HC3 Centrifuge Connection Retrofit

Purpose
The standard centrifuge feed and flush piping is prone to clogging. This document illustrates a procedure for replacing the existing hoses with new larger diameter hoses and valves.

Materials Required
- HC-3 manifold replacement kit
- Pipe Dope or teflon tape
- Hose lubricant (optional)

Tools Required
- #2 Philips Screwdriver
- 12" Adjustable Wrench
- Heat gun (optional)

Procedure

Step 1
Remove the existing manifold at the union above the automatic valve on the HC3 tank.

Step 2
Remove the PVC hose connections on at the centrifuge inlet and flush
Step 3
Using pipe dope or teflon tape and a 1" hose barb, install a 1" hose barb to the centrifuge inlet.
**Step 4**

Connect two 1" nipples, one 1" elbow, one 1" tee, one piece of 1" hose, two band clamps and three 1" hose barbs to the centrifuge flush connections as shown.

When installing the hose it is helpful to turn both the fittings so the hose barbs point upward and to bend the hose to make it fit. It is also helpful to lubricate the hose with hose lubricant or to use a heat gun to soften the hose. Also, putting the hose clamps on the hose before installing it will save time.
**Step 5**
Install the new manifold as shown in place of the old one by tightening it to the union on the automatic valve.

**Step 6**
Connect hoses between the tank and the centrifuge and the tank in locations shown in steps 3 and 5. Also close the valve going to the centrifuge flush and close the valve going to centrifuge inlet about halfway.

**Step 7**
Turn on your system. Check for leaks. If none are found then adjust the centrifuge inlet valve so that the flow to the centrifuge is in the middle of the green band on the gauge on the control panel.
Operating the retrofitted HC3
Operations of the retrofitted HC3 are the same as they were before the retrofit except that the flush should only be run as needed to clear debris from the centrifuge. This is typically once per week, but will vary from based on the mix of materials processed. To run the flush, make sure the system is not in a clean cycle and open the top valve on the manifold shown in step 5. Leave the valve open for approximately 5 minutes then close it. This will flush debris from the cabinet into the tank where they can then be removed by the centrifuge.

The lower valve on the manifold should not need regular adjustment. If desired, the handle can be removed from this valve to prevent tampering.