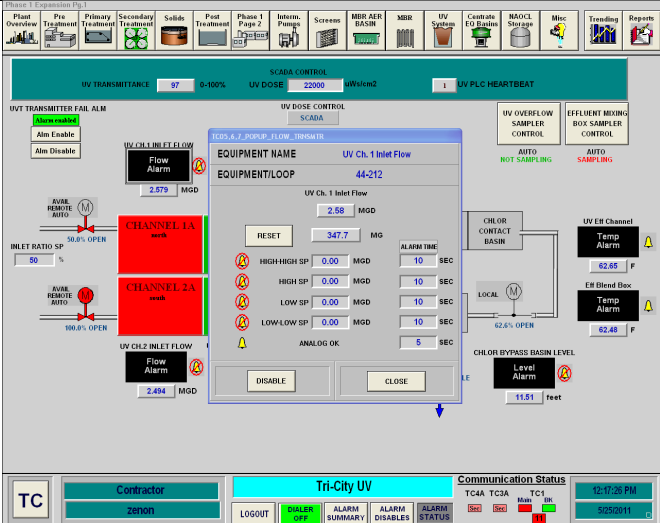


UV Disinfection Process Alarms

The UV Disinfection System process alarms include:

1. UV Channel Inlet Flow Alarm
2. UV Channel Level Alarm
3. UV Effluent Channel Temperature Alarm
4. Effluent Mixing Box Temperature Alarm
5. Chlorine Bypass Basin Level Alarm

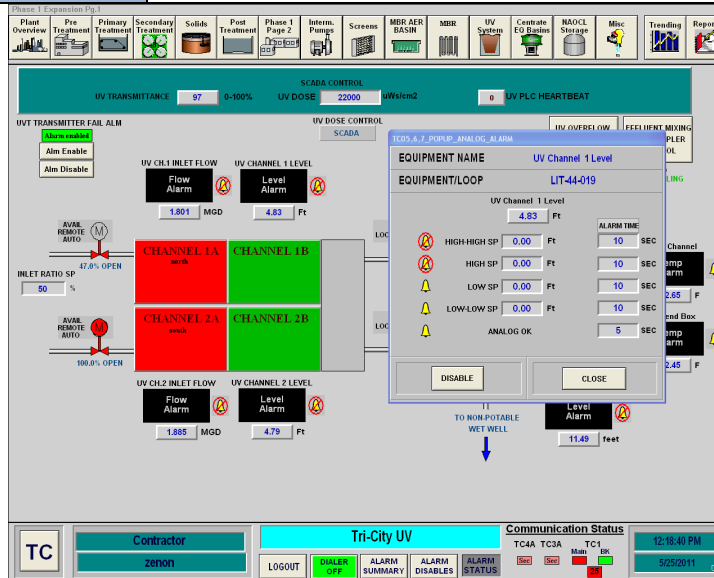
UV Channel Inlet Flow Alarm

Alarm Summary	
Title	UV Channel Inlet Flow
Tag Number(s)	
Location	UV Building
Alarm Location(s)	SCADA
Notes	This alarm shows that the flow to the UV channel is above the set-point.
Last Update	November 2, 2012
	
Possible Cause	Suggested Response
Inlet Valve Failure	Confirm valve is in AUTO and is operating properly.
Improper Inlet Ratio Setpoint	Confirm inlet Ratio Setpoint is correct
MBR Flow Excessive for Single Channel Operation	Start 2 nd UV Disinfection Channel

UV Channel Level Alarm

Alarm Summary	
Title	UV Channel Level Alarm
Tag Number(s)	

Location	UV Building
Alarm Location(s)	SCADA
Notes	This alarm will show that the channel level is too high or too low.
Last Update	November 2, 2012



Possible Cause	Suggested Response
MBR Plant Flow is off	Check Intermediate Pumps
MBR Flow is to high for single channel operation	Start 2 nd UV Channel

