Table 1: Quarterly Inspections for FFS Healy Clean Air Separator Only

Inspect Clean Air Separator for proper operating configuration. See Executive Order VR-204, Exhibit 2, Figure 2B-16 or 2B-16H for guidance. Figure 2B-16 applies to vertical CAS installations. Figure 2B-16H applies to horizontal CAS installations.

Quarterly Inspections for Healy Clean Air Separator					
Checklist results may be used to assist with filling out GDF maintenance log. This table may be also used for testing the Clean Air Separator.	Date	Page of			
Clean Air Separator Configuration (see Exh	ibit 2, Figures 2B-16 or 2	2B-16H)			
Valve	Circle	One			
A	Open	Closed			
В	Open	Closed			
С	Open	Closed			
D	Open	Closed			
Plug	Circle One				
E	Installed	Missing			
F	Installed	Missing			

Table 2: Annual Inspection Requirements for VST ECS Membrane Processor:

Annual VST ECS Membrane Processor Inspections and Replacements						
Component	Procedure	FailCorrectiveCriteriaAction		Reference Manuals	Authorized Personnel	
Blower	Replace the blower every ten years or 15,000 hrs. (whichever comes first).			IOM - 11		
Vacuum pump	Replace pump every ten years or 15,000 hrs. (whichever comes first).					
Vacuum pump drive coupling - rubber insert	Visually inspect the drive coupling between the vacuum pump and the motor for wear	Rubber debris is found on or around the vacuum-pump base.	Replace the drive coupling rubber insert	IOM - 11	VST ASC Level C	
Heat Trace Cable	Check the continuity of the heat trace cable.	If the heat trace cable circuit is open, the cable has failed.	Replace the heat- trace cable	IOM - 11		
HC Sensor	Test the HC sensor	The difference shall be within $\pm 1.0\%$ HC concentration from the calibration gas concentration for zero and mid-range gas and $\pm 2.0\%$ for the high-range gas.	Replace the HC Sensor	IOM – 11 and Exhibit 8		

Table 3: Preventative Maintenance Checklist Form for VST ECS Membrane Processor

Component	Frequency	Date Inspected	Completed	Required Action Items
VST ECS PROCESSOR	Yearly			
 Inspect drive coupling on the vacuum pump. 			[]	
Check the continuity of the heat trace cable.			[]	
RECIRCULATION BLOWER				
Replace every 10 years or 15,000 hours, whichever comes first.			[]	
VACUUM PUMP				
Replace every 10 years or 15,000 hours, whichever comes first.			[]	

Table 4: Annual Inspection Requirements/Checklist for Hirt VCS100 Vapor Processor:

DATE OF TEST:

SERVIC	E COMPANY NAME	SERVICE COMPANY'S TELEPHONE			
SERVIC	SERVICE TECHNICIAN HIRT TECHNICIAN CERTIFICATION # (as ICC or DISTRICT TRAINING CERTIFICATION applicable)				
STATIO	N NAME	DISTRICT PERMIT #			
STATIO	N ADDRESS C	ITY STATE ZIP			
In	structions: Perform each step and c	heck each box after step is completed.	Tilo		
		station's Maintenance Records.	lic		
	Turn OFF electrical power to process	or.			
1.	CAUTION: The processor can be hot from operation. Use caution when removing Weather Cover, Shell, and raising Inner Stack; they are HOT!				
	Remove Weather Cover Look inside	stack and burner chamber to check for			
2.	Remove Weather Cover. Look inside stack and burner chamber to check for debris. Remove any debris.				
3.	. Remove padlocks, if any, and remove Shell from processor.				
	Loosen stack bolt and raise Inner Sta	ck. The pilot and igniter/sensor are now			
4.	exposed. The internals should be ch	ecked for foreign material. Remove			
	any foreign material.				
	Check igniter/sensor for carbon build	up Replace Pilot Tip assembly if			
5.	Excessive buildup. See instructions t	hat come with replacement Pilot Tip for			
	Installation details.				

6.	Visually check all processor piping and tubing for leaks (this is checked when conducting TP-201.3 and Exhibit 4 of Executive Orders VR-203 and VR-204) Check metal tubing and piping for kinks, worn areas, and cracks, or deterioration. Check piping and metal tubing fittings to insure that they are strong and tight sealin Replace any components that show any wear, cracks, or deterioration.	
7.	Conduct Exhibit 13 of Executive Orders VR-203 and VR-204 "Hirt VCS 100 Proces With Indicator Panel Operability Test Procedure"	S
8.	Check setting of Pilot Needle Valve adjustmet (section 8.8 of Hirt VCS 100 IOM).	
9.	Lower Inner Stack and Tighten bolt. Replace Shell, Weather Cover, and padlocks removed for visual inspection.	
10.	Verify handle on 3-way valve is in down position – Processor to UST Ullage.	
11.	Turn ON electrical power to processor.	

Table 5: Annual battery check for Veeder-Root wireless components

You can get the battery status from the TLS-350 (with software Version 30A or higher). The battery status is displayed for the wireless sensors from the Smart Sensor Diagnostics (see menu below). The wireless sensors' battery status can also be printed from this screen. The battery status for the wireless sensors is reported as Full, Medium, Low, or Replace.

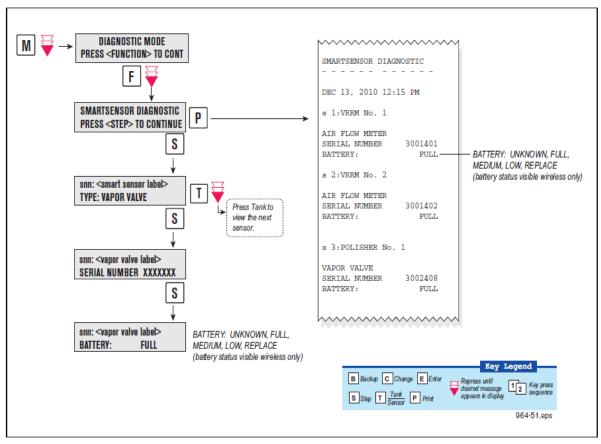


Figure 24. Device Battery Status in SmartSensor Diagnostic Menu

	VR-203 and VR-204 Annual Battery Check for Veeder-Root Wireless Sensors					
	Date:					
Vapor	Pressure	Flow	Battery Status			
Valve	Sensor	Meter	Full	Medium	Low	Replace

Table 6: Annual Inspection Requirements for VST Green Machine Processor:

	Annual Green Machine Inspections						
Component Procedure		Fail Criteria	Corrective Action	Reference Manual	Authorized Personnel		
Vacuum Pump Drive Coupling - Rubber Insert	Visually inspect the Drive Coupling between the Vacuum Pump and the Motor for wear	Rubber debris is found on or around the Vacuum Pump base.	Replace the drive coupling rubber insert	IOM-18	VST ASC Level D		
Vacuum Pump	Replace pump every 10 years or 15,000 hours			IOM-18			
VST <i>Green Machine</i> Annual Compliance Testing	Exhibit 15	<u>Compliance Bag Test</u> : If the value of the NOVA reading is ≥17%, the <i>Green Machine</i> is not in compliance. <u>Continuous Monitoring Test</u> : If a motor fault is not found then the <i>Green Machine</i> is not in compliance	Refer to the Green Machine Troubleshooting Manual for maintenance	Exhibit 15			