

Virginia Division of Consolidated Laboratory Services (DCLS)

Environmental Laboratory Certification Program

2021 Clean Water Act Methods Update Rule (MUR) Methods List

9/12/2022

TABLE 1

TABLE 1 IS A SUMMARY OF METHODS BEING UPDATED IN THE VELAP DATABASE UPON FULL IMPLEMENTATION OF THE 2021 CLEAN WATER ACT METHODS UPDATE RULE (MUR). ALL MATRICES IN THE VELAP DATABASE WILL BE UPDATED FOR THESE METHODS WHEN THE MUR IS FULLY IMPLEMENTED IN VIRGINIA. THE DATE FOR FULL IMPLEMENTATION WILL BE ANNOUNCED.

METHOD (OLD)	METHOD (NEW)	ANALYTES
ASTM D1067-11 2011	ASTM D1067-16	Alkalinity as CaCO ₃
ASTM D1126-12	ASTM D1126-17	Total Hardness as CaCO ₃
ASTM D1426-08 (A) (AS HACH 8038)	ASTM D1426-15 (A) (AS HACH 8038)	Ammonia as N
ASTM D1687-12 (A)	ASTM D1687-17 (A)	Chromium VI
ASTM D3590-11 (A)	ASTM D3590-17 (A)	Kjeldahl Nitrogen, Total (TKN)
ASTM D3590-11 MINUS SM4500-NH ₃	ASTM D3590-17 MINUS SM4500-NH ₃	Organic Nitrogen
ASTM D4282-02	ASTM D4282-15	Cyanide, Free
ASTM D4327-03	ASTM D4327-17	Bromide; Chloride; Fluoride; Nitrate as N; Sulfate
ASTM D516-11	ASTM D516-16	Sulfate
ASTM D516-11 (AS HACH 8051)	ASTM D516-16 (AS HACH 8051)	Sulfate
ASTM D516-11 (AS SEAL EPA-165-A)	ASTM D516-16 (AS SEAL EPA-165-A)	Sulfate
ASTM D5174-97	ASTM D5174-07	Uranium
ASTM D6919-09	ASTM D6919-17	Ammonia as N
ASTM D6919-09	ASTM D6919-17	Calcium; Magnesium; Potassium; Sodium
ASTM D7065-11	ASTM D7065-17	Nonylphenol
ASTM D7237-10	ASTM D7237-15 (A)	Cyanide, Free
ASTM D7511-12	ASTM D7511-12(17)	Cyanide, Total
SM 2540 B 2011	SM 2540 B 2015	Residue, Total
SM 2540 C 2011	SM 2540 C 2015	Residue, Filterable (TDS)

SM 2540 D 2011	SM 2540 D 2015	Residue, Nonfilterable (TSS)
SM 2540 E 2011	SM 2540 E 2015	Residue, Volatile; Volatile Suspended Solids
SM 2540 F 2011	SM 2540 F 2015	Residue, Settleable
SM 4500 CN C 2011	SM 4500 CN C 2016	Cyanide, Total - prep
SM 4500 CN E 2011	SM 4500 CN E 2016	Cyanide, Total
SM 4500 CN F 2011	SM 4500 CN F 2016	Cyanide, Total
SM 4500 CN G 2011	SM 4500 CN G 2016	Cyanide, Available
SM 4500 NO3 D 2011	SM 4500 NO3 D 2016	Nitrate as N
SM 4500 NO3 E 2011	SM 4500 NO3 E 2016	Nitrate-Nitrite
SM 4500 NO3 F 2011	SM 4500 NO3 F 2016	Nitrate as N
SM 4500 NO3 F 2011	SM 4500 NO3 F 2016	Nitrate-Nitrite
SM 4500 NO3 F 2011	SM 4500 NO3 F 2016	Nitrite as N
SM 4500 NO3 F 2011 (AS ASTORIA A173)	SM 4500 NO3 F 2016 (AS ASTORIA A173)	Nitrate-Nitrite
SM 4500 NO3 F 2011 MINUS EPA 353.2	SM 4500 NO3 F 2016 MINUS EPA 353.2	Nitrate as N
SM 4500 NO3 F 2011 MINUS SM 4500-NO2 B 2011 (CALC)	SM 4500 NO3 F 2016 MINUS SM 4500-NO2 B-2011 CALC	Nitrate as N
SM 4500 NO3 H 2011	SM 4500 NO3 H 2016	Nitrate-Nitrite
SM 4500 O G 2011	SM 4500 O G 2016	Oxygen, Dissolved (DO)
SM 5210 B 2011	SM 5210 B 2016	Biochemical Oxygen Demand (BOD)
SM 5210 B 2011	SM 5210 B 2016	Carbonaceous Biochemical Oxygen Demand (CBOD)
SM 5310 B 2011	SM 5310 B 2014	Dissolved Organic Carbon (DOC) [DW only]
SM 5310 B 2011	SM 5310 B 2014	Organic Carbon, Total (TOC)
SM 5310 C 2011	SM 5310 C 2014	Dissolved Organic Carbon (DOC) [DW only]
SM 5310 C 2011	SM 5310 C 2014	Organic Carbon, Total (TOC)
SM 9221 B 2006	SM 9221 B 2014	Total Coliforms
SM 9221 D 1999 [DW only]	SM 9221 D 2014 [DW only]	Total Coliforms
SM 9221 E 2006 (E+C)	SM 9221 E 2014	Fecal Coliform
SM 9221 F 2006	SM 9221 F 2014	Escherichia coli
SM 9222 B 1997	SM 9222 B 2015	Total Coliforms [DW only]
SM 9222 D 2006	SM 9222 D 2015	Fecal Coliform
SM 9230 C 2007	SM 9230 C 2013	Enterococci