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| **FORM 5** | **MDEQ** | **MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY APPLICATION FOR AIR POLLUTION CONTROL PERMIT** |
| **Adsorption** | **Section L3** |
| **1.** | **Adsorption Equipment Description** |
|  |  |
|  | A. | Emission Point Designation (Ref. No.): |       |  |
|  |  |
|  | B. | Equipment Description (include the process(es) that adsorption controls emissions from): |  |
|  |  |       |  |
|  |  |  |
|  |  |
|  | C. | Manufacturer: |       | D. | Model: |       |  |
|  |  |  |
|  | E. | Status: | [ ]  | Operating | [ ]  | Proposed | [ ]  | Under Construction |
|  |  |
|  |  |
| **2.** | **Adsorption Data** |
|  |  |
|  | A. | Adsorption Type: | [ ]  | Nonregenerative | [ ]  | One-pass regenerative | [ ]  | Two-pass regenerative |
|  |  |  |
|  |  | [ ]  | Recirculating | [ ]  | Other: |       |  |
|  |  |
|  | B. | Regenerative Method: | [ ]  | Discarded | [ ]  | Chemical | [ ]  | Thermal (dry heat) |
|  |  |  |
|  |  | [ ]  | Thermal (steam) | [ ]  | Pressure Swing | [ ]  | Other: |       |  |
|  |  |
|  | C. | Adsorption Material: |       |  |
|  |  |
|  | D. | Efficiency: |       | % | Controlling the following pollutant(s): |       |  |
|  |  |
|  | E. | Inlet air flow rate: |       | acfm | F. | Pressure Drop: |       | in. of H2O |
|  |  |
|  | G. | Inlet Temperature: |       | oF | H. | No. of compartments/beds: |       |  |
|  |  |
|  | I. | Size of Adsorbent Bed: |
|  |  | 1. | Length: |       | ft | 2. | Width: |       | ft |
|  |  | 3. | Height: |       | ft | 4. | Diameter: |       | ft |
|  |  |
|  | J. | Regenerative Cycle: |
|  |  | 1. | Time to maximum saturation (specify units): |       |  |
|  |  | 2. | Maximum time for desorption (specify units): |       |  |
|  |  |
|  | K. | How are emissions controlled during regeneration?       |  |
|  |  |  |
|  |  |  |  |
|  | L. | How is spent absorbent disposed of if not regenerated on site?       |  |
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