

A2LA Assessor Environmental Method Checklist

Titrimetry

Item	Section 1 - Personnel	Reference	Yes-No or NA	
1.1	Does the analyst(s) interviewed meet the job description position requirements, training and qualifications for performing the test? Supervisor: _____ Technician: _____	(G25)6.1		

Item	Section 2 - Equipment & Facilities	Reference	Yes-No or NA	
2.1	Is volumetric glassware Class A?	(SM18)1070B,2(1992)		
2.2	Are the manufacturer's suggested instructions followed for autotitrators?	(SM18)4500-Cl-D,4.a(1992)		
2.3	Is a magnetic stirrer available for use?	(SM18)2320B,3(1992)		

Item	Section 3 - Method	Reference	Yes-No or NA	
3.1	Is the titration method used for chloride, acidity, alkalinity, carbon dioxide, COD, cyanide, ammonia or sulfite? (circle test name)	(SM18)index,I-41(1992)		
3.2	Are titrants standardized before use?	(SM18)2320B,3(1992)		
3.3	Are standard solutions traceable to primary standards and documented?	(SM18)4500-Cl-D,4.a(1992)		
3.4	Are primary standards used, documented and traceable to national standards?	(SM18)4500-Cl-D,4.a(1992)		
3.5	Are the calculations made according to the reference method?	(SM18) 2320B,5(1992)		

Item	Section 4 - Sample Handling Practices	Reference	Yes-No or NA	
4.1	Are samples preserved and in the containers specified for wastewater testing?	(CFR136)Table II(1/31/94)		
4.2	Are holding times met for wastewater parameters? Sulfite: analyze immediately; Acidity, Alkalinity, Cyanide: 14 days; Ammonia, Chloride, COD: 28 days	(CFR136)Table II(1/31/94)		

Integrity (contd.)

4.3	Are holding times met for drinking water? Alkalinity: 14 days; Chlorine Residual, analyze immediately	(570_1)TableIV-4,22(1992)		
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Item	Section 5 - Quality Control Practices	Reference	Yes-No or NA	
5.1	Are the laboratory control standards externally supplied standards traceable to NIST with a concentration between 5 and 50 times the MDL or near sample ambient levels?	(SM18)1020B,3(1992)		
5.2	Is the laboratory control standard analyzed once each day of analysis or whenever known additions do not result in acceptable recovery?	(SM18)1020B,3(1992)		
5.3	Are reagent blanks analyzed a minimum of 5% of the sample load?	(SM18)1020B, 4(1992)		
5.4	Are duplicates analyzed at least 5% or more of the samples?	(SM18)1020B,6(1992)		
5.5	Are known additions (spikes) analyzed at least 10% of the samples?	(SM18)1020B,2(1992)		
5.6	Are known additions made between 5 and 50 times the MDL or between 1 and 10 times the ambient level (whichever is greater)?	(SM18)1020B,2(1992)		
5.7	Is the percent recovery for anions between 80-120%?	(SM18)1020B,2(1992)		