UV Effluent Channel Temperature Alarm

Alarm Summary	
Title	UV Effluent Channel Temperature Alarm
Tag Number(s)	
Location	UV Building
Alarm Location(s)	SCADA
Notes	This alarm will show that the channel temperature is outside of the set-points.
Last Update	November 2, 2012
Possible Cause	Suggested Response

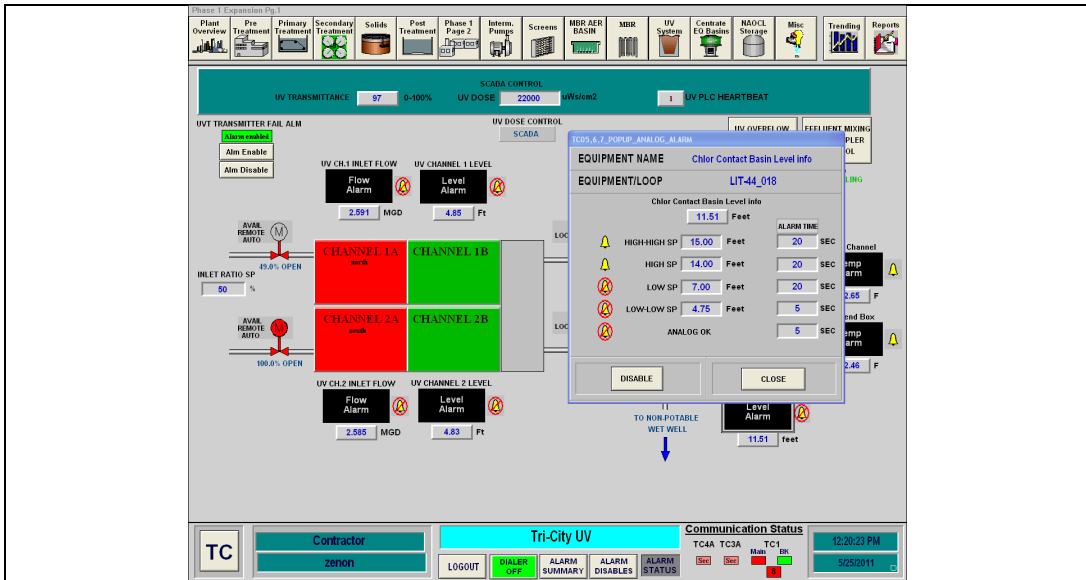
Effluent Mixing Box Temperature Alarm

Alarm Summary	
Title	UV Channel Level Alarm
Tag Number(s)	
Location	UV Building
Alarm Location(s)	SCADA

Notes	This alarm will show that the mixing box temperature is outside of the set-points.
Last Update	November 2, 2012
<p>The screenshot shows a SCADA control interface for UV Transmittance and UV Dose. It features a main control panel with various indicators and a pop-up window titled 'Efl Blend Box Temp info'. The pop-up window lists setpoints and alarm times for different temperature ranges: HIGH-HIGH SP (100.00 F, 20 SEC), HIGH SP (90.00 F, 20 SEC), LOW SP (0.00 F, 20 SEC), and LOW-LOW SP (0.00 F, 20 SEC). The interface also shows UV Channel 1 and 2 flow and level alarms, and a communication status bar at the bottom.</p>	
Possible Cause	Suggested Response
High water temperatures	Report to Plant Supervisor and Lab Supervisor

Chlorine Contact Basin Level Alarm

Alarm Summary	
Title	UV Channel Level Alarm
Tag Number(s)	
Location	UV Building
Alarm Location(s)	SCADA
Notes	This alarm will show that the wet well level is too high or too low.
Last Update	November 2, 2012



Possible Cause	Suggested Response
MBR Flow Not High Enough	Confirm operation of intermediate pumps
MBR Flow Not High Enough	Check reason for high non-potable water use
Gate to Nonpotable Wet Well Closed	Open Gates to feed wet well