|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **FORM 5** | | | | **MDEQ** | | | | | | | | | | | | **MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY APPLICATION FOR AIR POLLUTION CONTROL PERMIT** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Cyclones** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | **Section L2** | | | | | | | | | | | | |
| **1.** | **Cyclone Description** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | A. | Emission Point Designation (Ref. No.): | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | B. | Equipment Description (include the process(es) that the cyclone(s) controls emissions from): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
|  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
|  |  |  |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | C. | Manufacturer: | | | | | |  | | | | | | | | | | | | | | | | | | | | | D. | | | | | | | | Model: | | | | | |  | | | | | | | | | | | | | | | |  |
|  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | E. | Status: | | | | |  | | Operating | | | | | | | | | | | | |  | | Proposed | | | | | | | | | | | |  | | | | Under Construction | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **2.** | **Cyclone Data** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | A. | Cyclone Type: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  |  | Conventional | | | | | | | | |  | | | | | High Efficiency | | | | | | | | | | | | | | |  | | | Multiclone | | | | | | | | |  | Other: | | | |  | | | | | | | | | |  |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | B. | Efficiency (PM): | | | | | | | | |  | | | | | | | | | | % | | | | | | | | C. | | | | | | | | Gas Viscosity: | | | | | | | | | | |  | | | | | | | poise | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | D. | Pressure Drop: | | | | | | |  | | | | | | | | | | | | in. H2O | | | | | | | | E. | | | | | | | | Inlet air flow rate: | | | | | | | | | | |  | | | | | | | acfm | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | F. | Pollutant particle diameter: | | | | | | | | | | | | | | | | |  | | | | microns | | | | | | | | | | | G. | | | Baffles/Louvers? | | | | | | | | |  | | | | Yes | | | |  | | | No | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | H. | Cyclone Dimensions: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | 1. | | | Inlet height: | | | | | | | | | | | | |  | | | | | | | | ft | | | | | | | | | | | | 2. | | | | Inlet width: | | | | | | | | |  | | | | | ft | | | |
|  |  | 3. | | | Cylinder diameter: | | | | | | | | | | | | |  | | | | | | | | ft | | | | | | | | | | | | 4. | | | | Cylinder height: | | | | | | | | |  | | | | | ft | | | |
|  |  | 5. | | | Cone height: | | | | | | | | | | | | |  | | | | | | | | ft | | | | | | | | | | | | 6. | | | | Outlet pipe diameter: | | | | | | | | | |  | | | | ft | | | |
|  |  | 7. | | | Dust exit diameter: | | | | | | | | | | | | |  | | | | | | | | ft | | | | | | | | | | | |  | | | |  | | | | | | | | | |  | | | |  | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | I. | Is wet spray used? | | | | | | | | | | | |  | | | | | | Yes | | | | |  | | | | | No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | 1. | | | No. of nozzles: | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | 2. | | | Liquid used: | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | 3. | | | Flow rate: | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | gpm | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | 4. | | | Make-up rate: | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | gpm | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | J. | Fan Location: | | | | | | | |  | | | | | Downstream (direct emissions) | | | | | | | | | | | | | | | | | | | | | | |  | | | Downstream (auxiliary stack) | | | | | | | | | | | | | | | | | | |
|  |  |  | | | | | | | |  | | |  | | | | | | | | | | | | | | | | | | | | | | | | |  |  | | | | | | | | | | | | | | | | | | | | |
|  |  |  | | | | Upstream (no cap/vertical emissions) | | | | | | | | | | | | | | | | | | | | |  | | | | | | Upstream (fixed cap/diffuse emissions) | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  |  | | | |  | | | | | | | | | | | | | | | | | | | | |  | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  |  | | | | Upstream (wind respondent cap/horizontal emissions) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | K. | How is the collected dust stored, handled, and disposed of? | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | |
|  |  |  | | | |
|  |  |  | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | |