

Packing, Handling, and Shipping of Samples

Chapter 10: FIELD OPERATIONS
AHETF-10.B.1.

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1.0 PURPOSE AND SCOPE

- 1.1 This Standard Operating Procedure (SOP) provides a description of procedures for handling the Agricultural Handlers Exposure Task Force (AHETF) test system [matrix] samples collected at the field test sites. This SOP also covers storage, packing, and shipping procedures.
- 1.2 This SOP, section 2.4, was revised to clarify the separation of controls and treated samples while in temporary storage and during shipment to the analytical lab. The example form was changed to be presented as a blank form.

2.0 SAMPLE HANDLING AND STORAGE

- 2.1 All samples will be collected as directed by the study protocol or appropriate SOP to prevent degradation and/or contamination.
- 2.2 Place "dry" field samples (e.g., body dosimeters in aluminum foil) in appropriate labeled containers, then "immediately" place in an ice chest with dry ice or in a freezer.
- 2.3 All liquid samples should be placed in appropriate jars with lids. Allow sufficient headspace when freezing these samples to prevent cracking or breaking from expansion.

- 2.4 Untreated control samples and treated field samples (including field fortification samples, field fortification solutions, and worker dosimetry samples) must be maintained separately while in temporary storage locations (e.g., coolers with dry ice) or in shipping containers (e.g., boxes). At a minimum, untreated samples must be physically separated from treated samples by at least two boundary layers (e.g., double bagged, separate boxes/partitions, etc...) while in the same cooler/freezer, but preferably would be stored in completely separate coolers/freezers. Efforts should be taken to keep field fortification samples, field fortification solutions and dosimetry samples separate at all times; however, these samples may be stored and shipped together provided there is adequate separation and protection from potential cross-contamination. The Study Director shall make any decisions regarding the combining of samples in the same device.

3.0 SAMPLE PACKING AND SHIPPING

- 3.1 Samples, when packed for overnight shipping, should be placed on dry ice in insulated containers (boxes or coolers). Be sure to add enough dry ice to keep the samples frozen for at least 36 hours. Samples packed for transport by freezer truck service will be boxed and stored frozen until picked up by freezer truck.
- 3.2 Before shipping, all sample numbers should be checked against a sample list to provide an accurate chain of custody form for the analytical laboratory. A copy of the signed form will remain in the raw data logbook. Chain of custody documents will be included with the shipment to the analytical laboratory. See the attached example.
- 3.3 All samples in bottles or jars should be placed in sealable bags and wrapped with protective wrapping materials (e.g., bubble wrap or newspaper) to minimize breakage. Bottles or jars must be securely packed in each shipping container so that there is minimal or no movement. Additional bubble wrap or paper may be placed in the sample shipping container to provide cushioning.
- 3.4 If samples must be shipped via a commercial overnight freight carrier, they are always shipped on a priority basis. For local studies, samples may be transported on dry ice, in a cooler, from the field to a laboratory freezer.

- 3.5 An effort should be made to ship samples to arrive at the designated facility on a weekday. Do not ship samples over a weekend unless a freezer truck service is being used.

Sample Shipping Form
(example)

Agricultural Handlers Exposure Task Force			
Sample Shipping Chain of Custody			
AHETF Study No.	Sample Type:	Priority:	Page:
Ship To:		Ship From:	
Carrier:	Waybill/Airbill No.	Date Shipped/Initials:	
Approximate Amount of Dry Ice Included:		Conditions of Samples when Packed:	
Comments:			
List of Samples Shipped: 	Received: 	List of Samples Shipped: 	Received:
Date Received:		Received By/Company:	
Condition Received:			
Destination of Samples at Analytical Facility:		Date Placed in Storage/Initials:	
Do not ship samples over a weekend unless on a freezer truck.			