FORM C5
CONTROL DEVICE (ADSORBER)

AS REQUIRED BY 15A NCAC 2Q .0112, THIS FORM MUST BE SEALED BY A PROFESSIONAL ENGINEER (P.E.) LICENSED IN NORTH CAROLINA.

CONTROL DEVICE ID NO: | CONTROLS EMISSIONS FROM WHICH EMISSION SOURCE ID NO(S):

EMISSION POINT ID NO(S): | POSITION IN SERIES OF CONTROLS   NO. _____ OF _____ UNITS

OPERATING SCENARIO:

_____ OF _____

DESCRIBE CONTROL SYSTEM:

POLLUTANT(S) COLLECTED:	_____	_____	_____	_____
BEFORE CONTROL EMISSION RATE (LB/HR):	_____	_____	_____	_____
CAPTURE EFFICIENCY:	_____ %	_____ %	_____ %	_____ %
CONTROL DEVICE EFFICIENCY:	_____ %	_____ %	_____ %	_____ %
CORRESPONDING EFFICIENCY:	_____ %	_____ %	_____ %	_____ %
EFFICIENCY DETERMINATION CODE:	_____	_____	_____	_____
TOTAL EMISSION RATE (LB/HR):	_____	_____	_____	_____

INLET AIR FLOW RATE (ACFM):

PRESSURE DROP (IN. H_2O): _____ MIN _____ MAX   WARNING ALARM? ☐ YES ☐ NO

INLET TEMPERATURE (^{o}F): _____ MIN _____ MAX | OUTLET TEMPERATURE (^{o}F): _____ MIN _____ MAX

SIZE OF COMPARTMENTS (FT) LENGTH: | WIDTH: | HEIGHT: | DIAMETER:

METHOD OF ADSORPTION: ☐ ONE-PASS REGENERATIVE   ☐ ONE-PASS NONREGENERATIVE
☐ RECIRCULATING   ☐ OTHER:

TYPE OF ADSORPTION MATERIAL: | NUMBER OF COMPARTMENTS:

REGENERATIVE METHOD: ☐ DISCARDED   ☐ CHEMICAL   ☐ THERMAL (DRY HEAT)
☐ THERMAL (STEAM)   ☐ OTHER:

REGENERATIVE SCHEDULE MAX. TIME FOR DESORPTION: | LENGTH OF TIME TO MAX. SATURATION:

HOW ARE EMISSIONS CONTROLLED DURING REGENERATION? (Attach additional sheets as necessary.):

VOLATILE CONCENTRATIONS (PPMV) ENTERING UNIT: | LEAVING UNIT:

RELATIVE HUMIDITY OF AIR STREAM ENTERING UNIT (%): | ORIENTATION OF BEDS:

BREAKTHROUGH CAPACITY (LB. VAPOR/LB. ADSORBENT): | BREAKTHROUGH ALARM? ☐ YES ☐ NO

CYCLE TIME:

DESCRIBE MAINTENANCE PROCEDURES:

DESCRIBE ANY FIRE DETECTION DEVICES AND ANY MEANS OF FIRE SUPPRESSION:

DESCRIBE ANY MONITORING DEVICES, GAUGES, TEST PORTS, ETC:

DESCRIBE HOW REGENERATION CYCLE IS INITIATED (e.g. - fixed time, ppm monitor, etc.):

ON A SEPARATE PAGE, ATTACH A DIAGRAM OF THE RELATIONSHIP OF THE CONTROL DEVICE TO ITS EMISSION SOURCE(S):

Attach Additional Sheets As Necessary