**QAPP Worksheet #15: Project Action Limits and Laboratory-Specific Detection/Quantitation Limits**

**(UFP-QAPP Manual Section 2.6.2.3 and Figure 15)**

**(EPA 2106-G-05 Section 2.2.6)**

This worksheet should be completed for each matrix, analyte, analytical method, and concentration level (if applicable). Its purpose is to make sure the selected analytical laboratory and method can provide accurate data (i.e., quantitative results with known precision and bias) at the Project Action Limit (PAL). During the systematic planning process, identify target analytes, PALs, and the reference limits (e.g. regulatory limits or risk-based limits) on which action limits are based. (If more than one set of reference limits are applicable, add additional columns.) Target analytes that are critical to project-specific decision-making should be highlighted. Next, determine the matrix-specific quantitation limit goal. The quantitation limit goal should be lower than the PAL by an amount determined the DQOs/PQOs. This information, along with the MPC documented on Worksheet #12, should be used to select analytical methods and laboratories. Once the methods and laboratories have been selected, the remaining columns should be completed with laboratory-specific information. Project teams need to keep in mind that the laboratory-specific quantitation limit is usually determined in reagent water; therefore, the Project Quantitation Limit Goal (matrix-specific quantitation limit) will be higher. Explanations should be provided in cases where the quantitation limit is greater than either the project quantitation limit goal or the PAL. The laboratory must provide documentation that demonstrates precision and bias at the laboratory-specific quantitation limit. The laboratory-specific quantitation limit cannot be lower than the lowest calibration standard for any given method and analyte.

Matrix: Soil

Analytical Method: 8260

Concentration level (if applicable):

| **Analyte** | **Project Action Limit (PAL)** | **PAL Reference** | **Project Quantitation Limit Goal** | **Laboratory-specific quantitation limit[[1]](#footnote-1)** | **Laboratory-specific detection limit[[2]](#footnote-2)** |
| --- | --- | --- | --- | --- | --- |
| Benzene | 5.0 mg/Kg dry weight | 2003 Region 3 BTAG | 2.0 mg/Kg dry weight | 1.0 mg/Kg | 0.1 mg/Kg |

1. Define quantitation limit terminology used by the project/laboratory [↑](#footnote-ref-1)
2. Define detection limit terminology used by the project/laboratory [↑](#footnote-ref-2)