

FORM C2

CONTROL DEVICE (Electrostatic Precipitator)

REVISED 12/01/01

NCDENR/Division of Air Quality - Application for Air Permit to Construct/Operate

C2

CONTROL DEVICE ID NO:	CONTROLS EMISSIONS FROM WHICH EMISSION SOURCE ID NO(S):
EMISSION POINT (STACK) ID NO(S):	POSITION IN SERIES OF CONTROLS: NO. OF UNITS
MANUFACTURER:	MODEL NO.
MANUFACTURE DATE:	PROPOSED OPERATION DATE:
OPERATING SCENARIO:	PROPOSED START CONSTRUCTION DATE:
_____ OF _____	P.E. SEAL REQUIRED (PER 2Q .0112)? <input type="checkbox"/> YES <input type="checkbox"/> NO
EQUIPMENT SPECIFICATIONS	GAS DISTRIBUTION GRIDS: <input type="checkbox"/> YES <input type="checkbox"/> NO
TYPE: <input type="checkbox"/> WET <input type="checkbox"/> DRY <input type="checkbox"/> SINGLE-STAGE <input type="checkbox"/> TWO-STAGE	
TOTAL COLLECTION PLATE AREA (FT ²):	NO. FIELDS NO. COLLECTOR PLATE PER FIELD:
COLLECTOR PLATES SIZE (FT): LENGTH: WIDTH:	SPACING BETWEEN COLLECTOR PLATES (INCHES):
TOTAL DISCHARGE ELECTRODE LENGTH(FT):	GAS VISCOSITY (POISE):
NUMBER OF DISCHARGE ELECTRODES:	NUMBER OF COLLECTING ELECTRODE RAPPERS:
MAXIMUM INLET AIR FLOW RATE (ACFM):	PARTICLE MIGRATION VELOCITY (FT/SEC):
MINIMUM GAS TREATMENT TIME (SEC):	BULK PARTICLE DENSITY (LB/FT ³):
FIELD STRENGTH (VOLTS) CHARGING: COLLECTING:	CORONA POWER (WATTS/1000 CFM):

ELECTRICAL USAGE (kw/HOUR):

CLEANING PROCEDURES: RAPPING PLATE VIBRATING WASHING OTHER _____

OPERATING PARAMETERS	PRESSURE DROP (IN. H2O): MIN MAX	WARNING ALARM? <input type="checkbox"/> YES <input type="checkbox"/> NO
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RESISTIVITY OF POLLUTANT (OHM-CM):

INLET GAS TEMPERATURE (°F): MIN MAX

VOLUME OF GAS HANDLED (ACFM):

GAS CONDITIONING: YES NO TYPE OF AGENT (IF YES):

OUTLET GAS TEMPERATURE (°F): MIN MAX

INLET MOISTURE PERCENT: MIN MAX

POWER REQUIREMENTS		IS AN ENERGY MANAGEMENT SYSTEM USED? <input type="checkbox"/> YES <input type="checkbox"/> NO	
FIELD NO.	NO. OF SETS	CHARGING	EACH TRANSFORMER (kVA) EACH RECTIFIER Kv Ave/Peak Ma Dc

POLLUTANT(S) COLLECTED: _____

BEFORE CONTROL EMISSION RATE (LB/HR): _____

CAPTURE EFFICIENCY: _____ %

CONTROL DEVICE EFFICIENCY: _____ %

CORRESPONDING OVERALL EFFICIENCY: _____ %

EFFICIENCY DETERMINATION CODE: _____

TOTAL EMISSION RATE (LB/HR): _____

PARTICLE SIZE DISTRIBUTION			DESCRIBE STARTUP PROCEDURES:
SIZE (MICRONS)	WEIGHT % OF TOTAL	CUMULATIVE %	
0-1			DESCRIBE MAINTENANCE PROCEDURES:
1-10			
10-25			
25-50			DESCRIBE ANY AUXILIARY MATERIALS INTRODUCED INTO THE CONTROL SYSTEM:
50-100			
>100			
TOTAL = 100			

DESCRIBE ANY MONITORING DEVICES, GAUGES, OR TEST PORTS AS ATTACHMENTS:

ATTACH A DIAGRAM OF THE TOP VIEW OF THE ESP WITH DIMENSIONS (include at a minimum the plate spacing and wire spacing and indicate the electrode type), AND THE RELATIONSHIP OF THE CONTROL DEVICE TO ITS EMISSION SOURCE(S):

Attach Additional Sheets As Necessary