| **FORM 5** | | | | | **MDEQ** | | | | | | | | | | | | | | | | | | | **MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY APPLICATION FOR AIR POLLUTION CONTROL PERMIT** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| **Electrostatic Precipitators (ESP)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | **Section L6** | | | | | | | | | |
| **1.** | **Electrostatic Precipitator Description** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | A. | | Emission Point Designation (Ref. No.): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | |
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|  | B. | | Equipment Description (include the process(es) that ESP controls emissions from): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
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|  | C. | | Manufacturer: | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | D. | | | | | | | | | Model: | | | | | | | | | |  | | | | | | | | | | | | | | |  |
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|  | E. | | Status: | | | |  | | | Operating | | | | | | | | | | | | | | | | | | |  | | | | | | Proposed | | | | | | | | | | | | | | | | | | | | |  | | | | Under Construction | | | | | | | | | | | | | | | | | | | | |
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| **2.** | **Electrostatic Precipitator Data** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | A. | | Precipitator Type: | | | | | | | | | | | | |  | | | | | | | Wet | | | | | | | | | | | | | | | | | | | |  | | | | | | | Dry | | | | | | | | | | | | | |  | | | | Single-stage | | | | | | | | | | | | |
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|  |  | |  | | | Two-stage | | | | | | | | | | | | | |  | | | | | | | Other: | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | |
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|  | B. | | Efficiency: | | | | | |  | | | | | | | | | | | | | % | | | | | | | | | | | | Controlling the following pollutant(s): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | |  |
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|  | C. | | Inlet air flow rate: | | | | | | | | | | | | | | |  | | | | | | | | | | | | acfm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | D. | | Pressure Drop: | | | | | | | | | | | | | | |  | | | | | | | | | | | | in. of H2O | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | E. | | Inlet Temperature: | | | | | | | | | | | | | | |  | | | | | | | | | | | | oF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | F. | | Total collection plate area: | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | ft2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | G. | | Collector Plate Size: | | | | | | | | | | | | | | | | | | | | | | | Length: | | | | | | | | | | | |  | | | | | | | | | | | | | | | ft | | | | | | | Width: | | | | | | | | |  | | | | | | | ft | | | | |
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|  | H. | | Gas Viscosity: | | | | | | | | | | | |  | | | | | | | | | | | | | | | poise | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | I. | | Pollutant Resistivity: | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | ohm-cm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | J. | | Field strength: | | | | | | | | | Charging: | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | volts | | | | | | | | | | | | | Collecting: | | | | | | | | | | | | |  | | | | | volts | | | | | | | | |
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|  | K. | | No. of fields: | | | | | | | | |  | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | L. | | No. of collector plates per field: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| **2.** | **Electrostatic Precipitator Data (continued)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | M. | | Spacing between collector plates: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | in. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | N. | | No. of compartments: | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | O. | | No. of discharge electrodes: | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | P. | | Corona Power: | | | | | | | | | | |  | | | | | | | | | | | | | watts/1000cfm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | Q. | | Electrical Usage: | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | kW/hr | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | R. | | Cleaning Method: | | | | | | | | | | | | | |  | | | | | | | | Plate Rapping | | | | | | | | | | | | | | | | | | | | | | | |  | | | Plate Vibrating | | | | | | | | | | | | | | | | | |  | | | Washing | | | | | | | |
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|  |  | |  | | | Other: | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | |
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|  | | S. | | Rapper Frequency: | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | min/cycle | | | | | | | | | | | | | | | | |  | | | | Automatic | | | | | | | | | | | |  | | Manual | | | |
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|  | | T. | | Is flue gas conditioning required? | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | Yes | | | | | | | | | | |  | | | | No | | | | | | | | | | | | | | | | | | |
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|  | | U. | | Fan location relative to precipitator: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | Upstream | | | | | | | | | | | | | | | | |  | | | | | Downstream | | | | | | | | | | | | | | |
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|  | | V. | | How is the collected dust stored, handled, and disposed of? | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | |
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|  | | W. | | List the electrical conditions per field: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | |
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|  | |  | | FIELD NO. | | | | | | | VOLTAGE (kV) | | | | | | | | | | | | | | | | | | | | | | | | | | AMPERAGE (mA) | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | |
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