

## PROJECT UPDATE

## Covanta MSW Essex, New Jersey

Amerair Industries announces its successful startup of the first two of three, 240,000 ACFM pulse jet collectors replacing the plant's existing ESP's. The project features Amerair's Intermediate Pressure Pulse Jet Collectors using 6.1m long (20') filter bags cleaned using 2-1/2" pulse valves operating at a header pressure of 45 psig to 65 psig.

Other features of this highly advanced pulse jet collector include: complete shop fabrication of the 10 modules/baghouse and inlet + outlet manifolds. This configuration allows for minimal field construction time and cost.

Amerair's advanced design and attention to detail allows the plant to achieve PM 10 emissions below 1 mg/DSCM while operating their existing spray dryer absorbers.

### **SUMMARY**

Pulse Jet Filter: 10 Compartment Bags: 6" diameter x 20' long, 17 oz. PPS with ePTFE membrane Net Air to Cloth 3.3: 1 Emissions PM 10 < 1.0 mg/Nm<sup>3</sup> dry

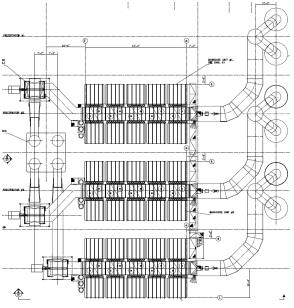
#### SCOPE:

Structural Support: by Amerair

Controls: by Amerair Ductwork: By Others I.D. fans: By Others

Electrical, MCC, Foundations by Others







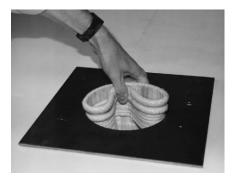
# Amerair Intermediate Pressure Pulse Jet Fabric Filter Systems

## AMERAIR INTERMEDIATE PRESSURE PULSE FABRIC FILTERS

Amerair intermediate pressure pulse jet collectors feature a range of 2-1/2" right angle valves on dual 6" headers to 3" or 4" immersed pulse valves in a 14" diameter header.

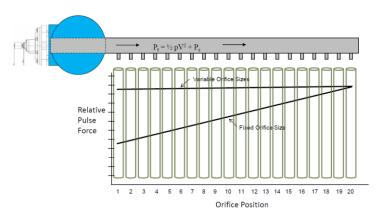


Bag installation is a snap with tool-less double bead snap band installation into the cell plate.



The advanced Amerair design uses nozzle mounted pulse tubes eliminating the need for a venturi at the top of the bag 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.



Compartment flow management is critical to successful operation with respect to; pressure drop, bag life, and cleaning performance. Amerair makes use of high and low side flow baffles as well as the compartment inlet damper designed by CFD analysis for balanced compartment flow.

