



**Worksheet AA**

**Public-Sector Development  
Qualitative Description of Estimated Change  
in Socioeconomic Indicators  
due to Pollution Control Costs**

Estimated change  
in Median  
Household  
Income (MHI)

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Estimated change  
in the  
unemployment  
rate

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Estimated change  
in overall net debt  
as a percent of full  
market value of  
taxable property

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Estimated change  
in % of  
households below  
the poverty line

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Impact on  
commercial  
development  
potential

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Impact on  
Property Values

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## Worksheet AB

### Private-Sector Development Factors to Consider in Making a Determination of Widespread Social and Economic Impacts

- Define the affected community in this case; what areas are included. \_\_\_\_\_ (1)
- Current unemployment rate in affected community (if available). \_\_\_\_\_ (2)
- Current national unemployment rate. \_\_\_\_\_ (3)
- Additional number of persons expected to collect unemployment in affected community due to compliance with water quality standards. \_\_\_\_\_ (4)
- Expected unemployment rate in the affected community after compliance with water quality standards (Current # of persons collecting unemployment in affected community + (4)/labor force in affected community). \_\_\_\_\_ (5)
- Median household income in affected community. \_\_\_\_\_ (6)
- Total number of households in affected community. \_\_\_\_\_ (7)
- Percent of population below the poverty line in affected community. \_\_\_\_\_ (8)
- Current expenditures on social services in affected community. \_\_\_\_\_ (9)
- Expected expenditures on social services due to job losses in the affected community. \_\_\_\_\_ (10)
- Current total tax revenues in the affected community. \_\_\_\_\_ (11)
- Tax revenues paid by the private entity to the affected community. \_\_\_\_\_ (12)

**Worksheet AB, continued**

Tax revenues paid by the private entity as a percentage of the affected community's total tax revenues. *	_____	(13)
Current statewide unemployment rates.	_____	(14)
Additional number of persons expected to collect unemployment in the State due to compliance with water quality standards.	_____	(15)
Expected statewide unemployment rate, after compliance with water quality standards (Current # of persons collecting unemployment in State + (15)/labor force in State.	_____	(16)
Current expenditures on social services in State.	_____	(17)
Expected statewide expenditures on social services due to job losses.	_____	(18)

\* In some cases, the affected community will include more than just the municipality in which the private entity is located. If so, the analysis should consider the private entity's tax revenues as a percentage of the tax revenues for only the municipality in which the entity is located.

## Worksheet B

### Calculation of Total Annualized Project Costs

#### A. Capital Costs

Capital Cost of Project	\$ _____
Other One-Time Costs of Project (Please List, if any):	
_____	\$ _____
_____	\$ _____
_____	\$ _____
<b>Total Capital Costs (Sum column)</b>	<b>\$ _____ (1)</b>
Portion of Capital Costs to be Paid for with Grant Monies	\$ _____ (2)
Capital Costs to be Financed [Calculate: (1) - (2) ]	\$ _____ (3)
Type of financing (e.g., G.O. bond, revenue bond, bank loan)	_____
Interest Rate for Financing (expressed as decimal)	_____ (i)
Time Period of Financing (in years)	_____ (n)
Annualization Factor = $\frac{i}{[(1+i)^n - 1] + i}$ + (or see Appendix B)	_____ (4)
<b>Annualized Capital Cost [Calculate: (3) x (4) ]</b>	<b>_____ (5)</b>

#### B. Operating and Maintenance Costs

Annual Costs of Operation and Maintenance (including but not limited to: monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement.) (Please list below)

_____	\$ _____
_____	\$ _____
_____	\$ _____
_____	\$ _____
_____	\$ _____
<b>Total Annual O &amp; M Costs (Sum column)</b>	<b>\$ _____ (6)</b>

#### C. Total Annual Cost of Pollution Control Project

Total Annual Cost of Pollution Control Project [ (5) + (6) ]	<table border="3" style="margin-left: auto; margin-right: auto;"><tr><td style="padding: 5px;">\$ _____ (7)</td></tr></table>	\$ _____ (7)
\$ _____ (7)		

## Worksheet C

### Calculation of Total Annual Pollution Control Costs Per Household

#### A. Current Pollution Control Costs:

Total Annual Cost of Existing Pollution Control	\$	_____ (1)
Amount of Existing Costs Paid By Households	\$	_____ (2)
Percent of Existing Costs Paid By Households		_____ % (3)
Number of Households*		_____ (4)
Annual Cost Per Household [Calculate: (2)/(4) ]	\$	_____ (5)

\* Do not use number of hook-ups.

