## 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**

(Other reactors not on this list may meet the criteria. Contact DWS for details on verfications for reactors not listed.)							
Manufacturer	Model	Log <sub>10</sub> Inactivation Credit **					
		Crypto.	Giardia	Virus	Max. Flow (gpm)		
Neotech	D438	3.5	3.5	0	435		
Trojan	UVSwiftSC™ D12	3.5+	3.5+	4.0+	3,000		
	UVSwiftSC™ B03	3.5	3.5	0	132		
	UVSwift™ 2L12	3.5 *	3.5 *	0	4,500		
	UVSwift™ 4L12	3.5 *	3.5 *	0	4,500		
Viqua	Pro50/SV50/Sterilight50	3.5	3.5	0	70		
	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		
Wedeco	Spektron 250e	4.0	4.0	0	7,300		
	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 <sub>10</sub> 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 <i>E. coli</i> 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 <sup>mW-s</sup> / <sub>cm<sup>2</sup></sub> (40 <sup>mJ</sup> / <sub>cm<sup>2</sup></sub> ) with a wavelength between 200 and 300 nanometers."								
Kinetico	KUV 1200x				12			
Viqua <del>Trojan</del>	UVMax™ Pro 7 UVMax™ Pro [x] series	-	to NSF Granted Credit See Distord See Distord	o Por Models list complete	8.2 up to 30			
UV Pure	Hallet 15XS		5.5	E SE	14.6			
Technologies	Hallet 30		10 m	à	30			
Viqua	SPV-200		£ £ 8 0		2.6			
	SPV-410	4	ම හි දී ර	-	5.9			
	SPV-600	<b>Q</b>	4 2		8.6			
	SPV-740	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<u>کي ه</u>		11.2			
	SPV-950		° s		14.9			