

DATA SUBMITTAL REQUIREMENTS FOR EXTERNAL ENTITIES

**The Hawaii State Department of Health
Clean Water Branch
January 6, 2015**

Data submitted to the Hawaii State Department of Health (HIDOH) Clean Water Branch (CWB) for the purpose of assessing State water quality may be used to fulfill certain federal Clean Water Act requirements (§303(c), §303(d) and §305(b)). Decisions and conclusions resulting from the data submitted to the CWB can have broad and long-standing implications to the State water quality program. It is therefore imperative that only data of acceptable quality be used to assess waters for compliance with State water quality standards. Data of acceptable quality can be assured through a series of defined and systematic activities carried out throughout the data generating process, including the planning process. The CWB believes that the minimum requirements listed below help to assure usability, scientific validity and defensibility of the data submitted for consideration. Data not meeting these requirements may not be used for State water quality assessment.

1. All data submittals, to the extent feasible, should be in electronic format that is PC compatible, preferably in Microsoft Excel or PDF format. References to websites will not be accepted in lieu of actual data submitted.
2. To expedite processing, all data and information submitted should include the following:
 - a. Name and contact information of person(s) or organization(s) submitting data and information certifying the completeness and accuracy of the data and information
 - b. Date on which data and information is being submitted to the CWB
 - c. Whether Geographical Information System (GIS) data files (ArcGis mxd or ArcView shapefiles) are included
 - d. Pollutant categories the submitted data and information pertain to
 - e. Start and end dates of when data was collected, or time period which the submitted information represents
 - f. Brief summary of submittal or list of submittal contents and any instructions required for assessment, which may include:
 - i. Definitions for codes or abbreviations used
 - ii. Whether additional summaries or instructions are attached to the cover sheet or where they are included in the submittal
 - g. Whether electronic or hard copy/paper format is being submitted
3. To be considered of sufficient quantity and quality to be used as a primary line of evidence in assessing water quality standards attainment, data being submitted should contain the following:
 - a. Pollutants (must include one or more of the following) - bacteria; nutrients; total suspended solids; chlorophyll *a*; dissolved silica; temperature; pH; conductivity/salinity; dissolved oxygen and turbidity
 - b. A minimum of 5 samples per sampling site for toxic pollutants (HAR §11-54-4)

- c. The name and exact area of the water body and monitoring sites, including:
 - i. Complete metadata for all GIS files with details of all parameters of the projection including datum
 - ii. The name and exact area of the water body and monitoring sites the information concerns, including, either:
 - 1. Very clear electronic copy indicating the area the information pertains to (*e.g.* mark sample location on a USGS topographic map);
or
 - 2. The latitude/longitude and datum of the location
- d. Metadata for the field and lab data, such as:
 - i. Date and time of all measurements
 - ii. Location of field measurements (unique site code, latitude and longitude, and water body name)
 - iii. Number of samples
 - iv. Name of laboratory
 - v. Analyses performed
 - vi. Units of measurement
 - vii. Analytical methods and detection limits
 - viii. Other relevant factors
- e. Supporting or associated analytical data (*e.g.* hardness data with dissolved metals samples, temperature and pH data with ammonia measurements)
- f. A signed copy of the quality assurance procedures including a signed copy of the Quality Assurance Project Plan (QAPP), or equivalent, must be submitted. The signature must be from the person who is responsible for the quality of the data submitted for this assessment. A hard copy of the QAPP must be submitted if a hard copy of the data is submitted. A QAPP or equivalent document must contain, as a minimum, the following:
 - i. Objectives of the study, project, or monitoring program
 - ii. Methods used for sample collection and handling
 - iii. Personnel training description and documentation
 - iv. Procedures for field and laboratory measurement and analysis (Standard Operating Procedures)
 - v. Data reduction, management, validation, and recordkeeping (including proper chain of custody) procedures
 - vi. Data auditing procedures
 - vii. Quality assurance and quality control procedures for field and laboratory measurements, including field and laboratory instrument calibration procedures
 - viii. Field assessment procedures
 - ix. A statement certifying the adequacy of the QAPP (and name of person certifying the document)
- g. For narrative and qualitative submittals, the submission must:
 - i. Describe events or conditions that indicate impacts on water quality
 - ii. Provide linkage between the measurement endpoint (*e.g.* a study that may have been performed for some other purpose) and the water quality standard of interest

- iii. Be scientifically defensible
 - iv. Provide analyst's credentials and training
 - v. Be verifiable by the HDOH CWB
 - vi. Identify the name and exact area of the water body and monitoring sites with details (see item 3c above)
- h. If photographic documentation is submitted, the submission must:
- i. Identify the date and time
 - ii. Identify the name and exact area of the water body and monitoring sites with details (see item 3c above)
 - iii. Provide a thorough description of the photographs
 - iv. Describe the spatial and temporal representation of the photographs
 - v. Provide linkage between photograph-represented condition and condition that indicates impacts on water quality
 - vi. Provide photographer's rationale for area photographed and camera settings used
 - vii. Be verifiable by the HDOH CWB
- i. For data submitted from citizen volunteer monitoring efforts, the submission should also include:
- i. The name and contact information of the group
 - ii. An indication of any training in water quality assessment completed by members of the group
- j. Site-specific or project-specific sampling and analysis plan for numeric data should also be available and contain the following:
- i. Data quality objectives or requirements of the project
 - ii. A statement that data quality objectives or requirements of the project have been met
 - iii. Rationale for the selection of sampling sites, water quality parameters, sampling frequency and methods that assure the samples are spatially and temporally representative of the water body and representative of conditions within the target sampling timeframe; and
 - iv. Documentation to support the conclusion that results are reproducible

Note: raw data, including instrument calibration data, must be made available to the CWB upon request. Raw data are defined as any original factual information from a measurement activity or study recorded in a laboratory notebook, worksheets, records, memoranda, notes, or exact copies thereof that are necessary for the reconstruction and evaluation of the report of the activity or study. Raw data may include photography, microfilm or microfiche copies, computer printouts, magnetic or digital media, including dictated observations, and recorded data from automated instruments. If exact copies of raw data have been prepared (and verified accurate by signature) then the exact copy or exact transcript may be substituted.