ARIZONA DEPARTMENT OF HEALTH SERVICES

Information Update
Marijuana Laboratory Certification Program

August 18, 2026

Update #13

A. The following practices must be followed for proficiency testing ("PT"):

1. Microbiology:

   a. Qualitative (presence/absence) microbiology parameters must correctly detect the presence or absence of target organisms in all PT replicates to be considered acceptable. The laboratories must specify in the quality assurance manual ("QAM") that only results reported with 100% accuracy are acceptable for qualitative microbiology methods. Any failure to correctly detect a PT sample is unacceptable. It must be investigated and followed by corrective action as per A.A.C. R9-17-404.02(C)(6)(a)(i-iii).

   b. PT results must not be reported as greater than (">") a numerical value for E. Coli. Some PT providers accept these results, but the Department considers them to be unacceptable.

2. Quantitative chemistry testing:

   a. PT results less than the laboratory's limit of quantitation ("LOQ") must be reported as "< LOQ", where LOQ is a numerical value equal to the laboratory's normal sample LOQ.

   b. PT results must not be reported as greater than (">") a numerical value. Some PT providers accept these results, but the Department considers them to be unacceptable. When an analyte concentration exceeds the highest calibration standard, the PT sample must be appropriately diluted and reanalyzed so that the reported result falls within the validated calibration range. The reported result must reflect the dilution performed.

c. Each PT sample must be tested according to A.A.C. R9-17-404.03, using the same procedures and techniques employed for routine sample testing per A.A.C. R9-17-404.02(C)(2). Routine analytical procedures must also include the use of the laboratory's routinely used calibration materials. The laboratory must not change its routinely used calibration materials solely for proficiency testing. If the PT provider's calibration materials are used, it must either be routinely used for sample analysis or the laboratory must document the unavailability of the routinely used calibration materials and justify the substitution.

B. The calibration curve must:

1. Use the same instrument method for all injections of calibration standards, quality control samples, and analytical samples.

2. Have all calibration standards be from the same run sequence.

3. Not have multiple calibration points at the same concentration averaged to create one calibration point at that concentration.

4. Not be used for samples which were injected before the calibration standards used in the calibration curve were injected.

5. Be the most recently established calibration curve used for sample analysis. Quality control samples and analytical samples must not be analyzed with a previous calibration curve once a new calibration curve has been established.

C. When samples require dilution due to analyte concentrations exceeding the calibration range, the dilution factor must be applied to both the sample result and the reported LOQ. It is acceptable for the reported LOQ to exceed the maximum per A.A.C. R9-17-404.03(I)(5), if the analyte concentration exceeds the calibration range and the sample requires dilution for quantitation. It is not acceptable to report not detected ("ND") for an analyte result with an LOQ that exceeds the maximum allowed by the Rules. If the laboratory is reporting multiple analytes for a test when some analyte concentrations exceed the calibration range and others fall within the range, the laboratory must analyze the sample twice - once with dilution and once without dilution. Laboratories must implement an SOP which includes a description of how results will be reported when sample dilution is performed. The SOP, must contain at a minimum, the following requirements:

1. Samples must initially be analyzed without additional sample dilution. If an analyte concentration exceeds the calibration range, the laboratory must perform an appropriate dilution and reanalyze the sample. If the laboratory anticipates that a sample will require dilution, the diluted and undiluted portions may be analyzed concurrently.

2. For analytes whose concentrations fall within the calibration range without dilution, the results and the LOQ values from the undiluted analysis must be reported.

3. For analytes whose concentrations exceed the calibration range and require dilution, the laboratory must perform appropriate dilutions to bring the analyte concentrations within the calibration range. The reported result must reflect the dilution factor applied to the sample.

4. For analytes requiring dilution, the laboratory must adjust the reported LOQ to reflect the dilution factor used and apply a D1 qualifier per A.A.C. R9-17-404.03(P)(2) to the analyte to indicate that the LOQ and reported result were adjusted to account for sample dilution.