

UV DISINFECTION PROJECT UPDATE



Issue 8

October 4, 2016

All Piping of effluent system in place as electrical installation continues.

All piping installations of the UV Systems movement of water to, through, and out of the UV Reactors have been completed. This includes all pipe mounting and support hardware. Progression into the power and electrical connections of the reactors has begun and well on its way to completion.

As one can see to the right and bottom the box type electrical controls are all self contained air controlling system to assure the controls stay clean and cool during operation.



It is easy to identify the full installation of all the piping as well as the flow controllers of the UV disinfection system.

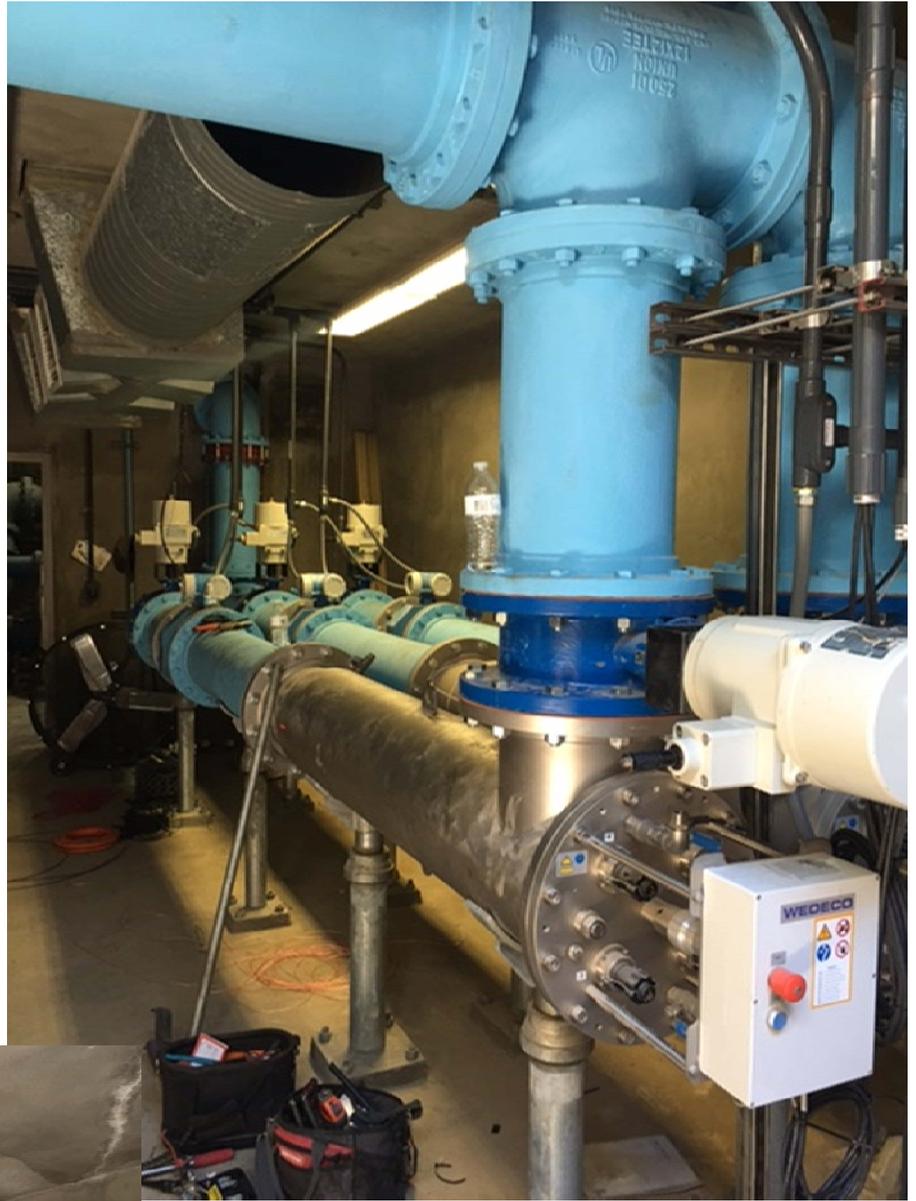
All support systems are in place and ready for operation.

We are being told by the contractors that electrical service will be tested by Wednesday of next week.

After the passing of this test the control systems will be placed in service allowing the operators to monitor and record the operation for TCEQ monthly approval.

In conjunction with the project is our LAS installation which will also have sample injection points near the effluent discharge of the UV Disinfection process.

We are excited to proceed forward and complying with all measures of the LT2 rule.



The photo to the left shows the main power source to provide power to the lamps within the UV reactors. This will contain fully functioning monitors to verify the current lighting source being provided at all time to assure continued disinfection.

This will be where the automatic cleaning will occur as well as access to change out the bulbs and manually provide cleaning services.

Sequence	Action	% Complete
1	Ordering of Instruments for UV Disinfection <ul style="list-style-type: none"> UV Disinfection Reactors are to be ordered preliminarily to assure equipment is received timely. 	100%
2	Ordering of Non-specific Materials and Equipment <ul style="list-style-type: none"> Actuators, Valves, Pipe Support Materials as an example have been ordered and due for delivery. 	100%
3	TCEQ Construction Submittal Request <ul style="list-style-type: none"> We have submitted the second information request from TCEQ and awaiting either an approval or additional information requests. 	100%
4	Issuance of "Notice to Proceed" to Contractor	100%
5	Ordering of Specific Materials and Equipment <ul style="list-style-type: none"> Completion of full Supplies order is finalized such as specific measured and order materials for this custom installation. Additional Equipment as required by TCEQ has been placed on order. Awaiting delivery. 	100%
6	Installation of Temporary Construction Bypass	100%
7	Begin complete demolition of existing equipment	100%
8	Electrical Installation	85%
9	Instrumentation Controls Installation	0%
10	Pipe Installation with Valves and Actuators	100%
11	Installation of Wedeco UV Reactors (Quantity = 3)	100%
12	Installation of Flow Monitoring Equipment <ul style="list-style-type: none"> Continuous Flow Rate for each disinfection channel. 	100%
Sequence	Action	% Complete
13	Installation of Regulatory Monitoring Equipment <ul style="list-style-type: none"> Relative Intensities Transmissivity of UV Light Number of Hours in Operation 	0%
14	Equipment Calibration and Certification	0%
15	Operator Wedeco Equipment Training <ul style="list-style-type: none"> Scheduled for Three (3) Complete days of on-site training. 	0%
16	Monthly Operator Report Training <ul style="list-style-type: none"> TCEQ has agreed to provide additional on-site assistance in confirming the monthly report is completed and submitted corrected. 	0%
17	Operational Trail Period	0%
18	Initiate Live Treatment	0%