# Texas Commission on Environmental Quality

**Table 4**

**Combustion Units**

| **Operational Data** |
| --- |
| Emission Point Number (from Flow Diagram): |
| Model Number *(if available):* |
| Name of Device: |
| Manufacturer: |
| **Characteristics of Input** |
| **Chemical Composition of Waste Material\*** |
| **Material** | **Minimum Value Expected lb/hr** | **Average Value Expected lb/hr** | **Design Maximum lb/hr** |
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|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Gross heating value of waste material as Btu/lb *(Wet Basis if applicable):* |
| **Air Supplied for Waste Material in SCFM (70°F and 14.7 psia)** |
| Minimum: | Maximum: |
| **Waste Material of Contaminated Gas – Total Flow Rate**  |
| Minimum Expected (lb/hr):  | Design Maximum (lb/hr):  |
| **Waste Material of Contaminated Gas – Inlet Temperature**  |
| Minimum Expected (°F): | Design Maximum (°F): |
| **Chemical Composition of Fuel** |
| **Material** | **Minimum Value Expected lb/hr** | **Average Value Expected lb/hr** | **Design Maximum lb/hr** |
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|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Gross heat value of fuel (Btu/lb): |
| **Air Supplied for Fuel in SCFM (70°F and 14.7 psia)** |
| Minimum: | Maximum: |
| \*Describe how waste material is introduced into combustion unit on an attached sheet. Supply drawings, dimensioned and to scale to show clearly the design and operation of the unit. |

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**Table 4**

**Combustion Units**

| **Characteristics of Output** |
| --- |
| **Chemical Composition of Flue Gas Released** |
| **Material** | **Minimum Value Expected lb/hr** | **Average Value Expected lb/hr** | **Design Maximum lb/hr** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Temperature at stack exit (°F): |
| **Total Flow Rate of Flue Gas Released (lb/hr)** |
| Minimum Expected: | Maximum Expected: |
| **Velocity at Stack Exit of Flue Gas Released (ft/sec)** |
| Minimum Expected: | Maximum Expected: |
| **Combustion Unit Characteristics** |
| Chamber Volume from Drawing (ft3): |
| Chamber Velocity at Average Chamber Temperature (ft/sec): |
| Average Chamber Temperature (°F): | Average Residence Time (sec): |
| Exhaust Stack Height (ft): | Exhaust Stack Diameter (ft): |
| **Additional Information for Catalytic Combustion Units** |
| Number and Type of Catalyst Elements: |
| Catalyst Bed Velocity (ft/sec): |
| Maximum Flow Rate per Catalytic Unit (Manufacturer’s Specifications) Specify Units: |
|   |
| Attach separate sheets as necessary providing a description of the combustion unit, including details regarding principle of operation and the basis for calculating its efficiency. Supply an assembly drawing, dimensioned and to scale, to show clearly the design and conditions. Submit explanations on control for temperature, air flow rates, fuel rates, and other operation variables. |