#### B. New Pollution Control Costs

Are households expected to provide revenues for the new pollution control project in the same proportion that they support existing pollution control? (Check a, b or c and continue as directed.)

- a) Yes [fill in percent from (3) ] [ ] percent.(6a)
- b) No, they are expected to pay [ ] percent.(6b)
- c) No, they are expected to pay based on flow. (Continue on Worksheet C, Option A)

Total Annual Cost of Pollution Control Project [Line (7), Worksheet B]	\$	_____ (7)
Proportion of Costs Households Are Expected to Pay [ (6a) or (6b) ]		_____ (8)
Amount to Be Paid By Households [Calculate: (9) x (10) ]	\$	_____ (9)
Annual Cost per Household [Calculate: (11)/(4) ]	\$	_____ (10)

#### C. Total Annual Pollution Control Cost Per Household

Total Annual Cost of Pollution Control Per Household (5) + (10)	\$	[ ] (11)
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## Worksheet C: Option A

### Calculation of Total Annual Pollution Control Costs Per Household Based on Flow

#### A. Calculating Project Costs Incurred By Households Based on Flow

Expected Total Usage of Project (eg. MGD for Wastewater Treatment)	<u>(1)</u>
Usage due to Household Use (MGD of Household Wastewater)	<u>(2)</u>
Percent of Usage due to Household Use [Calculate: (2)/(1) ]	<u>%(3)</u>
Total Annual Cost of Pollution Control Project	<u>\$ (4)</u>
Industrial Surcharges, if any	<u>\$ (5)</u>
Costs to be Allocated [Calculate: (4) - (5) ]	<u>\$ (6)</u>
Amount to Be Paid By Households [Calculate: (3) x (6) ]	<u>\$ (7)</u>
Annual Project Cost per Household [Calculate: (7)/Worksheet C, (4) ]	<u>\$ (8)</u>

#### C. Total Annual Pollution Control Cost Per Household

Annual Existing Costs Per Household [Worksheet C, (5) ]	<u>\$ (9)</u>	
Total Annual Cost of Pollution Control Per Household [ (8) + (9) ]	<table border="1"><tr><td><u>\$ (10)</u></td></tr></table>	<u>\$ (10)</u>
<u>\$ (10)</u>		

## Worksheet D

### Municipal Preliminary Screener

The Municipal Preliminary Screener indicates quickly whether a public entity will not incur any substantial economic impacts as a result of the proposed pollution control project. The formula is as follows:

$$\frac{\textit{Total Annual Pollution Control Cost per Household}}{\textit{Median Household Income} *} \times 100$$

#### A. Calculation of The Municipal Preliminary Screener

Total Annual Pollution Control Cost Per Household [Worksheet C, (11) or Worksheet C, Option A (10) ]	\$	(1)
Median Household Income *	\$	(2)
<b>Municipal Preliminary Screener</b> (Calculate: [(1)/(2)] x 100)		%(3)

#### B. Evaluation of The Municipal Preliminary Screener

If the Municipal Preliminary Screener is clearly less than 1.0%, then it is assumed that the cost will not impose an undue financial burden. In this case, it is not necessary to continue with the Secondary Test. Otherwise, it is necessary to continue.

Benchmark Comparison:

<b>Little Impact</b> Less than 1.0%		<b>Mid-Range Impact</b> 1.0% - 2.0%		<b>Large Impact</b> Greater than 2.0%
Indication of no substantial economic impacts		))))))) Proceed to Secondary Test		

\* 1990 Census adjusted by CPI inflation rate if necessary.

## Worksheet E

### Data Used in the Secondary Test

Please list the following values used in determining the Secondary Score. Potential sources of the data are indicated.

#### A. Data Collection

<b>Data</b>	<b>Potential Source</b>	<b>Value</b>
Direct Net Debt	Community Financial Statements Town, County or State Assessor's Office	\$ _____ (1)
Overlapping Debt	Community Financial Statements Town, County or State Assessor's Office	\$ _____ (2)
Market Value of Property	Community Financial Statements Town, County or State Assessor's Office	\$ _____ (3)
Bond Rating	Standard and Poors or Moody's	_____ (4)
Community Unemployment Rate	1990 Census of Population Regional Data Centers	_____ % (5)
National Unemployment Rate	Bureau of Labor Statistics (202) 606-6392	_____ % (6)
Community Median Household Income	1990 Census of Population	\$ _____ (7)
State Median Household Income	1990 Census of Population	\$ _____ (8)
Property Tax Collection Rate	Community Financial Statements Town, County or State Assessor's Office	_____ % (9)
Property Tax Revenues	Community Financial Statements Town, County or State Assessor's Office	\$ _____ (10)

