

Chapter 17g

Sewerage service explanatory factors

Covering:
Sludge treatment and disposal

Chapter 17g

Sludge treatment and disposal

Guidance

Three tables have been provided. One for NIW data only, one for PPP data only and a third which will be the sum of the NIW and PPP tables.

The purpose of these tables is to collect information about sewage sludge disposal routes, and the costs of sludge treatment and disposal associated with each of those routes.

This information will be used to update our modelling of the sewerage service to enable assessment of the comparative operating efficiency of the company's sewerage services.

Process losses, such as gas lost to the atmosphere, are included in the percentages entering each disposal route and must not be assigned to the 'Other' category.

The routes are classified as:

Farmland – Untreated:	Spreading untreated sewage sludge direct to farmland
Farmland – Conventional:	Spreading conventionally treated sewage sludge to farmland
Farmland – Advanced:	Spreading “advanced” treated sewage sludge to farmland
Incineration:	Sewage sludge disposed of by incineration
Landfill:	Sewage sludge disposed in landfill sites
Composted:	Sewage sludge disposed by means of composting
Land Reclamation:	Sewage sludge disposed of to land reclamation projects
Other:	Any other form of sewage sludge disposal; for example, gasification, forestry, or silviculture.

Disposal to farmland includes sludge spread on non-food crops.

Un-adopted septic tank activities

For the purposes of this table and the AIR, un-adopted septic tank activities are unregulated and should therefore be excluded. Adopted tank activity (i.e. Housing Executive tanks) should still be accounted for in the tables. Within the table commentary NIW must provide:

- The total excluded cost associated with this unregulated activity;
- A breakdown of this total figure by collection, treatment and disposal costs;
- A commentary on how these costs were arrived at and any assumption made
- The number of unregulated septic tanks collected from within the reporting year;
- The total load (ttds) collected from unregulated septic tanks

The company must check that the following data are consistent.

- Amount of sewage sludge disposed of in table 17g (line 2, column 9) should equal total sewage sludge disposed of in table 15 (line 16);
- Sludge treatment and disposal: direct costs in table 17g (line 5, column 9) should equal total direct costs for sludge treatment & disposal in table 22 (line 9, column 3);
- Sludge treatment and disposal: power costs in table 17g (line 6, column 9) should equal power costs for sludge treatment & disposal in table 22 (line 2, column 3);
- Sludge treatment and disposal: Service charges in table 17g (line 7, column 9) should equal service charges for sludge treatment & disposal in table 22 (line 7, column 3); and
- Sludge treatment and disposal: general and support expenditure in table 17g (line 8, column 9) should equal general and support expenditure for sludge treatment & disposal in table 22 (line 10, column 3);
- Sludge treatment and disposal: functional expenditure in table 17g (line 9, column 9) should equal functional expenditure for sludge treatment and disposal in table 22 (line 11, column 3).

The company should also provide data relating to services provided by its PPP wastewater contractor operated works. These data should be included in both the PPP table and the total table as indicated.

Company commentary

The company should:

- clearly explain any significant changes in sludge disposal routes that have occurred since this information was last collected;
- provide a clear explanation of any sludge disposal methods that are classed as 'Other'. In accordance with RAG4, the cost of mechanical sludge de-watering and sludge transfers to sewers and other works must be included in this table;
- comment on the reasons for any significant increases in the costs associated with a particular disposal route. For the purposes of this table, significant changes are those which amount to more than 5% of total sludge treatment and disposal costs, or more than 10% of any individual category; and
- only report the amount of sludge treated during the report year. This may not be the same as the amount of sludge disposed in the year. The company should explain any large movements between stockpiled and disposed stock.

Guidance for Reporter

The Reporter should comment on:

- the accuracy of the reported information;
- the reasonableness of any changes in the company's costs for different disposal routes since this information was last available;
- the reasonableness of assumptions made in separating out unregulated septic tank costs.

