Alternative Treatment Technology Units Meeting Validation Test Criteria

Oregon Administrative Rule 333-061-0050(5)(k)(I) Oregon Health Authority, Drinking Water Services (DWS)

ULTRAVIOLET REACTORS

52117/VIGEET RE/1010/10								
(Other reactors not on this list may meet the criteria. Contact DWS for details on verfications for reactors not listed.)								
Manufacturer	Model	Log ₁₀ Inactivation Credit **			May Flaw			
		Crypto.	Giardia	Virus	Max. Flow (gpm)			
Neotech	D438	3.5	3.5	0	435			
	UVSwiftSC™ D12	3.5+	3.5+	4.0+	3,000			
Troion	UVSwiftSC™ B03	3.5	3.5	0	132			
Trojan	UVSwift™ 2L12	3.5 *	3.5 *	0	4,500			
	UVSwift™ 4L12	3.5 *	3.5 *	0	4,500			
	Pro50/SV50/Sterilight50	3.5	3.5	0	70			
Viqua	Pro50/SV50/Sterilight50	3.0	3.0	0	80			
	Pro24-186	5.5+	5.5+	4.0	24			
Calgon	Sentinel 24" 9-lamp	4.0	4.0	0	19,600			
atg	UV SP-25-6	3.0	3.0	0	495			
	Spektron 250e	4.0	4.0	0	5,070,000			
Wedeco	BX100	3.0	3.0	0	387			
	B400XL	3.0	3.0	0	1,760			
	LBX1000	4.0	4.0	0	4,650			

^{*} If more log inactivation credit is requested after 2015 action spectra correction factors can be re-calculated to improve accuracy.

^{** 1} log is 90% inactivation of pathogens (e.g., Crypto.), 2 log is 99%, 3.5 log is 99.97%, 5.5 log is 99.9997% inactivation.

Manufacturer	Model	Log ₁₀ Inactivation Credit			Max. Flow
		Crypto.	Giardia	Virus	(gpm)

OAR 333-061-0050(5)(k)(J): "Non-Community water systems using only groundwater sources, and having minimal distribution systems as determined by the Department, may use ultraviolet light as the only disinfectant when total coliforms have been detected in the source water and no E. coli has been detected. UV units must meet the specifications of a Class A UV system under the National Sanitation Foundation (NSF) standard 55. The minimum ultraviolet light failsafe dosage set point shall be equivalent to 40 mV-s/cm² (40 mJ/cm²) with a wavelength between 200 and 300 nanometers."

The following are examples of Class A NSF 55 certified models and satisfy the Rule above:

Kinetico	KUV 1200x		12
Viqua Trojan	UVMax™ Pro 7		8.2
	UVMax™ Pro [x] series	79, 000, 000, 000, 000, 000, 000, 000, 0	up to 30
UV Pure	Hallet 15XS		14.6
Technologies	Hallet 30	removal credit	30
Viqua	SPV-200	0 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	2.6
	SPV-410		5.9
	SPV-600		8.6
	SPV-740	NO NO 10 10 10 10 10 10 10 10 10 10 10 10 10	11.2
	SPV-950	Q, S	14.9

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