## Worksheet E, Continued

### B. Calculation of Indicators

#### 1. Overall Net Debt as a Percent of Full Market Value of Taxable Property

Overall Net Debt (Calculate: (1) + (2) )

\$ \_\_\_\_\_ (11)

Overall Net Debt as a Percent of Full Market Value of Taxable Property (Calculate: [(11)/(3)] x 100)

\_\_\_\_\_ % (12)

#### 2. Property Tax Revenues as a Percent of Full Market Value of Taxable Property

Property Tax Revenues as a Percent of Full Market Value of Taxable Property (Calculate: [(10)/(3)] x 100)

\_\_\_\_\_ % (13)

## Worksheet F

### Calculating The Secondary Score

Please check the appropriate box in each row, and record the corresponding score in the final column. Then, sum the scores and compute the average. Remember, if one of the debt or socioeconomic indicators is not available, average the two financial management indicators and use this averaged value as a single indicator with the remaining indicators.

Indicator	Secondary Indicators			Score
	Weak*	Mid-Range**	Strong***	
Bond Rating Worksheet E, (4)	Below BBB (S&P) Below Baa (Moody's) <input type="checkbox"/>	BBB (S&P) Baa (Moody's) <input type="checkbox"/>	Above BBB (S&P) or Baa (Moody's) <input type="checkbox"/>	
Overall Net Debt as Percent of Full Market Value of Taxable Property Worksheet E, (12)	Above 5% <input type="checkbox"/>	2%-5% <input type="checkbox"/>	Below 2% <input type="checkbox"/>	
Unemployment Worksheet E, (5)& (6)	Above National Average <input type="checkbox"/>	National Average <input type="checkbox"/>	Below National Average <input type="checkbox"/>	
Median Household Income Worksheet E, (7) & (8)	Below State Median <input type="checkbox"/>	State Median <input type="checkbox"/>	Above State Median <input type="checkbox"/>	
Property Tax Revenues as a Percent of Full Market Value of Taxable Property Worksheet E, (13)	Above 4% <input type="checkbox"/>	2%-4% <input type="checkbox"/>	Below 2% <input type="checkbox"/>	
Property Tax Collection Rate Worksheet E, (9)	< 94% <input type="checkbox"/>	94% - 98% <input type="checkbox"/>	> 98% <input type="checkbox"/>	

\* Weak is a score of 1 point

**SUM**

\*\* Mid-Range is a score of 2 points

\*\*\* Strong is a score of 3 points

**AVERAGE**

## Worksheet G

### Calculation of Total Annualized Project Costs

Capital Costs to be financed (Supplied by applicant)	\$ (1)
Interest Rate for Financing (Expressed as a decimal)	(i)
Time Period of Financing (Assume 10 years *)	10 years (n)
Annualization Factor ** = $\frac{i}{[(1+i)^n - 1] + i}$	(2)
Annualized Capital Cost [Calculate: (1) x (2) ]	\$ (3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement) ***	\$ (4)
<b>Total Annual Cost of Pollution Control Project [ (3) + (4) ]</b>	<b>\$ (5)</b>

\* While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.

\*\* Or see Appendix B for calculated annualization factors

\*\*\* For recurring costs that occur less frequently than once a year, pro rate the cost over the relevant number of years (e.g., for pumps replaced once every three years, include one-third of the cost in each year).

## Worksheet H

### Calculation of Earnings Before Taxes With and Without Pollution Control Project Costs

#### A. Earnings Without Pollution Control Project Costs

$$\text{EBT} = \text{R} - \text{CGS} - \text{CO}$$

Where: EBT = Earnings Before Taxes

R = Revenues

CGS = Cost of Goods Sold (including the cost of materials, direct labor, indirect labor, rent and heat)

CO = Portion of Corporate Overhead Assigned to the Discharger (selling, general, administrative, interest, R&D expenses, and depreciation on common property)

#### Three Most Recently Completed Fiscal Years

	19__	19__	19__	
R	\$ _____	\$ _____	\$ _____	(1)
CGS	\$ _____	\$ _____	\$ _____	(2)
CO	\$ _____	\$ _____	\$ _____	(3)
EBT [ (1) - (2) - (3) ]	\$ <input type="text"/>	\$ <input type="text"/>	\$ <input type="text"/>	(4)

**Considerations:** Have earnings before taxes changed over the three year period? If so, what would a "typical" year's EBT be? Please explain below.

