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AZPDES and APP Permit Compliance Testing Field Method Update

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Update #1

1. This Information Update is meant to provide all facilities that have AZPDES and APP permits information about upcoming training opportunities, new instrumentation and methods, and relevant decisions pertaining to compliance field methods by ADHS. There has been some confusion in the past because ADHS has labeled most of the training and information with a Wastewater Treatment Plant Operator label. The information and training presented in this Information Update is relevant to all facilities that have an AZPDES, Reuse, or APP permit and are performing effluent, well, lake or river testing for compliance.
2. ADHS is maintaining a website <http://www.azdhs.gov/lab/license/wastewaterTreatment.htm> that contains all of the past three training Powerpoint and video presentations. This website also contains helpful information and frameworks to help facilities with developing SOPs and bench sheets.
3. The Field Method that has caused the most issues has been with the testing of total residual chlorine for AZPDES permits. AZPDES permits require testing to be performed in the 4-18 ug/L range depending upon the permit. The only two currently approved methods that can accurately reach these levels are: Hach Method 10014, which uses a DR2800 or equivalent spectrophotometer (none of these are hand held meters); or the Amperometric method, which requires a Hach Autocat 9000 or equivalent instrument. Color wheel tests and handheld meters are not ADHS approved for these low monitoring levels.
4. The other Field Method that has caused the most issues has been temperature. ADHS has been requiring the use of a glass or resistance thermometer based upon discussions with the USEPA Region 9. Most facilities have been using their pH, DO, and/or conductivity meters for this compliance test. ADHS has decided to allow these meters for APP permits only for temperature measurements if they are periodically calibrated against a NIST thermometer. However, for AZPDES permits, glass or resistance thermometers are still required without prior approval from the USEPA. The USEPA Region 9 may approve the use of these above meters for temperature measurements after the facility has submitted a temperature comparison with an NIST thermometer study. Please submit these temperature comparison studies to Steve Remaley at remaley.steve@epa.gov and (415) 972-3802.
5. ADHS has been notified by the USEPA that they will be issuing a Method Update Rule in the Federal Register hopefully by the end of this year. It is anticipated that this Method Update Rule will approve the Hach LDO probe for use with dissolved oxygen and BOD testing. For current

use of the LDO probe, a comparison study with the LDO probe versus either a membrane probe or the Winkler method is required for approval by the USEPA Region 9. Once the Method Update Rule is published, however, ADHS will approve the LDO probe for all facilities without the need for any comparison studies.

6. Just as a reminder for all facilities, ADHS's current focus is on the field methods used for AZPDES, Reuse, and APP Permits. However, the information being provided is relevant for any environmental permit requiring field methods, including drinking water. At some point in the future, ADHS will begin to notify drinking water facilities about the requirement to use approved methods. ADHS will most likely follow this notification with some sort of training. Currently, ADHS has identified 5 drinking water field tests that would be a part of any ADHS on-site inspections: pH; turbidity; chlorine residual (not low level); chlorine dioxide; and chlorite.
7. Please contact Steve Baker @ 602-364-0720 or steve.baker@azdhs.gov for any technical or interpretation issues.