

Appendix C – Fish Tissue Data Reporting Guidance

Notes: TCEQ staff collecting fish tissue must submit separate RFAs for each species of fish collected. See [Chapter 14](#) for additional information on completing RFAs. Only TCEQ staff use the RFA form.

All tissue sampling is considered a special study and requires a quality assurance plan that outlines the purpose and type/number of samples required.

Tissue Samples—Recording Data on the RFA

Metadata

Using SWQMIS, the collector completes the metadata area on the upper front portion of the RFA. See [Chapter 14](#) for information on completing an RFA. Following sample collection, the collector completes the Composite Sample section of the RFA.

Composite Sample

A fish tissue sample is always reported as a composite sample (e.g., time and space when electrofishing) even if only one fish is collected. Required fields for composite samples are

- Start Date
- Start Time
- Start Depth—measured, in meters, from the water surface and is the shallowest depth encountered while sampling
- End Date
- End Time
- End Depth—measured, in meters, from the water surface and is the deepest point encountered while sampling
- Composite Category—recorded as “B” for time and space
- Composite Type—equal to the number of individuals in the sample; also record the same number on the lower back portion of the RFA

Additional RFA Data Recording

The collector also completes the area on the lower back portion of the RFA labeled Tissue. This area of the RFA has options for the tissue type or portion of the fish submitted to the laboratory (Parameter Code 74995). Circle either whole fish or fillet; and refer to a more extensive list of anatomical (tissue type) codes in the Data Management Reference Guide (DMRG), [Chapter 6](#). Fields are provided for three other criteria—species, EPA Species Code (Parameter Code 74990), and # of individuals (Parameter Code 81614). Refer to the DMRG, Chapter 6, Commonly Used Parameter Codes, for the various Texas species parameter codes. Record the number of individuals in the sample. This number must agree with the number recorded in Composite Type. Finally, circle the desired suite of analyses to be conducted on the sample. Options are metals, pesticides, organics, or semivolatile organics.

For information on tissue sample collection and target species see SWQM-V1, Chapter 7.

Tissue Samples—Reporting Required Data

TCEQ data collectors with data entry access to SWQMIS report data from the RFA along with

information in the following tables unless otherwise instructed in a project specific QAPP. TCEQ data collectors report this data through the SWQMIS sample set and result data entry system just like other field data is reported to SWQMIS. Once the user is in the SWQMIS Sampling module, locate the sample event and input the Fish Tissue Metadata and Results. Select Sample-Other for the Quality Control Type, Observation for the Data Type, Tissue Sample Metadata for the Sampling Category, and Other should be the Sample Type. Remember to also select the Tissue Type and Species, and to make the correct data input for a Composite sample type.

If data management functions are being performed by a contracting entity, report the data using ASCII pipe-delimited file formats found in [Chapter 7](#) of the SWQM DMRG. This typically applies to CRP/TMDL/NPS contractors, SWQM contractors, or other state agencies such as the Texas Department of State Health Services (TDSHS) or the Texas Parks and Wildlife Department (TPWD) that do not have access to the SWQMIS manual data entry system.

See the tables below for guidance on entering tissue sample data.

Metadata for Tissue Sample Set - Analytical Data (Manual Data Entry)

Metadata Element	What to Enter
Quality Control Type	Sample-Other
Monitoring Type	As specified in QA document
Data Type	Analytical Result
Sampling Category	Metals-in-tissue, pesticides-in-tissue, semivolatiles-in-tissue, or volatile organics-in-tissue
Medium	Other
Sample Type	C (Composite)
Start, End, and Deepest Depth	Report values for all three depth fields in meters
Composite Category and Type	Report the category as "B" for both Time and Space, and Type represents the number of organisms sent to the laboratory
Tissue Type and Species	Select the tissue type and species from the system drop-down lists

Metadata for Tissue Sample Set – Metadata (Manual Data Entry)

Metadata Element	What to Enter
Quality Control Type	Sample-Other
Monitoring Type	As specified in QA Document
Data Type	Observation
Sampling Category	Tissue sample metadata

Medium	Other
Sample Type	C (Composite)
Start, End, and Deepest Depth	Report values for all three depth fields in meters
Composite Category and Type	Report the Category as B for both Time and Space, and Type represents the number of organisms sent to the laboratory
Tissue Type and Species	Select the tissue type and species from the system drop-down lists

Common Fish Tissue Specimen Parameters

Parameter Code	What to Enter	Reference
5-Digit, Texas Species Code	Number of individuals	Sample collected, and DMRG, Chapter 6
74990	EPA Species Code	DMRG, Chapter 6
74995	Anatomical Part Code	DMRG, Chapter 6
81614	Number of individuals in tissue sample	Sample collected
81615	Number of species in tissue sample	Always use one species per tissue sample, value=1
00039	Length in millimeters (if one fish)	Sample collected
00019	Weight in grams (if one fish)	Sample collected
84100	Sex of sample	1=male, 2=female, 3=mixed, 4=unknown

Tissue Samples - Completing the Fish Collection Reporting Form

The Fish Collection Reporting Form is used by TCEQ staff when reporting fish collection activities to SWQM-Central Office (SWQM-CO) staff. The Fish Collection Reporting Form is located in Chapter 7 of the SWQM-V1 (Figures 7.1 and 7.2). Fish tissue collection events conducted within each region are compiled and reported annually to SWQM-CO. SWQM-CO will tally and submit the information to TPWD to fulfill the scientific collection permit requirements. Refer to the Fish Collection Reporting Form for guidance on reporting data for the TPWD Permit Requirements. **Note:** Please do not attach this form to a SWQMIS Sample Event or Sample Set as a BLOB file.