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## Worksheet H, Continued

### B. Earnings With Pollution Control Project Costs

$$\mathbf{EWPR = EBT - ACPR}$$

Where: EWPR = Earnings with Pollution Control Project Costs  
EBT = Earnings Before Taxes (4)  
ACPR = Total Annual Costs of Pollution Control Project [Worksheet G, (5) ]

	19__*	
EBT (4)	\$ _____ (5)	
ACPR [Worksheet G, (5)]	\$ _____ (6)	
EWPR [ (5) - (6) ]	<table border="1"><tr><td>\$ _____ (7)</td></tr></table>	\$ _____ (7)
\$ _____ (7)		

\* The most recently completed fiscal year

**Considerations:** Is the discharger expected to have positive earnings after paying the annual cost of pollution control?  Yes  No

**Additional Comments:**

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## Worksheet I

### Calculation of Profit Rates With and Without Pollution Control Project Costs

#### A. Profit Rate Without Project Costs

$$\text{PRT} = \text{EBT} \div \text{R}$$

Where: PRT = Profit Rate Before Taxes  
EBT = Earnings Before Taxes  
R = Revenues

#### Three Most Recently Completed Fiscal Years

	19__	19__	19__	
EBT [Worksheet H, (4)]	_____	_____	_____	(1)
R [Worksheet H, (1)]	_____	_____	_____	(2)
PRT = Calculate: [(1)/(2)]	<input type="text"/>	<input type="text"/>	<input type="text"/>	(3)

**Considerations:** How have profit rates changed over the three years?

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Is the most recent year typical of the three years?  Yes  No  
(If not, you might want to use an earlier year or years for the analysis)

How do these profit rates compare with the profit rates for this line of business"? Please discuss below.

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## Worksheet I, Continued

### B. Profit Rate With Pollution Control Costs

$$\text{PRPR} = \text{EWPR} \div \text{R}$$

Where:      PRPR = Profit Rate With Pollution Control Costs  
              EWPR = Before-Tax Earnings With Pollution Control Costs  
              R = Revenues

	<b>The Most Recently Completed Fiscal Year</b>
	19__
EWPR [Worksheet H, (7)]	\$ _____ (4)
R [Worksheet H, (1)]	\$ _____ (5)
PRPR [Calculate: (4)/(5)]	_____ (6)

Considerations:

What is the percentage change in the profit rate due to pollution control costs? Calculate as follows:  $(\text{PRPR} - \text{PR})/\text{PR} \times 100$

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How does the profit rate with pollution control compare to the profit rate of this line of business?

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## Worksheet J

### Calculation of The Current Ratio

$$\text{CR} = \text{CA} \div \text{CL}$$

Where: CR = Current Ratio

CA = Current Assets (the sum of inventories, prepaid expenses, and accounts receivable)

CL = Current Liabilities (the sum of accounts payable, accrued expenses, taxes, and the current portion of long-term debt)

#### Three Most Recently Completed Fiscal Years

	19__	19__	19__
CA	\$ _____ (1)	\$ _____	\$ _____
CL	\$ _____ (2)	\$ _____	\$ _____
CR [Calculate: (1)/(2)]	<input type="text"/>	<input type="text"/>	<input type="text"/> (3)

Considerations:

Is the most recent year typical of the three years?  Yes  No  
(If not, you might want to use an earlier year or years for the analysis)

Is the Current Ratio (3) greater than 2.0?  Yes  No

How does the Current Ratio (3) compare with the Current Ratios for other firms in this line of business?

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## Worksheet K

### Calculation of Beaver's Ratio

$$BR = CF \div TD$$

Where: BR = Beaver's Ratio  
CF = Cash Flow  
TD = Total Debt

#### Three Most Recently Completed Fiscal Years

19\_\_                      19\_\_                      19\_\_

#### Cash Flow:

Net Income After Taxes	\$ _____	\$ _____	\$ _____	(1)
Depreciation	\$ _____	\$ _____	\$ _____	(2)
CF [Calculate: (1) + (2)]	\$ _____	\$ _____	\$ _____	(3)

#### Total Debt:

Current Debt	\$ _____	\$ _____	\$ _____	(4)
Long-Term Debt	\$ _____	\$ _____	\$ _____	(5)
Total Debt	\$ _____	\$ _____	\$ _____	(6)

#### Beaver's Ratio:

BR [(3) / (6)]	<input type="text"/>	<input type="text"/>	<input type="text"/>	(7)
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#### Considerations:

Is the most recent year typical of the three years?  Yes  No  
(If not, you might want to use an earlier year or years for the analysis)

Is the Beaver's Ratio for this discharger greater than 0.2?  Yes  No

Is the Beaver's Ratio for this discharger less than 0.15?  Yes  No

Is the Beaver's Ratio for this discharger between 0.2 and 0.15?  Yes  No

How does this ratio compare with the Beaver's Ratio for other firms in the same business?

