Appendix 6.2

Shadow Bid Model Assumptions

Databook of Financial Model Assumptions

A model databook has been constructed by Ernst & Young for the Merseyside Waste Partnership ("The Partnership") Shadow Tariff Model. The purpose of the databook is to set out and summarise the underlying assumptions used in the shadow Tariff financial model, and to comment on and resolve any issues raised as part of the review.

Model Structure

Time periods

The model worksheets can be grouped into three sections, an inputs section, a workings section and an outputs section. There are three specific time periods contained within the financial model, these being monthly, semi-annual and annual periods. The monthly time period is used for the purposes of calculating funding requirements and costs during the construction period, from financial close to March 2013. The semi-annual period is used for all other calculations from financial close through to the end of the concession on 31 March 2033 and to present the financial statement outputs of the financial model. The annual time period is used to input the waste flows and annual revenues and costs of the system.

Inputs

The inputs element of the financial model consists mainly of three worksheets although other sheets in the model also contain hard coded inputs. Details of where inputs are included in other sheets are included in the relevant sections below.

"Financial Inputs" contains time, inflation, accounting, financing and tax assumptions;

"Time Inputs" contains the total waste arising and the volumes of materials being processed at individual facilities as provided by the Partnership technical advisors (Enviros) contained with the Reference Project's waste flow model. It also includes capital and lifecycle timing assumptions;

"Technical Inputs" contains inputs for recycling income, electricity income, operating costs, capital costs and landfill costs.

Workings

"Process Output Costs" multiplies the income assumptions per tonne, from the Technical Inputs sheet, by the relevant tonnages from the Time Inputs sheet. The sheet then converts the annual real inputs into semi annual nominal totals.

"Operating Costs" multiplies the cost assumptions per tonne, from the Technical Inputs sheet, by the relevant tonnages from the Time Inputs sheet. The sheet then converts the real annual costs into nominal semi annual costs. This sheet also calculates the total nominal unitary charge based on the flat gate fee that results in goal seeking a pre-tax project IRR of 11.5%, this is run from the macro button on the summary sheet.

"Capex Profile" spreads the capital costs, from the Technical Input sheet, over the monthly construction period, using the timing from the Time Inputs sheet. This sheet calculates nominal semi annual capital expenditure; step up charges and lifecycle costs

Appendix 6.2

Shadow Bid Model Assumptions

(based on the lifecycle costs from the Technical Inputs sheet and the timings from the Time Inputs sheet) .

“Construction Cash flow” uses monthly cash flows during the construction period to determine the total sources and uses of funds during the construction period based on the financing structure set out in “Financial Inputs”.

“Cashflow” records the semi annual cash flows for the length of the contract.

“Financing” contains the funding calculations on a semi annual basis associated with each source of funding, including interest calculations, repayment profiles and related fees.

Outputs

The outputs section of the financial model consists of the following worksheets:

“Summary” summaries the outputs of the model in terms of affordability, sources and uses of funds, project returns and ratio analysis associated with the senior debt funding. This sheet also includes a series of model checks and a function for undertaking high-level sensitivities. The model currently uses an IRR goal seek macro button for undertaking such sensitivities.

“Affordability” contains the affordability analysis for input into the Outline Business Case comparing the cost of the reference project to existing budgets. This sheet highlights the revenue support generated by the PFI credit and the additional funding requirements required over and above existing waste management budgets.

“PFI Credit” contains the PFI credit calculation based on the level of capital investment included in the Reference Project. An additional facility is included to cap the amount of credit available from DEFRA. Revenue support calculations include the existing method of payment and the proposed annuity style repayment method.

“Balance Sheet” and “P&L and Tax” present the financial summaries on a semi annual basis.

“Annualised” contains all cash flows on an annual basis for the length of the contract.

“Output” contains graphical presentation of key ratios and cash profiles.

Appendix 6.2

Shadow Bid Model Assumptions

Background Assumptions

Dates

The model assumes that contract close is achieved on 1 April 2008. The concession period is then 25 years through to 31 March 2033. Within this concession period, the construction programme is assumed to be from 1 April 2008 through to 31 March 2013. The Partnership makes payments to the PFI contractor from 30 April 2008 onwards.

Inflation

The model applies inflation to both costs and revenues in the financial model. The level of inflation applied to operating costs over the life of the project, reflected in the Retail Prices Index (RPI), is 2.5% per annum. Construction costs are assumed to inflate at 4.5%. The price base of the numbers included in the financial model is 31 March 2004. Landfill costs (excluding landfill tax) are assumed to inflate at 5%.

Revenue

Revenue within the SPC is derived from the Unitary Charge and Other Income that is made up of income derived from the sale of recyclables. The Unitary Charge is calculated on a semi annual basis based on an initial gate fee generated via a goal seek to arrive at a Pre Tax project internal rate of return ("IRR") of 11.5%. During the contract period the unitary charge steps up as and when facilities come on line. The step-ups reflect the amortised costs of the investment over the remaining contract period.

