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| **Department of Natural Resources and Environmental Control**  **Division of Air Quality** | **AQM-1001K** |
| **STACK PARAMETERS AND AIR POLLUTION CONTROL EQUIPMENT** |

**NAME OF COMPANY:**

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| **SECTION I. SUMMARY SHEET *(Make additional copies, if necessary)*** | | | | | | | | | | | | |
| EMISSION POINT SUMMARY | EMISSIONS UNIT DESCRIPTION(S) | CONTROL EQUIPMENT | | | STACK PARAMETERS | | | | | CONTROL EFFCIENCY | CAPTURE OR COLLECTION EFFICIENCY  % | BASIS OF ESTIMATE |
| TYPE | DATE INSTALLED | COST  *$* | HEIGHT  *ft.* | DIAMETER  *ft.* | TEMP.  *°F* | FLOW  *acfm* | EXIT VELOCITY  *ft/sec* |
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1. If an emissions unit has secondary control equipment in addition to primary control equipment, use a separate line and indicate, under TYPE, that it is a secondary control

2. If the stack is rectangular, specify the dimensions. If there is no stack for a particular point, enter the minimum height of release under HEIGHT, and write NA (Not Applicable) under DIAMETER.

3. Capture or collection efficiency is the efficiency with which the pollutants are collected at the emission source before being sent to the control device.

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| **SECTION I. SUMMARY SHEET *(Continued) (Make additional copies, if necessary)*** | | | | | | | **AQM-1001K** |
| (Continued) |
| EMISSION POINT NUMBER | NAME AND CHEMICAL COMPOSITION OF POLLUTANTS | POLLUTANT LOADING  *(Specify Limits)* | | AMOUNT EMITTED | | BASIS OF ESTIMATE  *(Attach copies of calculations)* | |
| INLET | OUTLET | MAXIMUM  *(lb/hr)* | MAXIMUM  *(tons/yr)* |
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| **SECTION I.** | ***(CONTINUED)*** |
| The basis for all efficiency estimates should be given and supported with documentation and a detailed explanation of the method of calculation and the source of information. Submit all pertinent drawings. | | | | |
| Describe briefly the disposal of particulates collected, scrubbing liquid and/or other wastes generated at the plant site: | | | | |
| **SECTION II. SPECIFIC CONTROL EQUIPMENT** | | | | |
| **ADSORPTION UNIT** | | | | |
| 1. EMISSION POINT NUMBER OF ADSORPTION UNIT: | | | | |
| 2. MANUFACTURER *or Description*: | | | | |
| 3. ADSORBENT:  Activated Charcoal: Type:  Other: *(specify)*: | | | | |
| 4. ADSORBATE(S): | | | | |
| 5. NUMBER OF BEDS: | | | 6. WEIGHT OF ADSORBENT PER BED:        lb | |
| 7. DIMENSIONS OF BED:  Thickness in direction of gas flow:       inches  Cross-sectional area:       square inches | | | | |
| 8. INLET GAS TEMPERATURE:       ° | | | 9. PRESSURE DROP ACROSS UNIT:        inch water gauge | |
| 10. TYPE OF REGENERATION  Replacement  Steam  Other (Specify): | | | | |
| 11. METHOD OF REGENERATION  Alternate Use of Beds  Source Shut-down  Other (specify): | | | | |
| 12. TIME ON-LINE BEFORE REGENERATION:        minutes | | | 13. EFFICIENCY OF ADSORBER:       % | |

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| **AQM-1001K** |
| ***(Continued)*** |
| **AFTERBURNER**  ***(Incinerator for Air Pollution Control)*** | | |
| 1. EMISSION POINT NUMBER OF AFTERBURNER: | | |
| 2. MANUFACTURER *or Description*: | | |
| 3. COMBUSTION CHAMBER DIMENSIONS: (Provide for *all* chambers):  Length:       inches  Cross-Sectional Area:       square inches | | |
| 4. INLET GAS TEMPERATURE:       ° | 5. OPERATING TEMPERATURE OF CHAMBER:       ° | |
| 6. TYPE OF AUXILIARY FUEL:  HIGHER HEATING VALUE:  % SULFUR: Maximum:       Average:  % ASH: Maximum:       Average:  MAXIMUM HOURLY FUEL USAGE *(specify units)*: Hourly:       Average: | | |
| 7. BURNERS PER AFTERBURNER:       @       BTU/hr, each | | |
| 8. CATALYST USED:  Describe Catalyst: | | |
| 9. HEAT EXCHANGER USED:  Describe Heat Exchanger: | | |
| 10. GAS FLOW RATE:        *SCFM* (at 68°F) | 11. EFFCIENCY OF AFTERBURNER:        % | |
| 12. COMPOSITION OF WASTE COMBUSTED: | | |
| 13. MAXIMUM QUANTITY OF WASTE COMBUSTED (specify units):  Per Hour:       Per Year: | | |
| 14. INCINERATOR RESIDENCE TIME:        sec. | 15. MOISTURE CONTENT OF EXHAUST GAS:       % | |