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# Worksheet L

## Debt to Equity Ratio

$$\text{DER} = \text{LTL} \div \text{OE}$$

Where: DER = Debt/Equity Ratio

LTL = Long-Term Liabilities (long-term debt such as bonds, debentures, and bank debt, and all other noncurrent liabilities such as deferred income taxes)

OE = Owner Equity (the difference between total assets and total liabilities, including contributed or paid in capital and retained earnings)

### Three Most Recently Completed Fiscal Years

	19__	19__	19__	
LTL	\$ _____	\$ _____	\$ _____	(1)
OE	\$ _____	\$ _____	\$ _____	(2)
DER [(1)/(2)]	<input type="text"/>	<input type="text"/>	<input type="text"/>	(3)

Considerations:

Is the most recent year typical of the three years?  Yes  No  
(If not, you might want to use an earlier year or years for the analysis)

How does the Debt to Equity Ratio compare with the ratio for firms in the same business?

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## Worksheet M

### Qualitative Description of Estimated change in Socioeconomic Indicators due to Pollution Control Costs

Estimated change  
in Median  
Household  
Income (MHI)

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Estimated change  
in the  
unemployment  
rate

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Estimated change  
in overall net debt  
as a percent of full  
market value of  
taxable property

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Estimated change  
in % of  
households below  
the poverty line

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Impact on  
commercial  
development  
potential

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Impact on  
Property Values

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## Worksheet N

### Factors to Consider in Making a Determination of Widespread Social and Economic Impacts

- |   |       |      |
|---|-------|------|
| Define the affected community in this case; what areas are included.  | _____ | (1)  |
| Current unemployment rate in affected community (if available).   | _____ | (2)  |
| Current national unemployment rate.   | _____ | (3)  |
| Additional number of persons expected to collect unemployment in affected community due to compliance with water quality standards.   | _____ | (4)  |
| Expected unemployment rate in the affected community after compliance with water quality standards (Current # of persons collecting unemployment in affected community + (4)/labor force in affected community. | _____ | (5)  |
| Median household income in affected community.  | _____ | (6)  |
| Total number of households in affected community.   | _____ | (7)  |
| Percent of population below the poverty line in affected community.   | _____ | (8)  |
| Current expenditures on social services in affected community.  | _____ | (9)  |
| Expected expenditures on social services due to job losses in the affected community.   | _____ | (10) |
| Current total tax revenues in the affected community.   | _____ | (11) |
| Tax revenues paid by the private entity to the affected community.  | _____ | (12) |

**Worksheet N, continued**

Tax revenues paid by the private entity as a percentage of the affected community's total tax revenues. *	_____	(13)
Current statewide unemployment rates.	_____	(14)
Additional number of persons expected to collect unemployment in the State due to compliance with water quality standards.	_____	(15)
Expected statewide unemployment rate, after compliance with water quality standards (Current # of persons collecting unemployment in State + (15)/labor force in State.	_____	(16)
Current expenditures on social services in State.	_____	(17)
Expected statewide expenditures on social services due to job losses.	_____	(18)

\* In some cases, the affected community will include more than just the municipality in which the private entity is located. If so, the analysis should consider the private entity's tax revenues as a percentage of the tax revenues for only the municipality in which the entity is located.



