A2LA Assessor Environmental Method Checklist

Dissolved Oxygen(DO)

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 the dissolved oxygen measured with an electronic probe and meter that is calibrated before use and is it documented?	(SM18)4500-O,G,3.a(1992)		
2.2	Is the dissolved oxygen measured by iodometric titration (Winkler) using the azide modification method for wastewater samples?	(SM18)4500-O,C,3.a(1992)		
2.3	Is the probe membrane checked to ensure no minute air bubbles are present?	(SM18)4500-O.G,3.b(1992)		
2.4	Is the dissolved oxygen measured by iodometric titration using a modified iodometric titration method?	(SM18)4500-O D,E,F,1 (1992)		

Item	Section 3 - Method	Reference	Yes-No or NA	
3.1	Is the azide modification being used for measuring samples when the samples contain greater than 50 µg/L nitrite and less than 1 mg/L ferrous iron/L?	(SM18)4500-O.C,1(1992)		
3.2	Is the sodium thiosulfate titrant standardization with bi-iodate solution documented?	(SM18)4500-O.C,2.e(1992)		
3.3	Are samples sufficiently stirred to overcome erratic response when DO measurements are made using a meter and probe?	(SM18)4500-O.G,3.b(1992)		
3.4	Is the DO meter calibrated against air or a sample of known DO concentration determined by the iodometric technique?	(SM18)4500-O.G,3.a(1992)		
3.5	Is the DO meter checked by placing the probe in a water sample of a suitable matrix with a zero DO?	(SM18)4500-O.G,3.a(1992)		

	Section 4 - Sample Handling Practices		Yes-No	

Item		Reference	or NA	
4.1	Is DO determined immediately for wastewater samples?	(CFR136)Table II(1/94)		
4.2	Are samples with no iodine demand stored in the dark for a few hours (with the proper preservatives) and measured as soon as possible?	(SM18)4500-O.B,4(1992)		
4.3	Are samples with iodine demand preserved for 4 to 8 hours with the proper preservatives and stored at the collection temperature or water sealed and stored at 10 to 20°C?	(SM18)4500-O.B,4(1992)		
4.4	Is sample temperature recorded at the time of sampling?	(SM18)4500-O.B,3(1992)		

Item	Section 5 - Quality Control Practices	Reference	Yes-No or NA	
5.1	Is the temperature effect validated by checking one or two points to verify the temperature correction data when using a DO meter?	(SM18)4500-O.G,3.c(1992)		
5.2	Has a temperature/millivolt response graph been constructed when using a DO meter?	(SM18)4500-O.G,1(1992)		
5.3	Is the DO meter temperature compensator calibrated and documented?	(SM18)4500-O.G,1(1992)		
5.4	Is the precision in distilled water found to be about 0.020 mg/L for the iodometric titration and 0.05 mg/L for the probe method.	(SM18)4500-).C,G 5(1992)		
5.5	Is the accuracy of the probe method ±0.1 mg/L ?	(SM18)4500-O.G,5(1992)		