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| Department of Natural Resources and Environmental Control  Division of Air Quality | **AQM-1001B** |
| **MANUFACTURING OR PROCESSING OPERATIONS** |

SECTION A: CONTINUOUS PROCESS OPERATIONS (Complete a separate Form for each Mode of Operation)

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| --- | --- | --- | --- | --- | --- |
| EMISSION POINT NO.  (1) | PROCESS DESCRIPTION\*  (2) | CONTINUOUS OR BATCH  (3) | MAXIMUM OPERATING SCHEDULE (Hours/Day, Days/Week, Weeks/Year) | PROCESS EQUIPMENT  (Brief Description)  (5) | DATE INSTALLED  (6) |
|  |  |  | Hours/Day    Days/Week     Weeks/Year |  | /  / |

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| --- | --- | --- | --- | --- | --- |
| EMISSION POINT NO.  (1) | LIST MAJOR RAW MATERIAL(S) USED  (7) | MAXIMUM QUANTITY INPUT OF EACH MAJOR RAW MATERIAL  (*Specify Units/Hour*)  (8) | TYPE OF PRODUCTS\*  (9) | QUANTITY OUTPUT (Specify Units) | |
| MAXIMUM HOURLY  (*Specify Units*)  (10a) | MAXIMUM ANNUAL  (*Specify Units*)  (10b) |
|  |  |  |  |  |  |

\* Attach separate sheet if needed

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| **IMPORTANT: Complete AQM-1001K for Air Pollution Control Equipment. If there is no control equipment, complete only Section 1 of AQM-1001K.** | **AQM-1001B** |
| ***Continued*** |

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| EMISSION POINT NO.  (1) | FUEL TYPE FOR PROCESS HEAT  (11) | RATED BURNER CAPACITY  (BTU/HOUR)  (12) | FUEL COMPOSITION | | FUEL USAGE RATES | | NOTE: If the combustion products are emitted along with the process emissions, indicate so in this column by writing “*combined*.”  (15) |
| % SULFUR  (13a) | % ASH  (13b) | MAXIMUM HOURLY  (14a) | MAXIMUM ANNUAL  (14b) |
|  |  |  |  |  |  |  |

16. IMPORTANT: Submit a process flow diagram. Label all materials, equipment and emission point numbers.

17. The Department may request Material Safety Data Sheets (“MSDS”) for each process.

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| ***Continued*** |

SECTION B: BATCH PROCESS OPERATIONS (“BP”) (*Complete a separate Form for each Batch Process*)

NOTE: Complete Section B, Batch Process Profile, for each Batch Process in this Permit Application.

See instructions for further clarification and information.

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| 1. BATCH PROCESS I.D. NUMBER *–or-* FACILITY DESIGNATION |
| 2. BATCH PROCESS DESCRIPTION  *(Provide description specifying product produced and operations occurring: e.g., production of XYZ drug in Reactor 6, coating and sorting)* |
| 3. OPERATING SCENARIOS *(“OS”)*  (*Provide the total of the Operating Scenarios occurring in this Batch Process)* |
| 4. EQUIPMENT *(“E”)*  *(Provide a listing of the Equipment used in this Batch Process)* |
| 5. CONTROL DEVICES *(“CD”)*  *(Provide the number of, and identify, the air pollution Control Devices used in this Batch Process; complete AQM- 1001K for Pollution Control Equipment)* |
| 6. EMISSION POINTS *(“PT”)*  *(Identify the total amount of Emission Points found in this Batch Process)* |

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| ***Continued*** |

7. Emission Summary of Regulated Air Contaminants for this Batch Process *(“BP”)*. (Maximum Emissions)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CONTAMINANT CATEGORY/NAME** | | **BATCH PROCESS *(“BP”)* MAXIMUM EMISSIONS**  *(Pounds per Batch)*1 | | |
| **FUGITIVE EMISSIONS**2 | **EMISSIONS FROM EMISSION POINTS *(“PT”)*** | **TOTAL EMISSIONS**3 |
| VOC (total) | |  |  |  |
| NOX | |  |  |  |
| CO | |  |  |  |
| SO2 | |  |  |  |
| PM10 | |  |  |  |
| Other | |  |  |  |
| PM10 (total) | |  |  |  |
| HAPs (total) *(§112(b) definition)* | |  |  |  |
|  | |  |  |  |
| **CONTAMINANT NAME** | ***CAS* No.** | **BATCH PROCESS *(“BP”)* MAXIMUM EMISSIONS**  *(Pounds per Batch)*1 | | |
| **FUGITIVE EMISSIONS**2 | **EMISSIONS FROM EMISSION POINTS *(“PT”)*** | **TOTAL EMISSIONS**3 |
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*(Provide for each Operating Scenario)*

1These are your requested emission limits;

*(Provide overall air contaminant emissions for all Operating Scenarios for this Batch Process).*