## Worksheet P

### Public-Sector Pollution Control Calculation of Total Annualized Project Costs

#### A. Capital Costs

Capital Cost of Project \$ \_\_\_\_\_

Other One-Time Costs of Project (Please List, if any):

\_\_\_\_\_ \$ \_\_\_\_\_

\_\_\_\_\_ \$ \_\_\_\_\_

\_\_\_\_\_ \$ \_\_\_\_\_

**Total Capital Costs (Sum column)** \$ \_\_\_\_\_ (1)

Portion of Capital Costs to be Paid for with Grant Monies \$ \_\_\_\_\_ (2)

Capital Costs to be Financed [Calculate: (1) - (2) ] \$ \_\_\_\_\_ (3)

Type of financing (e.g., G.O. bond, revenue bond, bank loan) \_\_\_\_\_

Interest Rate for Financing (expressed as decimal) \_\_\_\_\_ (i)

Time Period of Financing (in years) \_\_\_\_\_ (n)

Annualization Factor =  $\frac{i}{[(1+i)^n-1]+i}$  + (or see Appendix B) \_\_\_\_\_ (4)

Appendix B) \_\_\_\_\_

**Annualized Capital Cost** [Calculate: (3) x (4) ] \_\_\_\_\_ (5)

#### B. Operating and Maintenance Costs

Annual Costs of Operation and Maintenance (including but not limited to: monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement.) (Please list below)

\_\_\_\_\_ \$ \_\_\_\_\_

\_\_\_\_\_ \$ \_\_\_\_\_

\_\_\_\_\_ \$ \_\_\_\_\_

\_\_\_\_\_ \$ \_\_\_\_\_

**Total Annual O & M Costs (Sum column)** \$ \_\_\_\_\_ (6)

#### C. Total Annual Cost of Pollution Control Project

Total Annual Cost of Pollution Control Project [ (5) + (6) ] 

\$ _____ (7)
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## Worksheet Q

### Calculation of Total Annual Pollution Control Costs Per Household

#### A. Current Pollution Control Costs:

Total Annual Cost of Existing Pollution Control	\$ _____	(1)
Amount of Existing Costs Paid By Households	\$ _____	(2)
Percent of Existing Costs Paid By Households	_____	%(3)
Number of Households*	_____	(4)
Annual Cost Per Household [Calculate: (2)/(4) ]	\$ _____	(5)

\* Do not use number of hook-ups.

#### B. New Pollution Control Costs

Are households expected to provide revenues for the new pollution control project in the same proportion that they support existing pollution control? (Check a, b or c and continue as directed.)

- a) Yes [fill in percent from (3) ] 

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 percent.(6a)
- b) No, they are expected to pay 

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 percent.(6b)
- c) No, they are expected to pay based on flow. (Continue on Worksheet Q, Option A)

Total Annual Cost of Pollution Control Project [Line (7), Worksheet P]	\$ _____	(7)
Proportion of Costs Households Are Expected to Pay [ (6a) or (6b) ]	_____	(8)
Amount to Be Paid By Households [Calculate: (9) x (10) ]	\$ _____	(9)
Annual Cost per Household [Calculate: (11)/(4) ]	\$ _____	(10)

#### C. Total Annual Pollution Control Cost Per Household

Total Annual Cost of Pollution Control Per Household (5) + (10)	\$ _____	(11)
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## Worksheet Q: Option A

### Calculation of Total Annual Pollution Control Costs Per Household Based on Flow

#### A. Calculating Project Costs Incurred By Households Based on Flow

Expected Total Usage of Project (eg. MGD for Wastewater Treatment)	<u>(1)</u>
Usage due to Household Use (MGD of Household Wastewater)	<u>(2)</u>
Percent of Usage due to Household Use [Calculate: (2)/(1) ]	<u>%(3)</u>
Total Annual Cost of Pollution Control Project	<u>\$ (4)</u>
Industrial Surcharges, if any	<u>\$ (5)</u>
Costs to be Allocated [Calculate: (4) - (5) ]	<u>\$ (6)</u>
Amount to Be Paid By Households [Calculate: (3) x (6) ]	<u>\$ (7)</u>
Annual Project Cost per Household [Calculate: (7)/Worksheet Q, (4) ]	<u>\$ (8)</u>

#### C. Total Annual Pollution Control Cost Per Household

Annual Existing Costs Per Household [Worksheet Q, (5) ]	<u>\$ (9)</u>	
Total Annual Cost of Pollution Control Per Household [ (8) + (9) ]	<table border="1"><tr><td><u>\$ (10)</u></td></tr></table>	<u>\$ (10)</u>
<u>\$ (10)</u>		

## Worksheet R

### Private-Sector Development Calculation of Total Annualized Project Costs

Capital Costs to be financed (Supplied by applicant) \$ \_\_\_\_\_ (1)

Interest Rate for Financing (Expressed as a decimal) \_\_\_\_\_ (i)

Time Period of Financing (Assume 10 years \*) \_\_\_\_\_ 10 years (n)

Annualization Factor \*\* =  $\frac{i}{[(1+i)^n - 1] + i}$  \_\_\_\_\_ (2)

Annualized Capital Cost [Calculate: (1) x (2) ] \$ \_\_\_\_\_ (3)

Annual Cost of Operation and Maintenance  
(including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement) \*\*\* \$ \_\_\_\_\_ (4)

**Total Annual Cost of Pollution Control Project** [ (3) + (4) ] 

\$ _____ (5)
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\* While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.

