

# **Revaluation 2010**

# **Public Buildings Committee**

# Practice Note 20 Waste Water Treatment Works

#### 1.0 Introduction

This Practice Note deals with the valuation of Waste Water Treatment Works, including septic tanks which serve areas with a population equivalent not exceeding 8,000. Population equivalent figures are calculated using the "notional population" comprising; resident population, a percentage of transient population, liquor input and trade waste and are provided by Scottish Water on a central basis.

#### 2.0 Basis of Valuation

All treatment works where the population equivalent exceeds 8,000 should be valued on the Contractor's Basis using costs appropriate for the tone date of 1st April 2008 having regard to Basic Principles Committee Practice Note 2 and Public Buildings Committee Practice Note 4, where appropriate.

## 3.0 Types of Waste Water Treatment Works

Sewage Works have historically been classified in the following manner

## (A) Biological Plant

- (i) with sludge thickening and sludge treatment
- (ii) with sludge thickening but without sludge treatment
- (iii) without sludge thickening or sludge treatment

## (B) Activated Sludge Plant

- (i) with sludge thickening and sludge treatment
- (ii) with sludge thickening but without sludge treatment
- (iii) without sludge thickening or sludge treatment

## (C) Extended Aeration Plant or Oxidation Ditch with no Primary Settlement

- (i) with sludge thickening and sludge treatment
- (ii) with sludge thickening but without sludge treatment
- (iii) without sludge thickening or sludge treatment

## (D) Primary Settlement only

## Septic Tanks

#### 4.0 Method of Valuation

In the absence of detailed information to allow a full Contractor's Basis valuation to be made for **smaller Sewage Treatment Works serving population equivalents up to 8,000** a valuation may be carried out by reference to the table of rates provided in the **Appendix**.

The unit cost rates to apply are based on a cost per head of optimum/design capacity by Sewage Works type. Rates shown cover **all** elements **excluding** Land value. Optimum/design population equivalent figures are calculated using the "notional population" comprising; resident population, a percentage of transient population, liquor input and trade waste. The optimum/design population equivalent figures are provided by Scottish Water on a central basis.

Adjustments require to be made for **non - rateable items** and guidance is provided below.

Works serving up to **1,000** - an allowance of **15%** should be made for non rateable items.

Works serving between **1,001 and 4,500** - an allowance of **17.5%** should be made for non rateable items.

Works serving between **4,501 and 8,000** - an allowance of **20%** should be made for non rateable items.

Larger works serving over 8,000 should be valued on the full Contractor's Basis and the table should not be used.

#### 5.0 Over-Capacity

Waste Water Treatment Works are designed to meet discharge standards regulated by the Scottish Environment Protection Agency (SEPA) and are generally built with a design capacity of at least three times the anticipated average Dry Weather Flow.

(Dry Weather Flow is the daily flow into the works after a period of 7 days dry weather). No allowance needs to be made for this additional capacity as it is required to deal with seasonal fluctuations in flow.

If a treatment works serves an area where there is a local tourist industry which may produce different Dry Weather Flows at different times of the year the works will have been designed to be capable of dealing with the quantity of flow at peak holiday times. In comparison the flow at off peak times will be considerably reduced. **No over-capacity allowance should be given for tourist season fluctuations.** 

If, however, a Treatment Works has been built with a capacity which reflects a projected population increase which has not been reached, and is not likely to be reached between the years of revaluation, or for the treatment of a trade effluent process which may now have ceased, then it may be necessary to make an allowance. The figure for "Used Capacity" is derived by taking the actual equivalent population as a percentage of the optimum/design population.

Used Capacity	Percentage Deduction	Used Capacity	Percentage Deduction			
80% or more	NIL	49%-45%	35%			
79%-75%	5%	44%-40%	40%			
74%-70%	10%	39%-35%	45%			
69%-65%	15%	34%-30%	50%			
64%-60%	20%	29%-25%	52.50%			
59%-55%	25%	24% or less	55%			
54%-50%	30%					

# The following allowances should be applied to all works, where appropriate

#### 6.0 Obsolescence Allowances

Allowances should be applied in accordance with SAA Public Buildings Committee Practice Note 4 (Contractor's Basis Valuations, Adjustment of Areas, External Works' Costs, Allowances and Land).

