Attachment G2: Cost/Economic Impact Analysis

Applicant Name:	 	
Unit No.:		
Pollutant:		
BACT Option:		

Complete this form in accordance with the <u>instructions</u> (DEEP-NSR-INST-214) to ensure the proper handling of your application. Print or type unless otherwise noted.

Complete this form for each BACT option in which cost and economic impacts are to be considered. On this form, do not include costs that would be incurred regardless of whether the BACT option is chosen. If the particular item is not applicable to the BACT option being evaluated, indicate "Not Applicable" (N/A) in the appropriate blanks. Add additional lines and/or use additional forms as necessary. Complete this form for each technically feasible BACT Option in Part II of Attachment G Best Available Control Technology (DEEP-NSR-APP-214a).

Part I. Total Capital Investment

Total Capital Investment (TCI) is the total direct and indirect capital costs associated with implementation of a BACT option. Use Tables A and B to indicate the direct and indirect capital costs that would be incurred above the baseline project costs. Attach vendor quotes and additional sheets as necessary.

Table A. Direct Capital Costs

	Item	Cost Estimate	Reference/Comments
	1. Equipment Costs (Itemize Below)		
		\$	
Costs		\$	
nt C		\$	
Equipment		\$	
Equ	2. Instrumentation	\$	
sed	3. Sales Tax	\$	
Purchased	4. Freight	\$	
Pu	5. Other:	\$	
	6. Purchased Equipment Subtotal (Sum of Items 1, 2, 3, 4, and 5)	\$	

Table A. Direct Capital Costs (continued)

	7. Foundations and Supports	\$
its	8. Auxiliaries (duct work, fittings – include only the equipment which would not be necessary if the facility was not controlled)	\$
Costs	9. Handling and Erection	\$
ıtion	10. Piping	\$
Installation	11. Insulation and Painting	\$
	12. Electrical	\$
Direct	13. Site Preparation	\$
	14. Other:	\$
	15. Direct Installation Costs Subtotal (Sum of Items 7, 8, 9, 10, 11, 12, 13 and 14)	\$
	16. DIRECT CAPITAL COSTS SUBTOTAL (Sum of Items 6 and 15)	\$

Table B. Indirect Installation Costs

Item	Cost Estimate	Reference/Comments
1. Engineering and Supervision	\$	
2. Lost Production (for retrofit situations only)	\$	
3. Construction and Field Expenses	\$	
4. Contractor Fees	\$	
5. Start-up and Performance Tests	\$	
6. Over-all Contingencies	\$	
7. Working Capital (if applicable)	\$	
8. Other:	\$	
9. Indirect Installation Costs Subtotal (Sum of Items 1, 2, 3, 4, 5, 6, 7, and 8)	\$	

Table C. Capital Cost Summary

Item	Cost Estimate	Reference/Comments
Total Capital Investment Subtotal (Sum of Table A, item 16 and Table B Item 9)	\$	
2. Capital Recovery Factor		
a. Interest Rate		
b. Economic Lifetime		
3. Capital Recovery Cost	\$	

Part II. Total Annual Cost

Total Annual Cost includes the direct and indirect costs and recovery credits associated with implementation of a BACT option. Use Tables D and E to indicate the annual costs that would be incurred above the baseline project costs. Use Table F to indicate the recovery credits that would be realized after implementation of the BACT option. Summarize the total annual costs in Table G. Attach vendor quotes and additional sheets as necessary.

Table D. Direct Capital Costs

Item	Cost Estimate	Reference/Comments
1. Operating Labor (Itemize Below)		
	\$	
	\$	
2. Maintenance Labor (Itemize Below)		
	\$	
	\$	
3. Materials (Itemize Below)	•	
	\$	
	\$	
4. Utilities (Itemize Below)	•	
	\$	
	\$	
5. Waste Treatment and Disposal (Itemize Below)	•	
	\$	
	\$	
6. Replacement Parts (Itemize Below)		
	\$	
	\$	
7. Other (Please Specify)		
	\$	
	\$	
8. DIRECT ANNUAL COSTS SUBTOTAL (Sum of Items 1, 2, 3, 4, 5, 6, and 7)	\$	

Table E. Indirect Annual Costs

Item	Cost Estimate	Reference/Comments
1. Overhead	\$	
2. Property Taxes, Insurance, and Administrative Charges	\$	
3. Other:	\$	
4. Indirect Annual Costs Subtotal (Sum of Items 1, 2, and 3)	\$	

Table F. Recovery Credits

Item	Cost Estimate	Reference/Comments
1. Materials Recovered		
	\$	
2. Energy Recovered		
	\$	
3. Other (Please Specify)		
	\$	
4. RECOVERY CREDITS SUBTOTAL (Sum of Items 1, 2, and 3)	\$	

Table G. Total Annual Cost Summary

Item	Cost Estimate	Reference/Comments
Direct Annual Costs Subtotal (Table D, Item 8)	\$	
2. Indirect Annual Costs Subtotal (Table E, Item 4)	\$	
3. Recovery Credits Subtotal (Table F, Item 4)	\$	
4. TOTAL ANNUAL COST SUBTOTAL (Items 1 plus Item 2 minus Item 3)	\$	

Part III. Cost/Economic Impact Summary

Table H. Total Annualized Cost Summary

Item	Cost Estimate
Capital Recovery Cost (Table C, Item 3)	\$
2. Total Annual Cost Subtotal (Table G, Item 4)	\$
3. TOTAL ANNUALIZED COST (TAC) (Sum of Items 1 and 2)	\$

Table I. Cost Effectiveness

Item	Cost Estimate
Baseline Emissions Rate (tpy)	
2. Allowable Emissions Rate (tpy)	
Total Pollutant Removed (tpy) (Difference of Item 1 and Item 2)	
4. AVERAGE COST EFFECTIVENESS OF BACT OPTION (\$/ton of pollutant removed) (Divide Table H, Item 3 by Table I, Item 3)	\$

Part IV. Attachments

List any attachments used to support your calculations in the table below.

Attachment	Description