\*\* Or see Appendix B for calculated annualization factors

\*\*\* For recurring costs that occur less frequently than once a year, pro rate the cost over the relevant number of years (e.g., for pumps replaced once every three years, include one-third of the cost in each year).

## Worksheet S

### Municipal Preliminary Screener

The Municipal Preliminary Screener indicates quickly whether a public entity will not incur any substantial economic impacts as a result of the proposed pollution control project. The formula is as follows:

$$\frac{\textit{Total Annual Pollution Control Cost per Household}}{\textit{Median Household Income} *} \times 100$$

#### A. Calculation of The Municipal Preliminary Screener

Total Annual Pollution Control Cost Per Household [Worksheet C, (11) or Worksheet C, Option A (10) ]	\$	(1)
Median Household Income *	\$	(2)
<b>Municipal Preliminary Screener</b> (Calculate: [(1)/(2)] x 100)		%(3)

#### B. Evaluation of The Municipal Preliminary Screener

If the Municipal Preliminary Screener is clearly less than 1.0%, then it is assumed that the cost will not impose an undue financial burden. In this case, it is not necessary to continue with the Secondary Test. Otherwise, it is necessary to continue.

Benchmark Comparison:

<p><b>Little Impact</b> Less than 1.0%</p>	<p><b>Mid-Range Impact</b> 1.0% - 2.0%</p>	<p><b>Large Impact</b> Greater than 2.0%</p>
<p>Indication of no substantial economic impacts</p>	<p>))))))))))))) Proceed to Secondary Test</p>	

\* 1990 Census adjusted by CPI inflation rate if necessary.

## Worksheet T

### Data Used in the Secondary Test

Please list the following values used in determining the Secondary Score. Potential sources of the data are indicated.

#### A. Data Collection

<b>Data</b>	<b>Potential Source</b>	<b>Value</b>
Direct Net Debt	Community Financial Statements Town, County or State Assessor's Office	\$ _____ (1)
Overlapping Debt	Community Financial Statements Town, County or State Assessor's Office	\$ _____ (2)
Market Value of Property	Community Financial Statements Town, County or State Assessor's Office	\$ _____ (3)
Bond Rating	Standard and Poors or Moody's	_____ (4)
Community Unemployment Rate	1990 Census of Population Regional Data Centers	_____ % (5)
National Unemployment Rate	Bureau of Labor Statistics (202) 606-6392	_____ % (6)
Community Median Household Income	1990 Census of Population	\$ _____ (7)
State Median Household Income	1990 Census of Population	\$ _____ (8)
Property Tax Collection Rate	Community Financial Statements Town, County or State Assessor's Office	_____ % (9)
Property Tax Revenues	Community Financial Statements Town, County or State Assessor's Office	\$ _____ (10)

## Worksheet T, Continued

### B. Calculation of Indicators

#### 1. Overall Net Debt as a Percent of Full Market Value of Taxable Property

Overall Net Debt (Calculate: (1) + (2) )

\$ \_\_\_\_\_ (11)

Overall Net Debt as a Percent of Full Market Value of Taxable Property (Calculate: [(11)/(3)] x 100)

\_\_\_\_\_ % (12)

#### 2. Property Tax Revenues as a Percent of Full Market Value of Taxable Property

Property Tax Revenues as a Percent of Full Market Value of Taxable Property (Calculate: [(10)/(3)] x 100)

\_\_\_\_\_ % (13)

## Worksheet U

### Calculating The Secondary Score

Please check the appropriate box in each row, and record the corresponding score in the final column. Then, sum the scores and compute the average. Remember, if one of the debt or socioeconomic indicators is not available, average the two financial management indicators and use this averaged value as a single indicator with the remaining indicators.

