

Table I
Economic Analysis - Air Emissions Control Equipment

FACILITY NAME AND ADDRESS: _____

FACILITY ID AND CONTROL TYPE _____

1) COST OF EMISSIONS CONTROL EQUIPMENT INCLUDING INSTALLATION \$ _____ (1)

2) CAPITAL RECOVERY FACTOR (*) _____ (2)

3) ANNUAL EQUIPMENT COST (MULTIPLY ITEM 1 BY ITEM 2) \$ _____ (3)

4) ANNUAL OPERATING COSTS

A. ELECTRICITY(**) \$ _____ (4A)

B. NATURAL GAS(**) \$ _____ (4B)

C. CATALYST REPLACEMENT \$ _____ (4C)

D. CARBON REPLACEMENT \$ _____ (4D)

E. MAINTENANCE \$ _____ (4E)

5) TOTAL ANNUAL COSTS [ADD ITEMS 3 AND 4 (A TO E)] \$ _____ (5)

6) VOC OR NO_x TONNAGE REDUCTION

A. VOC ACTUAL ANNUAL EMISSIONS OR NO_x POTENTIAL TO EMIT _____ (6A)

B. PERCENT CAPTURE AND CONTROL (OR PERCENT REDUCTION) ACHIEVED _____ (6B)

C. TONS REDUCED (MULTIPLY ITEM 6A BY ITEM 6B) _____ (6C)

TOTAL COST OF CONTROLS PER TON REDUCED (DIVIDE ITEM 5 BY ITEM 6C) \$ _____

* - CRF = CAPITAL RECOVERY FACTOR

$$\frac{I}{(1+I)^n - 1} \quad \text{WHERE: } I = \text{ANNUAL INTEREST RATE}\%$$

$$n = \text{EQUIPMENT OR REPLACEMENT PARTS LIFE, IN YEARS (n=10\#)}$$

** - Energy costs should be the added costs of operating the control equipment minus any cost that will no longer continue to incur as a result of the equipment installation and operation, not the total energy costs of running the process to be controlled.

- Generally, a ten year period is used for the life span of control equipment. However, manufacturers' guarantees for longer designed life spans of control equipment must be used if provided. Finally, the emission source owner may provide the Department with manufacturers' data that justifies that a shorter life span is appropriate.

% - The annual interest rate is based on the current market rate as of the date of the analysis. The applicant should contact their lending institution for the annual interest rate.