Care should be taken to apply the appropriate Buildings, Plant, Civils or Tanks allowances. Please note that Concrete tanks e.g. Storm or Settlement etc should be treated as Civils when considering any age and obsolescence allowances.

For those works serving populations of up to 8,000, valued using the table of rates provided below, a notional age and obsolescence allowance should be applied having regard to the ratio of buildings, civils, tanks etc.

#### 7.0 Land Value

It should be borne in mind that the level of value adopted should reflect the assumption that the development of the site is confined to the class of subject under consideration. The prevailing use value in the locality may be a useful indicator but care must be taken to ensure that any values attributable to residential or commercial uses, for example, are discounted where appropriate. The level of value applied to the site should not be lower than agricultural value or higher than prevailing residential value for adjacent land.

#### 8.0 Decapitalisation Rate

The appropriate statutory decapitalisation percentage should be applied

2010 TABLE OF RATES PER HEAD OF POPULATION TO REPLACEMENT CAPITAL VALUE (EXCL SITE)										Appendix	
				TYPE OF WORKS							
OPTIMUM /	(A)(i)	(A)(ii)	(A)(iii)	(B)(i)	(B)(ii)	(B)(iii)	(C)(i)	(C)(ii)	(C)(iii)	(D)	SEPTIC
DESIGN CAPACITY											TANKS
100	£1,080	£900	£540	£1,080	£900	£540	£930	£660	£400	£230	£440
200	£1,050	£820	£510	£1,050	£820	£510	£900	£620	£370	£220	£400
300	£1,010	£760	£450	£1,010	£760	£450	£860	£590	£360	£190	£370
400	£970	£730	£450	£970	£730	£450	£830	£560	£330	£190	£330
500	£940	£720	£430	£940	£720	£430	£790	£540	£310	£180	£310
750	£870	£590	£360	£870	£590	£360	£730	£480	£270	£180	£270
1,000	£790	£560	£330	£790	£560	£330	£660	£430	£220	£160	£220
1,250	£730	£540	£290	£730	£540	£290	£620	£400	£200	£150	£200
1,500	£700	£510	£270	£700	£510	£270	£580	£370	£180	£150	£180
1,750	£650	£470	£250	£650	£470	£250	£550	£360	£180	£120	£180
2,000	£610	£430	£230	£610	£430	£230	£510	£330	£160	£110	£160
2,250	£560	£400	£200	£560	£400	£200	£480	£310	£150		
2,500	£550	£400	£190	£550	£400	£190	£480	£300	£150		
2,750	£540	£370	£190	£540	£370	£190	£450	£290	£150		
3,000	£510	£360	£190	£510	£360	£190	£430	£270	£150		
3,250	£480	£360	£180	£480	£360	£180	£400	£270	£120		
3,500	£480	£340	£150	£480	£340	£150	£380	£260	£120		
3,750	£450	£330	£150	£450	£330	£150	£380	£250	£120		
4,000	£450	£330	£150	£450	£330	£150	£370	£230	£120		
4,250	£440	£330	£150	£440	£330	£150	£370	£230	£120		
4,500	£430	£330	£150	£430	£330	£150	£360	£230	£120	ļ	
4,750	£430	£330	£150	£430	£330	£150	£340	£230	£120	ļ	
5,000	£400	£330	£150	£400	£330	£150	£330	£230	£120	ļ	
8,000	£370	£300	£150	£370	£300	£150	£310	£220	£120		

NOTE: Categories A - D require adjustment for non-rateable items

up to 1,000	-15%
Between 1,001 and 4,500	-17.5%
Between 4,501 and 8,000	-20%