3) consents which are less than (or equal to) 10mg/l but greater than 5mg/l.

This should be calculated as the unweighted mean of percentage compliance for all sizes of works of each particular treatment type.

Processing Rule: Input field

Field Type: Input

Previous References: Ofwat 07 Ref: -   WICS 06 Ref: E8.29

E8.30	Small sewage treatment works with ammonia consent <= 5 mg/l	%	1dp

Data Definition: The average percentage of compliance with discharge consents for all types of small STWs (receiving <=1500kg by BOD5/day load) with ammonia (NH3) consents, which are less than (or equal to) 5mg/l.

This should be calculated as the unweighted mean of percentage compliance for all sizes of works of each particular treatment type.

Processing Rule: Input field

Field Type: Input

Previous References: Ofwat 07 Ref: -   WICS 06 Ref: E8.30

E8.31	Direct costs for works in size band 0	£000	3dp

Data Definition: The direct costs for works in size band 0. Direct costs are defined in RAR 4 for Table M18WW.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: -   WICS 06 Ref: E8.31

E8.32	Direct costs for works in size band 1	£000	3dp

Data Definition: The direct costs for works in size band 1. Direct costs are defined in RAR 4 for Table M18WW.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17f, L1 | WICS 06 Ref: | E8.32

E8.33	Direct costs for works in size band 2	£000	3dp

Data Definition: The direct costs for works in size band 2. Direct costs are defined in RAR 4 for Table M18WW.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17f, L2 | WICS 06 Ref: | E8.33

E8.34	Direct costs for works in size band 3	£000	3dp

Data Definition: The direct costs for works in size band 3. Direct costs are defined in RAR 4 for Table M18WW.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17f, L3 | WICS 06 Ref: | E8.34

E8.35	**Direct costs for works in size band 4**	**£000**	**3dp**

Data Definition: The direct costs for works in size band 4. Direct costs are defined in RAR 4 for Table M18WW.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17f, L4 | WICS 06 Ref: | E8.35

E8.36	**Direct costs for works in size band 5**	**£000**	**3dp**

Data Definition: The direct costs for works in size band 5. Direct costs are defined in RAR 4 for Table M18WW.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17f, L5 | WICS 06 Ref: | E8.36

E8.37	**Direct costs for works in size band 6 (large works)**	**£000**	**3dp**

Data Definition: The direct costs for works in size band 6. Direct costs are defined in RAR 4 for Table M18WW.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17f, L6 | WICS 06 Ref: | E8.37

E8.38	Direct costs for all sewage treatment works	£000	3dp

Data Definition: The direct costs for all sewage treatment works. Direct costs are defined in RAR 4 for Table M18WW.

Processing Rule: The sum of lines E8.31 to E8.37

Field Type: Calculated

Previous References: Ofwat 07 Ref: | T17f, L7 | WICS 06 Ref: | E8.38

E8.39	General and support expenditure	£000	3dp

Data Definition: The general and support expenditure allocated for all sewage works (as defined in RAR 4 for Table M18WW). Where possible, such expenditure should be attributed on a causal basis; otherwise it should be apportioned in proportion to direct costs.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17f, L12 | WICS 06 Ref: | E8.39

E8.40	Functional expenditure	£000	3dp

Data Definition: The sum of direct costs and general support expenditure for all sewage treatment works.

Processing Rule: The sum of E8.38 and E8.39

Field Type: Calculated

Previous References: Ofwat 07 Ref: | T17f, L13 | WICS 06 Ref: | E8.40

E8.41	Power costs	£000	3dp

Data Definition: The total power cost for the STW included in the direct costs above. The power costs of terminal pumping may only be included if the costs of a terminal pumping station at the STW are included in M18WW, line M18WW.2 in the sewage treatment column. SW must clearly indicate whether or not such costs are included.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17f, L10 | WICS 06 Ref: | E8.41

E8.42	Service charges SEPA	£000	3dp

Data Definition: The total Scottish Environmental Protection Agency service charges for the STW included in the direct costs above.

Processing Rule: Column 'Total' is the sum of all inputs

Field Type: Input

Previous References: Ofwat 07 Ref: | T17f, L11 | WICS 06 Ref: | E8.42