

TITLE: Training Chemical Speciation Network Filter Shipping and Handling Personnel

Effective Date: _____

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Reviewed by: Anne Glubis
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Annual Review			
Reviewed by:	Title:	Date:	Signature:

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1.0 Procedures

1.1 Scope and Applicability

The Filter Shipping and Handling Unit (FiSH) is responsible for the preparation of filter media to be sent to sampling sites in the Chemical Speciation Network (CSN). Filters are prepared, packaged and shipped from the FiSH to the site operator prior to the scheduled sampling dates. Following the sampling event, the site operator returns the filter media via UPS Next Day Air to the FiSH, where the samples are logged, filters are removed from their modules and sent to laboratories for analysis. This document will present the methods and documentation used to train new personnel.

1.2 Summary of Method

Training must be performed for:

- New employees
- Preparation of personnel for new assignments
- Significant procedural changes
- Process/technology changes
- Addressing nonconformance to the quality system

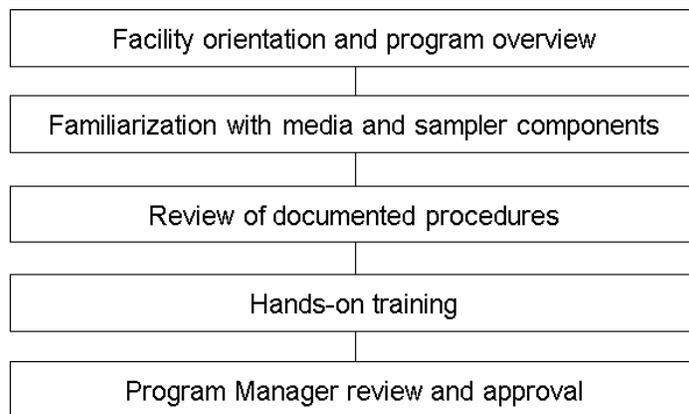


Figure 1. Training Procedure Overview

1.3 Definitions

CSN	Chemical Speciation Network
FiSH	Filter Shipping and Handling Unit
QAPP	Quality Assurance Project Plan
SDS	(Materials) Safety Data Sheet
SOP	Standard Operating Procedure
UPS	United Parcel Service

1.4 Health & Safety Warnings

The employee must be aware of the hazards associated with the chemicals they use. Reducing the possibility of accidental absorption or ingestion minimizes the hazards. Eating and drinking are not permitted in areas where chemicals are used or stored. Laboratory coats, gloves, and safety glasses must be worn at all times when handling chemicals listed as hazardous at the strength utilized. If the analyst is not familiar with the hazards associated with the chemicals being used, the Safety Data Sheets (SDS) must be consulted. The SDS by chemical and brand can be found in the Wood analytical laboratory or at the [SDS/MSDS Search web site at https://www.msdsonline.com/msds-search/](https://www.msdsonline.com/msds-search/) or the [Agency for Toxic Substances and Disease Registry \(ATSDR\), website at https://www.atsdr.cdc.gov/](https://www.atsdr.cdc.gov/). Employ lifting equipment and other handling aids to eliminate the need to move heavy objects manually. Do not strain to lift any object.

1.5 Personnel Qualifications/Responsibilities

FiSH Personnel must have completed Wood safety orientation and lab safety orientation. Documentation is kept on site with the Wood local safety officer.

1.6 Equipment and Supplies

FiSH personnel will demonstrate competency performing procedures using filter media, sampling components, activity records and database operations detailed in GLO3110-002 *Field Shipping and Handling* and GLO3110-003 *Analysis Batch Preparation and Shipment*.

1.7 Procedures

1. The Program Manager will orient all new technicians to the FiSH facility. This will include explanation of all safety and security information.
2. The first step in training new technicians is providing a program overview, including the presentation of the various filter media and sampling component types in the program, their purpose, and proper handling and cleaning.
3. A new technician will be paired with an experienced technician, who will instruct them in the documented FiSH procedures.
 - During this time the new technician will be required to review the current SOPs and the QAPP.
 - At first the new technician will be solely in the role of observer, slowly giving way to performing procedures under the guidance of the experienced technician.
 - Once they have the knowledge and ability to perform the procedure unassisted, the technician will be evaluated and certified by Program Manager.

4. The Program Manager will observe technician perform procedures within GLO3110-002 and GLO3110-003. Upon successful demonstration of capability to perform these procedures as documented, the Program Manager will sign off on the certification statement for procedures demonstrated (see Figure 1).
5. Annual and “As Needed” Refresher demonstrations of capability will be documented in the same manner as the initial certification.

1.8 Data and Records Management

A copy of FiSH training records will be stored electronically on the local area network, a hard copy will be filed with Program Manager.

2.0 Quality Control and Quality Assurance

The Quality Assurance Manager or designee reviews each documented demonstration of capability, including associated raw data as appropriate, for compliance with this training procedure. Compliant documentation will receive an approval signature. Errors or deficiencies will be investigated and discussed with the Program Manager. Minor deficiencies (e.g. entry errors or missing records) will be noted on the form itself along with the correction acknowledgment. A formal corrective action will be initiated if the investigation reveals it is necessary.

3.0 References

Wood Environment & Infrastructure Solutions, Inc. (Wood). 2017. *Chemical Speciation Network (CSN) Standard Operating Procedures (SOP) GLO31110-002, Revision 0, Field Shipping and Handling*. Prepared for U.S. Environmental Protection Agency (EPA), Washington, DC. Contract No. EP-D-15-001. Gainesville, FL.

Wood Environment & Infrastructure Solutions, Inc. (Wood). 2017. *Chemical Speciation Network (CSN) Standard Operating Procedures (SOP) GLO31110-003, Revision 0, Analysis Batch Preparation and Shipment*. Prepared for U.S. Environmental Protection Agency (EPA), Washington, DC. Contract No. EP-D-15-001. Gainesville, FL.

**Demonstration of Capability
 Chemical Speciation Network
 Filter Shipping and Handling (FiSH) Unit
 Certification Statement**

Date: _____
 For Year: _____

Facility Name: Amec Foster Wheeler Environment and Infrastructure CSN FiSH Unit

Facility Address: 404 SW 140th Terrace, Newberry, FL 32669-3000

Technician(s) Name(s): _____

Area(s): Filter media, sampling modules, data operations

Method number, SOP#, Rev#, and Title

We, the undersigned, CERTIFY that:

1. The technicians identified above, using the cited procedure(s), which is in use at this facility for the processing of samples, have met the Demonstration of Capability.
2. The procedure(s) was performed by the technician(s) identified on this certification.
3. A copy of the procedure(s) and the specific SOPs are available for all personnel on-site.
4. The data associated with the demonstration capability are true, accurate, complete and self-explanatory (1).
5. All raw data (including a copy of this certification form) necessary to reconstruct and validate these procedures have been retained at the facility.

FiSH Technical Area Supervisor

 Technical Director's Name and Title Signature Date

 Quality Assurance Officer's Name Signature Date

This certification form must be completed each time a demonstration of capability study is completed.

- (1) True: Consistent with supporting data.
 Accurate: Based on good laboratory practices consistent with sound scientific principles / practices.
 Complete: Includes the results of supporting performance testing (e.g. calibration and reference standards).
 Self-Explanatory: Data properly labeled and stored so that the results are clear and require no additional explanation.

Figure 2. Demonstration of Capability Certification Statement GLF-3110-001/Rev0