



P.O. Box 670 Hoschton GA 30548 USA  
Tel: (706) 654-3232 Fax: (706) 654-3888  
E-Mail: [sales@ibis-usa.com](mailto:sales@ibis-usa.com) <http://www.ibis-usa.com>

Bulletin 121410

## **CENTRAL VACUUM SYSTEM (CVS) SEQUENCE OF EVENTS**

### **PRIMARY RECEIVER TANKS (A and B)**

Under normal operation both Tank A and B will be under vacuum and collect material simultaneously. The dump “count-down” timer will time out and Tank A will come off line and dump the material it has collected. Once the dump and cleaning sequences for tank A are complete, Tank A will come back on line, and again both Tank A and B will be under vacuum and collect materials simultaneously. When the dump “count-down” timer again times out, Tank B will come off line and dump the material it has collected. Once the dump and cleaning sequences for Tank B are complete, Tank B will come back on line, and again both Tank A and B will be under vacuum and collect materials simultaneously.

The sequence of events:

- Step 1 Dump timer times out
- Step 2 Tank A's Inlet Block Valve Closes
- Step 3 Tank A's Outlet Block Valve waits 3 seconds then closes.  
*This allows vacuum to build up in the tank's body.*
- Step 4 Approximately 0.5 seconds after the Tank A's Outlet Block Valve Closes, Tank A's Reverse Air (atmosphere) Valve opens for approximately 3 seconds.  
*When the Reverse Air Valve opens, air is pulled into the tank in a violent rush, relieving the vacuum in the tank. This air is pulled through the screen from top to bottom, and strips material off the underside of the screen.*  
Tank A's Reverse Air Valve closes.
- Step 5 Before the Tank A's Reverse Air Valve closes, Tank A's Dump Door Opens for approximately 12 seconds. The sequence waits another 6 seconds for the door to close.
- Item 6 Tank A's Outlet Block Valve opens  
*This will charge Tank A with vacuum prior to putting it back on line.*
- Item 7 Tank A's Inlet Block Valve opens.  
*Both tanks are back on line simultaneously.*
- Item 8 Dump “count-down” timer will time out and Sequence will repeat itself on Tank B

### Optional: Special Cleaning Cycle.

All Dual Tank Systems have a special cleaning cycle. This cycle can be activated to assist in the cleaning of primary receiver screens in systems that have trouble with excessively difficult materials, such as fine materials and dust. The cycle is activated in the panel by connecting a laptop computer to the processor and activating a counter. When the Special Cleaning Cycle is activated and a count value is set, the dump "count-down" will trigger Tank A to go through the Special Clean Cycle. Then the dump "count-down" counter will trigger Tank B to go through the Special Clean Cycle.

The sequence of events:

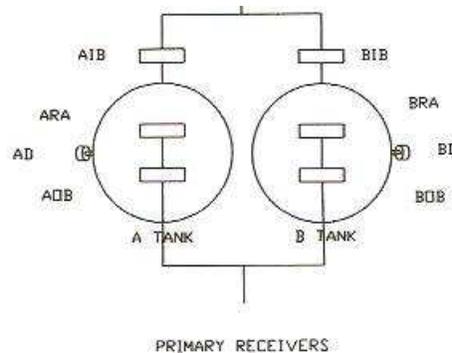
Step 5a After Step 5 (Dump Door Closes), Tank A's Reverse Air Valve reopens for 3 seconds.

Step 6a 0.5 seconds after Tank A's Reverse Air Cleaning valve opens, Tank A's Inlet Block Valve opens for approximately 1 second, and then Tank A's Inlet Block and Reverse Air Valve Close.

When Tank A's Inlet Block Valve Opens, vacuum from Tank B which is in operation will pull a vacuum in Tank A. As Tank A's Reverse Air Valve opens, another Reverse Air Cleaning of the screen will occur as air is pulled through the Tank A's Reverse Air Valve, through the Tank A's Screen Section, and out Tank A into Tank B.

Step 7a Tank A Outlet Block Valve opens  
System is now under normal operation.  
Tank B will go through a Special Clean Cycle.

When the Counter has been set on three, then the Special Cleaning Sequence would wait for Tank A to go through three dumps and then the Special Cleaning Cycle would repeat. NOTE: three dumps is an arbitrary number. Your actual counter setting will vary with the need for the special cleaning cycle.

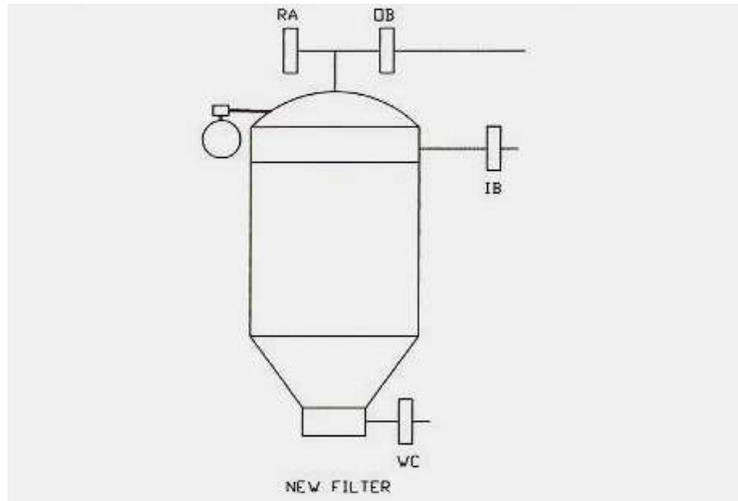


Under normal operation both the IBIS Secondary Filter and the Abington Secondary Filters will operate simultaneously. A "count-down" timer will time out and the IBIS filter will come off line. The waste already collected in the waste bucket will be pneumatically evacuated to the A and B Primary Receiver Tanks. Once cleaned, the Ibis Secondary Filter will come back on line. When the "count-down" timer again times out, the Abington Secondary Filter will come off line and the Waste Tee will be pneumatically evacuated to A and B Primary Receiver Tanks. Then the Abington Secondary Filter will come back on line and again both A and B Tanks will be under vacuum and will continue to collect materials simultaneously.

### **IBIS FILTER SEQUENCE**

- Step 1 IBIS Filter Inlet Block Valve will close  
Vacuum will be allowed to build up in the filter's body.
- Step 2 Approximately 2 seconds later the Outlet Block Valve will close,  
This locks the vacuum in the filter's body.
- Step 3 0.5 seconds later, the reverse Air Clean (atmosphere) Valve will open for approximately 4 seconds.  
Reverse Air Cleaning is accomplished by air rushing through the Reverse Air Cleaning Valve through the bags and into the tank body, relieving the vacuum
- Step 4 1.0 second after Reverse Air valve opens, Waste Clean Valve opens for 3 seconds.  
Reverse Air Cleaning requires about 1 second. Tank is now at atmospheric pressure. The Waste Clean Valve opens and pulls air through the Reverse Air Valve, through the bags, and out the bucket to the Dual Primary Receivers. This cleans the bags a second time and evacuates the bucket.

Pulse Jet Cleaning sequence will be in continuous operation and will cycle through the nine valves (1 second open and 10-30 seconds off).



### ABINGTON FILTER SEQUENCE

We have been requested not to change the Abington Filter's sequence. We do not know the cleaning frequency. The count down timer will signal the Abington Filter to begin it's cycle automatically.