Table 17g line definitions

1	Resident population served	000	1dp
Definition	The resident population contributing to the particular sludge disposal route. Sludge disposal routes are as defined at the beginning of this chapter. The population equivalent must not be used in place of the resident population.		
Primary Purpose	Informing relative performance and efficiency assessments.		
Processing rule	Input: line 1 column 1 to column 8 Calculated: line 1 column 9 is the sum of line 1 column 1 to 8.		
Responsibility	Comparative Efficiency and Performance Team		

2	Amount of sewage sludge	ttds	1dp
Definition	<p>The amount of sewage sludge (including grit and screenings) in thousand tonnes of dry solids (ttds) which is disposed of through each of the routes listed. The total for this line should agree with table 15 line 16.</p> <p>The company must submit the amount entering (not leaving) the treatment and disposal process for each of the routes listed. Process losses, such as gas lost to the atmosphere, are therefore included in the amount entering each disposal route and must not be assigned to the 'Other' category.</p>		
Primary Purpose	Informing relative performance and efficiency assessments.		
Processing rule	Input: line 2 column 1 to column 8 Calculated: line 2 column 9 is the sum of line 2 column 1 to 8.		
Responsibility	Comparative Efficiency and Performance Team		

3	Sludge treatment: direct costs	£000	3dp
Definition	The direct costs attributable to sludge treatment for each of the disposal routes. Column 9 'total' is the direct cost of sludge treatment for all disposal routes.		
Primary Purpose	Informing relative performance and efficiency assessments.		
Processing rule	Input: line 3 column 1 to column 8 Calculated: line 3 column 9 is the sum of line 3 column 1 to 8. The PPP table commentary should split this figure out into opex, capital maintenance and any operator profit.		
Responsibility	Comparative Efficiency and Performance Team		

4	Sludge disposal: direct costs	£000	3dp
Definition	The total sludge disposal direct costs attributable to each of the disposal routes. Column 9 'total' is the direct cost of sludge disposal for all disposal routes.		
Primary Purpose	Informing relative performance and efficiency assessments.		
Processing rule	Input: line 4 column 1 to column 8 Calculated: line 4 column 9 is the sum of line 1 column 1 to 8.		
Responsibility	Comparative Efficiency and Performance Team		

5	Sludge treatment & disposal: direct costs	£000	3dp
Definition	The direct costs attributable to sludge treatment and disposal for each of the disposal routes. Column 9 is the total direct cost of sludge treatment and disposal for all routes. This total should reconcile with table 22 line 9 column 3.		
Primary Purpose	Informing relative performance and efficiency assessments.		
Processing rule	Calculated: for each column line 5 is the sum of line 3 and line 4.		
Responsibility	Comparative Efficiency and Performance Team		

6	Sludge treatment & disposal: power costs	£000	3dp
Definition	The sludge treatment and disposal power costs for each of the disposal routes. Column 9 is the power cost for sludge treatment and disposal for all disposal routes and should reconcile with table 22 line 2 column 3.		
Primary Purpose	Informing relative performance and efficiency assessments.		
Processing rule	Input: line 6 column 1 to column 8 Calculated: line 6 column 9 is the sum of line 6 column 1 to 8.		
Responsibility	Comparative Efficiency and Performance Team		

7	Sludge treatment & disposal: service charges	£000	3dp
Definition	The service charges for sludge treatment and disposal for each of the disposal routes including regulation and legal costs. Column 9 is the total service charge for all disposal routes. This total should reconcile with table 22 line 7 column 3.		
Primary Purpose	Informing relative performance and efficiency assessments.		
Processing rule	Input: line 7 column 1 to column 8 Calculated: line 7 column 9 is the sum of line 7 column 1 to 8.		
Responsibility	Comparative Efficiency and Performance Team		

8	Sludge treatment & disposal: general & support exp.	£000	3dp
Definition	The general and support expenditure for sludge treatment and disposal allocated to each of the disposal routes. Column 9 is the total general and support expenditure for all disposal routes. This total should reconcile with table 22 line 10 column 3.		
Primary Purpose	Informing relative performance and efficiency assessments.		
Processing rule	Input: line 8 column 1 to column 8 Calculated: line 8 column 9 is the sum of line 8 column 1 to 8.		
Responsibility	Comparative Efficiency and Performance Team		

9	Sludge treatment & disposal: functional expenditure	£000	3dp
Definition	The sum of direct costs and general support expenditure for sludge treatment and disposal. The total for this line should reconcile with table 22 line 11 column 3.		
Primary Purpose	Informing relative performance and efficiency assessments.		
Processing rule	Calculated: for each column line 9 is the sum of line 5 and line 8.		
Responsibility	Comparative Efficiency and Performance Team		

CHANGE CONTROL SHEET

CHAPTER 17g

2008/1.0	First issue of chapter for the SBP period
2009/1.0	Second issue of chapter for the SBP period <ul style="list-style-type: none">- processing rule for line 3 amended- Additional table added for PPP and Total data