

15A NCAC 18D .0203 RATING VALUES TO DETERMINE VARIOUS CLASSES OF CERTIFICATION

The designation of public water system treatment classifications shall be based on the following rating values:

	PARAMETER	RATING VALUE
(1)	Surface Water Source	
	(a) flowing stream	5
	(b) flowing stream with impoundment	7
	(c) raw water treatment	3
(2)	Ground Water Source	
	(a) first five wells	5
	(b) add 1 point per 5 wells or fraction thereof over 5	1
(3)	Coagulation	
	(a) aluminum sulfate, ferric chloride	10
	(b) polymer	5
(4)	Mixing	
	(a) baffle	2
	(b) mechanical	4
	(c) air	3
(5)	Oxidation (pre-treatment)	
	(a) Cl_2O_2	5
	(b) ozone	5
	(c) $KMnO_4$	3
	(d) Cl_2	3
(6)	Carbon Treatment	2
(7)	Aeration	
	(a) mechanical draft	3
	(b) coke tray or splash tray	2
	(c) diffused	3
	(d) packed tower (VOC reduction)	10
(8)	pH Adjustment (primary)	
	(a) caustic (NaOH)	10
	(b) lime or soda ash	3
	(c) acid	10
(9)	Sedimentation	
	(a) standard rate	5
	(b) tube settlers	3
	(c) upflow	8
	(d) pulsators and plates	5
(10)	Contact Tank	1
(11)	Filtration	
	(a) pressure	
	(i) sand or anthracite	8
	(ii) synthetic media (birm)	8
	(iii) granular activated carbon (GAC)	9
	(b) gravity	
	(i) sand	10
	(ii) anthracite (mixed) or GAC	12
	(iii) with surface wash or air scour	2
	(c) membrane	10
(12)	Ion Exchange	
	(a) softener, Na cycle	5
	(b) softener, H cycle	7
	(c) Fe and Mn (greensand)	9
	(d) mixed bed or split stream	9
(13)	Lime Softening	
	(a) spiractors	10

	(b)	clarifier with coagulation	12
	(c)	fuel burner (recarbonation)	5
(14)		Phosphate (sequestering agent)	5
(15)		Stabilization	
	(a)	acid feed	10
	(b)	phosphate	2
	(c)	caustic (NaOH)	10
	(d)	lime or soda ash	3
	(e)	contact units	5
(16)		Reverse Osmosis, Electrodialysis	15
(17)		Disinfection	
	(a)	gas Cl ₂	10
	(b)	hypochlorite solution	7
	(c)	Cl ₂ O ₂ (sodium chlorite and Cl ₂)	13
	(d)	ozone	13
	(e)	ammonia and Cl ₂	12
	(f)	ultraviolet light (uv)	5
(18)		Fluoridation	
	(a)	saturator	8
	(b)	dry feed	8
	(c)	solution (acid)	10
(19)		Pumping	
	(a)	raw	3
	(b)	intermediate	1
	(c)	finished	3
	(d)	system booster	2
(20)		Storage	
	(a)	raw	1
	(b)	treated ground level tank	1
	(c)	elevated in system (each extra tank 1 point)	2
	(d)	hydropneumatic	2
(21)		Population Served 1 point per 1,000 persons served	50 max
(22)		Plant Capacity 1 point per 1 MGD capacity	25 max
(23)		On-Site Quality Control	
	(a)	bacteriological	
		(i) MPN/MF	5
		(ii) HPC	2
		(iii) MMO-MUG (Colilert)	2
	(b)	pH	
		(i) meter	2
		(ii) test kit	1
	(c)	fluoride	
		(i) meter	3
		(ii) colorimetric	3
	(d)	chlorine	
		(i) titrator	3
		(ii) colorimeter/spec.	2
		(iii) test kit	1
	(e)	iron	1
	(f)	hardness	1
	(g)	alkalinity	1
	(h)	turbidity	1
	(i)	manganese	1
	(j)	others (1 point each)	1
	(k)	A.A. Spec, or G.C. Unit	5 each

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