Control Equipment – Adsorbers

1	Facility Name	
2	Equipment Name and identification number	
3	Stack ID or flow diagram point identifications	
4	Name of Manufacturer	
5	Model Number	
6	Cost of Equipment	
7	Date of Manufacture	
8	Date of Installation	

	LIST OF CONTAMINANTS TO BE REMOVED AND CORRESPONDING CONCENTRATIONS	
9	Air Contaminant	Concentration (PPM at standard conditions)

10	The carrier gas is	☐Air	☐Other (specify)
	The concentration of vapors is	☐Above upper explosive limit ☐Below lower explosive limit	☐Within lower and upper explosive limits ☐Not Flammable
	Condition of gas stream	Temperature (ºF):	
		Pressure (in. Hg):	
		Moisture Content (%):	

11	The gas volume to be treated is	CFM at STP		
	The duct size is	diameter		
	The gas velocity in the duct is	FPM at STP		
	The above mentioned pertinent data was determined by	☐Stack test	☐Other calculations (submit copy)	
	The process to be served is	☐Continuous	☐Intermittent	☐Cyclic
	Give average operating time for process	hours/day		
		days/week		
		weeks/year		

	ADSORPTION SYSTEM DATA		
12	This system is (mark all that apply)	☐Regenerative ☐Non-Regenerative	☐Single Pass ☐Multi-pass	☐Thin Bed ☐Thick Bed
	The type adsorbent is	☐Activated Carbon	Mesh Size:	
		☐Hydrous oxides specify:	Mesh Size:	
		☐Mettalics specify:	Mesh Size:	
		☐Other (specify)		
	Note: If adsorbent is to be chemically impregnated to act as a catalyst, give details:			

Continued

13	GIVE DETAILS OF SYSTEM VARIABLES	
	A. Bed depth (in inches) Bed Area (in ft^2)	
	B. Packing Density (lbs/ft^3)	
	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 of adsorbent)	at working temperature and concentration of air contaminants. Submit supporting data from manufacturer.
	G. Estimated life of adsorbent to break through	hrs (submit supporting data from manufacturer)
	H. Air flow rate through bed	cubic feet/minute

14	REGENERATIVE SYSTEMS	
	A. Number of adsorbers in system	
	B. Time required for regeneration cycle	
	C. If steam is used to regenerate, indicate steam to solvent ratio	
	D. Indicate capacity of working charge (%)	
	E. List all equipment to be used for recovery systems	

	GENERAL INFORMATION
15	Drawings of all equipment should be submitted with each application.

16	Give control equipment efficiency for each pollutant being control by this equipment`	Specify Pollutant	Efficiency (%)

17	Page Number	Revision Number	Date of Revision