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| **AQM-1001K** |
| ***(Continued)*** |
| **CONDENSER** | | |
| 1. EMISSION POINT NUMBER OF THE CONDENSER: | | |
| 2. MANUFACTURER *or Description*: | | |
| 3. HEAT EXCHANGER AREA:        square feet | 4. COOLANT FLOW RATE:  Water       gpm  Air       scfm  Other       specify: | |
| 5. GAS FLOW RATE:        scfm | 6. COOLANT TEMPERATURE:  in:      ° out:      ° | |
| 7. GAS TEMPERATURE:  in:      ° out:      ° | 8. EFFICIENCY OF CONDENSER:       % | |
| 9. COMPOSITION OF THE GAS AT THE:  a. inlet:  b. outlet: | | |

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| **ELECTROSTATIC PRECIPITATOR** | |
| 1. EMISSION POINT NUMBER OF PRECIPITATOR: | |
| 2. MANUFACTURER *or Description*: | |
| 3. COLLECTING ELECTRODE AREA:       square feet | |
| 4. GAS FLOW RATE:       scfm | 5. EFFICIENCY:      % |
| 6. VOLTAGE ACROSS THE PRECIPITATOR PLATES: | 7. RESISTIVITY OF POLLUTANTS: |
| 8. NUMBER OF STAGES IN THE PRECIPITATOR: | |

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| ***(Continued)*** |
| **CYCLONE** | | |
| 1. EMISSION POINT NUMBER OF CYCLONE: | | |
| 2. MANUFACTURER or Description: | | |
| 3. TYPE OF CYCLONE: | 4. NUMBER OF CYCLONES IN MULTIPLE CYCLONE: | |
| 5. GAS FLOW RATE:       scfm | 6. EFFICIENCY:      % | |
| 7. DESCRIPTION AND SKETCH, WITH DIMENSIONS, FOR APPROPRIATE CYCLONE.  ALTERNATELY, PROVIDE MANUFACTURER’S DESCRIPTION WITH DRAWINGS, INCLUDING DIMENSIONS: | | |
| **TANGENTIAL INLET CYCLONE** | **AXIAL INLET CYCLONE** | |
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| **AQM-1001K** |
| ***(Continued)*** |
| **FILTER UNIT** | | |
| 1. EMISSION POINT OF FILTER UNIT: | | |
| 2. MANUFACTURER or Description: | | |
| 3. FILTERING MATERIAL: | 4. FILTERING AREA: | |
| 5. CLEANING METHOD  Shaker  Reverse Air  Pulse Jet  Other *(specify)*: | | |
| 6. GAS COOLING METHOD  Ductwork Length:       ft Diameter:       inches  Heat Exchanger  Bleed-In Air  Water Spray  Other *(specify)*: | | |
| 7. GAS FLOW RATE (from source):       scfm | 8. COOLING GAS FLOW RATE:  Bleed-in Air:       scfm  Water Spray:       gpm | |
| 9. INLET GAS CONDITION:  Temperature:      °  Dew Point:      ° | 10. EFFICIENCY OF FILTER UNIT:      % | |
| **SCRUBBER** | | |
| 1. EMISSION POINT NUMBER OF SCRUBBER: | | |
| 2. MANUFACTURER *or Description*: | | |
| 3. a. TYPE OF SCRUBBER  Venturi  Wet Fan  Packed Packing Type:       Size:       Packed Height:       inches  Spray Number of Nozzles:       Nozzle Pressure:       psig  Other *(specify)*:       (*Attach description and sketch with dimensions)*  b. Pressure Drop across Scrubber:       inches H2O | | |
| 4. TYPE OF FLOW: | | |
| 5. SCRUBBER GEOMETRY  Length in direction of Gas Flow:       ft  Cross-Sectional Area:       square ft. | | |
| 6. CHEMICAL COMPOSITION OF SCRUBBING LIQUID: | | |
| 7. SCRUBBING LIQUID FLOW RATE:       gpm | 8. GAS FLOW RATE:       scfm | |
| 9. INLET GAS TEMPERATURE:      ° | 10. EFFICIENCY OF SCRUBBER:      % | |

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| **AQM-1001K** |
| ***(Continued)*** |
| **OTHER TYPE OF CONTROL EQUIPMENT** | |
| 1. EMISSION POINT NUMBER OF “*OTHER TYPE*” OF CONTROL EQUIPMENT: | |
| 2. GENERIC NAME OF “*OTHER EQUIPMENT*”: | |
| 3. MANUFACTURER *or Description*: | |
| 4. DESCRIPTION AND SKETCH, WITH DIMENSIONS, FLOW RATES AND EFFICIENCY OF “*OTHER EQUIPMENT*”: | |

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