

## PROJECT UPDATE Ameresco – Savannah River, South Carolina

Amerair Industries announces its successful 2010 startup of two 79,800 ACFM pulse jet collectors ventilating the client's two CFB biomass fired boilers. The project features Amerair's Conventional Pulse Jet Collector design using 15 ft. long 6" diameter filter bags constructed of 17 oz. PPS felt.

Other features of the pulse jet collectors include: modular construction, roof door access for bag maintenance and a full weather tight penthouse. This relatively compact configuration allows the 79,800 ACFM @ 325 °F to be filtered at an air to cloth ratio of 3.3: 1 using only 4 prefabricated modules.

In addition to the Amerair state of the art fabric filter, this project also employs Amerair's package Trona dry sorbent injection system for control of HCl to comply with Industrial Boiler MACT emission limits allowing the client to burn biomass fuel for reduced CO<sub>2</sub> emissions. The injection system features a bulk bag storage system and regulated feed rate pneumatically conveyed to an injection point downstream of the customer's multi clone collector and upstream of the fabric filter inlet.

Feed rate and performance of the sorbent injection system are optimized by critical in duct placement of Amerair's proprietary injection nozzle design. HCl and particulate testing showed performance well below guaranteed limits.









## AMERAIR CONVENTIONAL HIGH PRESSURE PULSE FABRIC FILTERS

Amerair conventional pulse jet collectors feature 1-1/2", 2" or 2-1/2" pulse valves in a 6" diameter header.



Bag installation is a snap with tool-less double bead snap band installation into the cell plate.



The advanced Amerair design uses a venturi at the top of the bag contained in the wire cage while allowing for efficient pulse cleaning with the pulse of compressed air centered in the bag.



Cleaning is further enhanced by balancing the cleaning force coming from each of the pulse tube's orifices by custom varying the diameter of each orifice progressively along the pulse tube.

