SC DEPARTMENT of ENVIRONMENTAL SERVICES

Standard Methods QC Requirements for Peracetic Acid and Hydrogen Peroxide

Peracetic Acid - SM 4500-PAA -B (2019)

- Method blank analyzed daily before each batch. MB must recover <½ the MRL.
- MRL check standard analyzed daily before each batch. The MRL check standard must recover within ±50%.
- LFB at mid or high concentration analyzed initially and after every 10 samples. These LFBs must recover within ±15% of true value, (85-115%).
- Duplicate analysis required with each batch. Duplicate and sample RPD must be <15%.
- ICV once per year with a blank and 5 standards verifying the entire linear range the laboratory uses.

- Note: If the laboratory is using the instrument's residual chlorine curve and performing a conversion calculation to get the Peracetic Acid (PAA)result (either manually or automatically on the instrument), KMnO4 standards can be used to verify the curve for the MRL check standard, LFBs, and ICV in the same manner as residual chlorine.

Hydrogen Peroxide – SM 4500-H_2O_2-B (2020)

- Method blank analyzed daily before each batch. MB must recover <½ the MRL.
- MRL check standard analyzed daily before each batch. The MRL check standard must recover within ±30%.
- LFB at mid or high concentration analyzed initially and after every 10 sample. The LFBs must recover within ±15% of true value (85-115%).
- Duplicate analysis with each batch. Duplicate and sample RPD must be <15%.
- ICV once per year with a blank and 5 standards verifying the entire linear range the laboratory uses.
- Note: If the laboratory is using the instrument's residual chlorine curve and performing a conversion calculation to get the Hydrogen Peroxide (H_2O_2) result (either manually or automatically on the instrument), KMnO4 standards can be used to verify the curve for the MRL check standard, LFBs, and ICV in the same manner as residual chlorine.