FORM C2

CONTROL DEVICE (Electrostatic Precipitator)

REVISED 09/22/16 **NCDEQ/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.
OPERATING SCENARIO:	
OPERATING SCENARIO: _____ OF _____	P.E. SEAL REQUIRED (PER 2Q .0112)? ☐ YES ☐ NO

DESCRIBE CONTROL SYSTEM:

EQUIPMENT SPECIFICATIONS	GAS DISTRIBUTION GRIDS: ☐ YES ☐ NO
TYPE: ☐ WET ☐ DRY	☐ SINGLE-STAGE ☐ TWO-STAGE
TOTAL COLLECTION PLATE AREA (FT^2):	NO. FIELDS NO. COLLECTOR PLATES PER FIELD:
COLLECTOR PLATE 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. H20): MIN MAX / WARNING ALARM? ☐ YES ☐ NO
RESISTIVITY OF POLLUTANT (OHM-CM):	GAS CONDITIONING: ☐ YES ☐ NO TYPE OF AGENT (IF YES):
INLET GAS TEMPERATURE (^oF): MIN MAX	OUTLET GAS TEMPERATURE (^oF): MIN MAX
VOLUME OF GAS HANDLED (ACFM):	INLET MOISTURE PERCENT: MIN MAX
POWER REQUIREMENTS	IS AN ENERGY MANAGEMENT SYSTEM USED? ☐ YES ☐ 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 AFTER CONTROL EMISSION RATE (LB/HR):				

PARTICLE SIZE DISTRIBUTION

SIZE (MICRONS)	WEIGHT % OF TOTAL	CUMULATIVE %
0-1		
1-10		
10-25		
25-50		
50-100		
>100		
TOTAL = 100		

DESCRIBE STARTUP PROCEDURES:

DESCRIBE MAINTENANCE PROCEDURES:

DESCRIBE ANY AUXILIARY MATERIALS INTRODUCED INTO THE CONTROL SYSTEM

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

COMMENTS:

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