Indicator	Secondary Indicators			Score
	Weak*	Mid-Range**	Strong***	
Bond Rating Worksheet T, (4)	Below BBB (S&P) Below Baa (Moody's) <input type="checkbox"/>	BBB (S&P) Baa (Moody's) <input type="checkbox"/>	Above BBB (S&P) or Baa (Moody's) <input type="checkbox"/>	
Overall Net Debt as Percent of Full Market Value of Taxable Property Worksheet T, (12)	Above 5% <input type="checkbox"/>	2%-5% <input type="checkbox"/>	Below 2% <input type="checkbox"/>	
Unemployment Worksheet T, (5)& (6)	Above National Average <input type="checkbox"/>	National Average <input type="checkbox"/>	Below National Average <input type="checkbox"/>	
Median Household Income Worksheet T, (7) & (8)	Below State Median <input type="checkbox"/>	State Median <input type="checkbox"/>	Above State Median <input type="checkbox"/>	
Property Tax Revenues as a Percent of Full Market Value of Taxable Property Worksheet T, (13)	Above 4% <input type="checkbox"/>	2%-4% <input type="checkbox"/>	Below 2% <input type="checkbox"/>	
Property Tax Collection Rate Worksheet T, (9)	< 94% <input type="checkbox"/>	94% - 98% <input type="checkbox"/>	> 98% <input type="checkbox"/>	

\* Weak is a score of 1 point

**SUM**

\*\* Mid-Range is a score of 2 points

\*\*\* Strong is a score of 3 points

**AVERAGE**

Worksheet V

Calculation of Earnings Before Taxes

**A. Earnings Without Pollution Control Project Costs**

$$\mathbf{EBT = R - CGS - CO}$$

**B. Earnings With Pollution Control Project Costs**

$$\mathbf{EWPR = EBT - ACPR}$$

Where: EBT = Earnings Before Taxes

EWPR = Earnings with Pollution Project Costs

R = Revenues

CGS = Cost of Goods Sold (including the cost of materials, direct labor, indirect labor ,  
rent and heat)

CO = Portion of Corporate Overhead Assigned to the Discharger (selling, general ,  
administrative, interest, R&D expenses, and depreciation on common property)

ACPR = Total Annual Costs of Pollution Control Project [Worksheet R (5)]

R \$ \_\_\_\_\_ (1)

CGS \$ \_\_\_\_\_ (2)

CO \$ \_\_\_\_\_ (3)

**EBT [ (1) - (2) - (3) ]** 

\$
----

 (4)

ACPR [ Worksheet R (5) ] \$ \_\_\_\_\_ (5)

**EWPR [ (4) - (5) ]** 

\$
----

 (6)

## Worksheet W

### Calculation of Profit Rates

#### A. Profit Rate Without Project Costs

$$\text{PRT} = \text{EBT} \div \text{R}$$

#### B. Profit Rate With Pollution Control Costs

$$\text{PRPR} = \text{EWPR} \div \text{R}$$

Where: PRT = Profit Rate Before Taxes  
PRPR = Profit Rate with Pollution Control Costs  
EBT = Earnings Before Taxes  
EWPR = Before-Tax Earnings with Pollution Control Costs  
R = Revenues

EBT [Worksheet V, (4)] \_\_\_\_\_ (1)

R [Worksheet V, (1)] \_\_\_\_\_ (2)

**PRT = Calculate: [(1)/(2)]**  (3)

EWPR [Worksheet V, (6)] \$ \_\_\_\_\_ (4)

R [Worksheet V, (1)] \$ \_\_\_\_\_ (5)

**PRPR [Calculate: (4)/(5)]**  (6)

## Worksheet X

### Calculation of The Current Ratio

$$\text{CR} = \text{CA} \div \text{CL}$$

Where: CR = Current Ratio

CA = Current Assets (the sum of inventories, prepaid expenses, and accounts receivable)

CL = Current Liabilities (the sum of accounts payable, accrued expenses, taxes, and the current portion of long-term debt)

CA \$ \_\_\_\_\_ (1)

CL \$ \_\_\_\_\_ (2)

CR [Calculate: (1)/(2)]  (3)

## Worksheet Y

### Calculation of Beaver's Ratio

$$\mathbf{BR = CF \div TD}$$

Where: BR = Beaver's Ratio  
CF = Cash Flow  
TD = Total Debt

#### Cash Flow:

Net Income After Taxes	\$ _____	(1)
Depreciation	\$ _____	(2)
CF [Calculate: (1) + (2)]	\$ _____	(3)

#### Total Debt:

Current Debt	\$ _____	(4)
Long-Term Debt	\$ _____	(5)
Total Debt	\$ _____	(6)

#### Beaver's Ratio:

BR [(3)/(6)]	<input type="text"/>	(7)
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