State Water Resources Control Board

TO: SWAMP Coordinators

FROM: Tessa Fojut
Surface Water Ambient Monitoring Program Quality Assurance Officer
OFFICE OF INFORMATION MANAGEMENT AND ANALYSIS

DATE: January 27, 2020

SUBJECT: QUALITY ASSURANCE CODES FOR QUESTIONABLE DATA – SURFACE WATER AMBIENT MONITORING PROGRAM

Regional Board coordinators for the Surface Water Ambient Monitoring Program (SWAMP) have identified water quality data collected in the 2019 sampling season that they suspect are inaccurate based on known site conditions and comparing the results to previous years of monitoring data. The data managers of the SWAMP Information Management and Quality Assurance Center (SWAMP IQ) have been working with the laboratory that generated the data to determine if there were errors in the analysis or reporting of the results. Thus far, no errors have been identified, however, the results are questionable based on knowledge of water quality in the associated water bodies.

To address this situation, SWAMP IQ data managers will add a quality assurance (QA) code to results identified as questionable by Regional Board staff or Statewide Program Science Leads based on their knowledge of local conditions and previous monitoring data to ensure that all data users, who would access the data through CEDEN, are aware the results many not accurately represent water quality conditions. The QA code used in these circumstances will be “Q”, which means the result is questionable and the QA code will be applied at the result level.

When results are flagged with the “Q” QA code, they are assigned a review level of 4 for the Integrated Report, indicating that extensive review is necessary. This should prevent the data from being used as lines of evidence without Regional Board staff approving its use.

If this situation occurs in the future, Regional Board staff or Statewide Program Science Leads should notify the appropriate SWAMP IQ data manager (based on data type) if they identify data that are questionable based on their knowledge of the water body, historical data for the site, or other factors. First, SWAMP IQ will work with the lab or data provider to determine if there was a reporting or analysis error that can be corrected. If we cannot identify an error or cause for the questionable results, then the SWAMP IQ data manager will add the “Q” QA code to the affected records, either before loading to the database, or updating records if the data have already been loaded. Questionable data issues would ideally be caught as early as possible to facilitate working with labs to correct errors, or potentially re-analyze samples, before results are loaded to the database.

cc: SWAMP Coordinators