

**System Startup Checklist**

Project Name	
Project Location	
General Description	
Performed By	
Date	

Equipment Summary	
Day Tanks	
Duplex Pump Sets	
Filtration Polishers	
Fill Station	
Tank Selection	
Network Interface	
Veeder Root	

Contacts				
Company	Name	Title	Phone	Email

**System Startup Checklist**

Day Tank Startup Checklist	
Day Tank ID	
Description	

Item	Description	Check	Date	Comments
1	Power to control panel			
2	Power to return flow pump			
3	Initial display is accurate			
4	Critical low sensor input and display			
5	Low level input and display			
6	Pump start level input and display			
7	Pump stop level input and display			
8	High level input and display			
9	Leak input and display			
10	Manual mode fill inlet solenoid energize			
11	Manual mode fill pump start			
12	Manual mode fill disable on high level			
13	Manual mode fill disable on estop			
14	Manual mode return flow pump energize			
15	Manual mode pump flow confirmed			
16	Manual mode pump disable on estop			
17	Auto mode fill start level inlet solenoid energize			
18	Auto mode fill start level pump start			
19	Auto mode fill start level disable on estop			
20	Auto mode fill start level disable on high level			
21	Auto mode fill start level disable on leak			
22	Auto mode fill stop level inlet valve de-energize			
23	Auto mode fill stop level pump stop			
24	High level return pump start			
25	High level return pump time out after clear			
26	Confirm Output relay and horn on Alarm			
27	Alarm modes: Leak, Low, Clow, High			

**System Startup Checklist**

<b>Duplex Pump Startup Checklist</b>	
Duplex Pump ID	
Description	

Item	Description	Check	Date	Comments
1	Power to control panel			
2	Power to Pump 1			
3	Power to Pump 2			
4	Initial display is accurate			
5	Pump 1 Manual mode start and display			
6	Pump 2 Manual mode start and display			
7	Pump 1 current sensor or flow input			
8	Pump 2 current sensor or flow input			
9	Pump 1 suction PSI at static run			
10	Pump 1 discharge PSI at static run			
11	Pump 2 suction PSI at static run			
12	Pump 2 discharge PSI at static run			
13	Setup Auto mode fuel request input			
14	Pump 1 Auto mode start and display			
15	Pump 2 Auto mode start and display			
16	Pump 1 Auto mode disable on leak			
17	Pump 2 Auto mode disable on leak			
18	Pump 1 Auto mode disable on estop			
19	Pump 2 Auto mode disable on estop			
20	Select Pump 1 as lead			
21	Confirm Pump 1 Auto start			
22	Disable Pump 1 by change to Off Mode			
23	Confirm Pump 2 Auto start			
24	Pump 1 trouble by no CS, no Flow, or DT Low			
25	Confirm Pump 2 Auto start			
18	Select Pump 2 as lead			
19	Confirm Pump 2 Auto start			
20	Disable Pump 2 by change to Off Mode			
21	Confirm Pump 1 Auto start			
22	Pump 2 trouble by no CS, no Flow, or DT Low			
23	Confirm Pump 1 Auto start			
24	Confirm Output relay and horn on Alarm			
25	Alarm modes: Leak, Pump 1 Fail, Pump 2 Fail			

**System Startup Checklist**

<b>Filtration Startup Checklist</b>	
Filtration ID	
Description	

Item	Description	Check	Date	Comments
1	Power to control panel			
2	Power to pump			
3	Initial display is accurate			
4	Pump Manual mode start and display			
5	Pump suction PSI at static run			
6	Pump discharge PSI at static run			
7	Pump Man mode disable on leak			
8	Pump Man mode disable on estop			
9	Set Filter Cycle for 1 Min ON and 1 Min OFF			
10	Set Pump to AUTO mode			
11	Select Filter Cycle Manual mode			
12	Confirm pump start and run for 1 Min			
13	Confirm pump stop after 1 Min			
14	Select OFF then MAN and confirm 1 Min recycle			
15	Pump Auto mode disable on leak			
16	Pump Auto mode disable on estop			
17	Select Filter Cycle Auto mode			
18	Confirm pump start and run for 1 Min			
19	Confirm pump stop after 1 Min			
20	Confirm 1 Min OFF cycle			
21	Confirm recycle			
	Simulate DP or High Pressure input and display			
20	Simulate High Water input and display			
21	Confirm Output Relay on Active			
22	Confirm Output relay and horn on Alarm			
23	Alarm modes: Leak, DP, Water			

**System Startup Checklist**

<b>Fill Station Startup Checklist</b>	
Fill Station ID	
Description	

Item	Description	Check	Date	Comments
1	Power to control panel			
2	Initial display is accurate			
3	High Warning level input and display			
4	High Alarm level input and display			
5	High stop level input and display			
6	Valve open input and display			
7	Valve close input and display			
8	Test Mode Valve Cycle open and close			
9	Select tank to fill			
10	Confirm valve open			
11	Confirm valve close on OFF select			
12	Confirm valve close on estop			
13	Alarm and display on High Warning level			
14	Alarm, display and valve close on High Alarm			
15	Alarm, display, and valve close on High Stop			
16	Confirm % Fill display accurate			

**System Startup Checklist**

<b>Tank Selection Startup Checklist</b>	
Tank IDs	
Description	

Item	Description	Check	Date	Comments
1	Power to control panel			
2	Initial display is accurate			
3	Valve #      open input and display			
4	Valve #      close input and display			
5	Valve #      open input and display			
6	Valve #      close input and display			
7	Manual Mode Tank 1 Confirm T1 FOS-FOR Open and T2 FOS-FOR Close			
8	Manual Mode Tank 2 Confirm T2 FOS-FOR Open and T1 FOS-FOR Close			
9	Auto Mode with Pump Start Confirm T1 FOS-FOR Open and T2 FOS-FOR Close			
10	Auto Mode with Pump Start Confirm T2 FOS-FOR Open and T1 FOS-FOR Close			
11	Select T1 as Primary and simulate low level alarm to confirm Auto switch to T2			
12	Select T2 as Primary and simulate low level alarm to confirm Auto switch to T1			
13	Select T1 as Primary and simulate pump fail alarm to confirm Auto switch to T2			
14	Select T2 as Primary and simulate pump fail alarm to confirm Auto switch to T1			
	Tank Select for Filtration			
15	Operate Filter for T1. Record T1 and T2 Volumes at Start and Confirm same volumes after 10 minute run			
16	Operate Filter for T1. Record T1 and T2 Volumes at Start and Confirm same volumes after 10 minute run			

**System Startup Checklist**

<b>Network Interface Startup Checklist</b>	
Fill Station ID	
Description	

Item	Description	Check	Date	Comments
1	Power to control panel			
2	Initial display is accurate			
3	Display navigation is correct			
5	Confirm all status inputs and display			
6	Confirm all value inputs and displays			
7	Confirm summary alarm inputs and display			
8	VR Communication confirmed			
9	VR Volume on NIM is accurate			
10	BMS communication confirmed			
11	DI inputs confirmed to BMS			
12	AI values confirmed to BMS			
13	Confirm Output signals #1 - #			
14	Horn and silence operation confirmed			
15	Alarm modes: leak, pump fail			