Costs

Cost in the financial model can be considered within the following categories:

Operating Costs

The "Operating Costs" worksheet contains an annual profile of operating costs for the provision of the waste management service over the life of the project. Monthly and semi annual operating costs are calculated based on these cost inputs. The underlying operating costs of the facilities and associated transport costs were provided by the Council's technical advisors Enviros.

Appendix 6.2

Shadow Bid Model Assumptions

SPV costs

The "Operating Costs" worksheet also contains SPV costs. An allowance of £2.0m per annum has been made for the provision of marketing, promotion and educational activities associated with the services provided by the PFI contractor.

Capital Costs

Capital costs are incurred from financial close in April 2008 through to March 2013. Construction spend is constituted of the following elements:

Capitalised Costs	Total Value £000
Construction cost (nominal terms)	355,630
Bid costs / Fees	5,150
Operating Cash Flows	(42,406)
Prefunded Debt Service Reserve Account ("DSRA")	0
Capitalised Interest	78,124
Total	**396,498**

Financing

It has been assumed that the project will be delivered through a special purpose company whose only activity will relate to the provision of services associated with the Partnership's Waste Management PFI Project. The funding structure will be typical to that used in other PFI projects whereby funding will be provided by a combination of non/limited recourse finance and equity. For the purposes of modelling the Shadow Tariff we have assumed for simplicity purposes that the long-term debt will be provided by way of a project finance loan from senior debt provider. The equity will be provided by a combination of shareholder loans (Subordinated debt) and ordinary share capital. A summary of the funding sources is shown below.

Capitalised Costs	% Funding	Total Value £000
Senior Bank Debt	83%	330,540
Shareholder Loan	16%	62,774
Equity	1%	3,184
Total	**100%**	**396,498**

Appendix 6.2

Shadow Bid Model Assumptions

Senior Debt

Senior debt is drawn down from 1 April 2008 and the maturity date is 31 March 2031.

Interest on the senior debt is calculated as the brought forward balance plus half of the amount drawn down in the period multiplied by the relevant interest rate for the period. Interest is calculated monthly during construction and semi annually thereafter. The annual interest rate is determined from the following component elements:

Element	Value
Libor swap rate	5.50%
Yearly mandatory liquid assets	0.04%
Margin during construction	1.25%
Margin post construction	1.20%
Annual 'All in' rate during construction	6.99%
Annual 'All in' rate during operations	6.94%
Commitment Fees	0.60%
Arrangement Fees	1.25%

Commitment fees on senior debt total £3.4 million and arrangement fees total £3.4 million. Senior debt principal and interest repayments are made on an annuity basis. The resulting performance against assumed banking covents is as follows:

	Average Debt Service Cover Ratio	Loan Life Cover Ratio
Required (assumption)	1.25	1.25
Minimum achieved	1.40	1.64
Average achieved	**1.54**	**3.04**

Appendix 6.2

Shadow Bid Model Assumptions

Subordinated Debt

The subordinated debt is drawn down from April 2008, and is repaid by March 2033. Interest on the subordinated debt is calculated as the brought forward balance multiplied by the relevant interest rate for the period. Interest payments are made on a monthly basis during construction and a semi-annual basis thereafter with annual coupon of 14% per annum. Interest is paid where there is sufficient cash to do so after payments to senior debt and reserve movements. Where interest is not paid, this is added to an outstanding interest balance, and in turn attracts an interest charge at the subordinated debt coupon rate. Outstanding interest is repaid when sufficient cash is available. No commitment fees are charged on subordinated debt.

Equity

Equity represents 1% of the project finance and this is injected into the project at financial close. Dividends are paid annually subject to positive retained earnings, available cash and the satisfaction of the distribution lock up mechanism.

Debt Service Reserve

In common with the typical requirements of a bank funded PFI project, a debt service reserve account builds a cash reserve against future debt service requirements. The reserve account holds cash sufficient for six months of debt service (senior debt principal and interest). The balance on the debt service reserve account at the end of each financial year is included in the total cash balance and earns interest for the SPV at a rate of 4.5%.

Appendix 6.2

Shadow Bid Model Assumptions

Accounting Assumptions

Balance Sheet

Fixed Assets

Fixed assets are recorded in the balance sheet at Net Book Value. The assets expected useful lives are from the end of construction until the end of concession, and depreciation is applied accordingly on a straight-line basis.

Appendix 6.2

Shadow Bid Model Assumptions

Taxation Assumptions

Corporation Tax

Corporation tax is charge at 30% on all taxable profit in the P&L and Tax tab. The financial model is based on a fixed asset structure and capital allowances have assumed to be used by the SPV.