

ADSORBER SYSTEM APPLICATION

**FORM E108
07/2001**

(This form must be accompanied by Form E001, E010, E011, E102, E103 or E104 if not already submitted for this equipment.)

1. Name of Company: _____
(As shown on Line 1 of Form E001)

2. Name of Equipment: _____
(As shown on Line 9 of Form E001)

3. Control Equipment Name: _____

4. Control Equipment Data:

A. Equipment Data:
 Name of Manufacturer: _____
 Model Number: _____ Cost of Equipment: _____
 Date of Manufacture: _____ Date of Installation: _____

B. Pollutant Data:
 List of contaminants to be removed and the corresponding concentrations.

Pollutant	Concentration (ppm at Standard Conditions)

C. Carrier Gas Data:
 a. The carrier gas is: Air Other (specify): _____
 b. Vapor concentration: Above Upper Explosive Limit Within Lower and Upper Explosive Limits*
 Below Lower Explosive Limit Not Flammable
 c. Gas Stream Conditions: Temperature: _____ °F Pressure: _____ Inches Hg
 Moisture Content: _____ %
 * If within the lower and upper explosive limits, explosion proof pumps, fans, etc. should be considered.

D. Emissions data determined by: Stack Test (submit report) Calculation (submit copy)

5. Process Data:

A. Volume of gas to be treated: _____ CFM @ STP
 B. Velocity of gas to be treated: _____ FPM @ STP
 C. Duct diameter: _____ Ft
 D. Process Operation: Continuous Intermittent Periodic
 E. Operating Time:
 Daily: _____ Hours/day
 Weekly: _____ Days/week
 Yearly: _____ Weeks/year

6. Adsorption System Data:

A. The system is: Regenerative Non-regenerative Single Pass
 Multi Pass Thin Bed Thick Bed

B. Adsorbent data:
 Activated Carbon – mesh size: _____
 Hydrous Oxides (Specify): _____ - mesh size: _____
 Metallics (Specify): _____ - mesh size: _____
 Other (Specify): _____ - mesh size: _____

C. If adsorbent is to be chemically impregnated to act as a catalyst or chemisorbent, give details:

7. Adsorbent System Variables:

A. Bed Depth: _____ Inches Bed Area: _____ Ft²

B. Packing Density: _____ Lbs/ft³

C. Total Charge per System: _____ Lbs

D. Temperature of Adsorbent: _____ °F *All adsorption reactions are exothermic – give maximum working temperature.*

E. Pressure Drop through Bed: _____ Inches Water _____ Inches Hg

F. Capacity of Adsorbent: _____ *In weight capacity/weight adsorbent at working temperature and air contaminant concentration.*

G. Estimated Life of Adsorbent to Breakthrough: _____ hours *Submit supporting data from manufacturer.*

H. Air Flow Rate through Bed: _____ CFM

8. Regenerative Systems:

A. Number of Adsorbers in System: _____

B. Time required for Regeneration Cycle: _____

C. If steam is used to regenerate, indicate the steam ratio to solvent: _____

D. Capacity of Working Charge: _____

E. List all equipment to be used for recovery system: _____

9. Control Efficiency:

Specify Pollutant	Efficiency %

10. Drawings of all equipment should be submitted with each application.

*This is to certify that I am familiar with the operations concerning this equipment and that the information provided on this application is true and correct to the best of my knowledge. **This form must be completely filled out before it will be acceptable.***

Mail to:
 CHATTANOOGA-HAMILTON COUNTY
 AIR POLLUTION CONTROL BUREAU
 2034 Hamilton Place Blvd. Suite 300
 Chattanooga, TN 37421

Company Official: _____
Signature

Title: _____

Date: _____

DO NOT WRITE BELOW THIS LINE

_____ Engineer Approval This form corresponds to permit number: _____

Special Notations: _____