2Batch Process Fugitive Emissions are the fugitive emissions generated from the equipment used in the Batch Process;

*(Provide the total annual fugitive emissions of each air contaminant from all Operating Scenarios in the Batch Process).*

3*(Summation of Columns 1 and 2).* 4

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| ***Continued*** |

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| 8. Are any of the determined emission limits the result of an *“Alternate Emission Limit”*?1 |

1If any of the emission levels quantified in the previous sections are entirely or in part limited by an “Alternate Emission Limit”, select “YES” and attach a supplemental sheet explaining the basis for the Alternate Emission Limit. Some examples of Alternate Emission Limits are: a probationary rule, a federally-enforceable rule, or an approved case-by-case rule.

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**9. EQUIPMENT INVENTORY (“E”)**

*(Provide a list and description of all major equipment described in one (1) Batch Process;*

*provide specific information for each piece of major equipment)*

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| --- | --- | --- | --- |
| **BATCH PROCESS I.D. NUMBER**  **-or-**  **FACILITY DESIGNATION**1 | **EQUIPMENT I.D.** | **TYPE/DESCRIPTION**2 | **SIZE OR CAPACITY**3 |
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1Batch Process I.D. Number or Facility Designation, as provided in Section B(1).

2An overview for the piece of equipment, which includes its function, attributes and make and model, if known;

e.g., *Genco AC2200 Glass-Lined Reactor.*

3The maximum volume of flow accommodated by the piece of equipment;

e.g., *250-gallon Kettle, 500-gallon Reactor, 50-pound-per-hour Dispenser*.

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| ***Continued*** |

10. CONTROL DEVICE INVENTORY (“CD”)\*

*Complete AQM-1001K for each air pollution control device; if there is no control equipment, complete only Section 1 of AQM-1001K)*

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| **CONTROL DEVICE I.D.** | **FACILITY’S DESIGNATION**1 | **TYPE/DESCRIPTION**2 |
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\* “*Control Device*” refers to an Air Pollution Control Apparatus, not a control apparatus which is necessary to execute a process.

1The NAME your facility uses for the piece of equipment.

2An overview for the piece of equipment, which includes its attributes and make and model, if known.

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| ***Continued*** |

**FACILITY I.D. NO**.:

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| 11. OPERATING SCENARIO DESCRIPTION  (*For a batch Process, the process line used to produce a single product is synonymous with an Operating Scenario (“OS”)*; *complete this section for each Operating Scenario (“OS”)*. | | | | | | | | | | |
| Attach a block/flow diagram for each Operating Scenario (“OS”). | | | | | | | | | | |
| OPERATING SCENARIO I.D. NUMBER:  OS: | | | | | | OVERALL RUN TIME:  Maximum (hours):  Minimum (hours): | | | | |
| FACILITY’S DESIGNATION and PRODUCT NAME (*if applicable*): | | | | | | | | | | |
| PRODUCT DESCRIPTION: | | | | | | | | | | |
| List major raw materials for each Operating Scenario (“*OS*”) | | | | | | | GAS DISCHARGE INFORMATION | | | |
| PROCESS STEP | | I.D. NUMBERS | | STEP TIME (Hours) | | | FLOW  (acfm) | | TEMPERATURE  (°F) | |
| OS No.1 | DESCRIPTION2 | EQUIPMENT3 | CONTROL DEVICE4 | MIN.5 | MAX.5 | | MIN. | MAX. | MIN. | MAX. |
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1Sequential Number, starting at 1.

2Brief description of operations occurring during this scenario.

3Use Equipment I.D. Number from Equipment Inventory (“E”).

4Identify Air Pollution Control Device.

5Minimum and maximum amounts of time needed for this operation to occur, in hours, rounded to the nearest tenth.

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**FACILITY I.D. NO.:**

**12. EMISSIONS OF REGULATED AIR CONTAMINANTS FOR THIS OPERATING SCENARIO (“*OS*”)**

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| **CONTAMINANT CATEGORY/NAME** | | **TOTAL MAXIMUM EMISSIONS FROM OPERATING SCENARIO**  **(*at Maximum Flow Rates and Maximum Run Times*)**  **(*pounds per Batch*)** |
| **VOC (total)** | |  |
| **NOX** | |  |
| **CO** | |  |
| **SO2** | |  |
| **PM (total)** | |  |
| **Other** | |  |
| **PM10 (total)** | |  |
| **HAPs1** | |  |
|  | |  |
| **CONTAMINANT NAME** | ***CAS* NUMBER** | **TOTAL MAXIMUM EMISSIONS FROM OPERATING SCENARIO**  **(*at Maximum Flow Rates and Maximum Run Times*)**  **(*pounds per batch*)** |
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1As defined by Section 112(b) of the 1990 Clean Air Act Amendment