



## 10.8 CORRECTIVE ACTION

Whenever any QC parameters are outside of the control limits or DQO specified in the SAP or QAPP, the investigation team must identify the potential origin(s) of the problem(s), and initiate any appropriate corrective action. In some cases, the corrective action may involve evaluating potential impacts that these exceedances have on data quality and therefore usability of the data.

Any investigation should include a checklist of parameters or questions related to potential data quality issues potentially needing corrective action. Example issues include (but are not limited to) the following:

- Were any analytes, not on the initial SAP analyte suite, detected in laboratory blanks that could be attributed to laboratory contamination rather than field contamination? (e.g., solvents commonly used in analytical laboratories such as methylene chloride and acetone that were likely not used, handled, or stored at the site under investigation).
- Were any analytes of concern detected in the Method Blank? This may indicate contamination that is unrelated to the field sample.
- Were contaminants found in both the environmental sample and a blank sample? Such detections may be regarded as laboratory artifacts and not a result of contamination at the investigation site if the contaminant is detected in both and the concentration in the environmental sample is:
  - less than 10 times the blank value for common laboratory contaminants (e.g. methylene chloride, acetone, 2-butanone and phthalate esters)
  - greater than five times the blank value for other potential laboratory contaminants
- Did the RPD and Percent Recoveries for any of the QC analyses (e.g., LCS, MS/MSD) exceed the control limits initially specified in the SAP or QAPP? This may indicate sample preparation problems such as differences in spike solution preparation methods. If the control limits for a certain batch of samples being analyzed are exceeded and underlying issues not identified or resolved, the affected samples may need to be qualified or rejected.



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- Was there any matrix interference suspected or determined that required dilution of the sample for reanalysis (e.g., did the dilution cause any reanalysis reporting limit to exceed the corresponding screening or regulatory criteria)? This may result in a degree of uncertainty for contaminants that may potentially mask each other on a chromatogram, such as pesticides and polychlorinated biphenyls (PCBs), or it may cause the reporting limit to exceed the HDOH Tier 1 EAL screening criteria or cleanup criteria.
- Were all calibration verification sample results within control limits? If any fail, recalibration of the instrument is necessary.

These parameters should be evaluated before accepting the data for use in the overall site investigation. Investigation reports should also include a data quality evaluation section that addresses these issues and provides documentation and justification for accepting the data. The HEER Office may reject data that does not meet the agreed upon level of data quality in the initially reviewed work plan or planning documents for the investigation. In more extreme cases, not evaluating data quality issues or initiating appropriate corrective action after an issue is identified may result in rejection of subsequent data sets.