

National Human Exposure Assessment Survey (NHEXAS)

Region 5 Study

Quality Systems and Implementation Plan for Human Exposure Assessment

Research Triangle Institute
Research Triangle Park, NC 27079
Cooperative Agreement CR 821902

Field Operations Protocol

RTI/ACS-AP-209-083

Title: Sample Shipping Procedures

Source: Research Triangle Institute

U.S. Environmental Protection Agency
Office of Research and Development
Human Exposure & Atmospheric Sciences Division
Human Exposure Research Branch

Notice: The U.S. Environmental Protection Agency (EPA), through its Office of Research and Development (ORD), partially funded and collaborated in the research described here. This protocol is part of the Quality Systems Implementation Plan (QSIP) that was reviewed by the EPA and approved for use in this demonstration/scoping study. Mention of trade names or commercial products does not constitute endorsement or recommendation by EPA for use.

FIELD OPERATIONS PROTOCOL	RESEARCH TRIANGLE INSTITUTE POST OFFICE BOX 12194 RESEARCH TRIANGLE PARK, NC 27709-2194	RTVACS-AP-209-083 Page 1 of 10
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TITLE: SAMPLE SHIPPING PROCEDURES

SOURCE: Research Triangle Institute
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SAMPLE SHIPPING PROCEDURES

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1.0 SCOPE AND APPLICATION

Sample shipping procedures have been described in the individual NHEXAS sample collection protocols. They will be summarized here to provide a quick reference tool for the field staff when samples are prepared for shipment at the field lab/staging area. Each sample type is listed along with the packaging, shipping temperature, and allowable shipping times. Shipping addresses are provided.

2.0 SAMPLES FOR SHIPMENT TO RTI

2.1 Air VOC Samples

- 2.1.1 Ship samples in their cans.
- 2.1.2 Package sample cans to prevent movement or excessive vibration in the shipping container. They may be shipped with the air aerosol samples.
- 2.1.3 Ship samples at ambient temperature.
- 2.1.4 Ship by overnight air express. Morning or afternoon delivery is acceptable, except for Saturday delivery which must be in the morning.
- 2.1.5 Ship within 7 days of collection.

2.2 Air Aerosol Samples

- 2.2.1 Ship samples in the special protective packaging in which they were shipped to the field.
- 2.2.2 Package samples to prevent movement or excessive vibration in the shipping container. They may be shipped with the air VOC samples.
- 2.2.3 Ship samples at ambient temperature.
- 2.2.4 Ship by overnight express. Morning or afternoon delivery is acceptable, except for Saturday delivery which must be in the morning.
- 2.2.5 Ship within 7 days of collection.

2.3 Hair Samples

- 2.3.1 Pack the hair samples together in an outer plastic bag, and seal the bag.
- 2.3.2 Pack the bag to prevent movement or excessive vibration in the shipping container. Hair samples may be shipped in the same container as the air VOC and aerosol samples.
- 2.3.3 Ship samples at ambient temperature.
- 2.3.4 Ship by overnight express. Morning or afternoon delivery is acceptable.
- 2.3.5 Ship within 7 days of collection.

2.4* Blood Samples (Archival)

- 2.4.1 Pack blood sample vacutainer tubes in the styrofoam tube shipper to prevent glass-to-glass contact.
- 2.4.2 Package styrofoam shipper in its cardboard box. Place the box in a Zip-loc bag with an adsorbent pad.
- 2.4.3 Place the bag in an insulated shipping container to prevent movement or excessive vibration.
- 2.4.4 Ship samples with sufficient ice packs to keep the samples cold during shipment.
- 2.4.5 Ship by overnight air express with delivery by noon the next day.
- 2.4.6 Follow all air carrier shipping regulations.
- 2.4.7 Ship the samples within 5 days of collection.

2.5 Shipping Address

- 2.5.1 For weekday delivery ship RTI-bound samples to:
Mr. Kent W. Thomas
Dreyfus Laboratory
Research Triangle Institute
3040 Cornwallis Road
Research Triangle Park, N.C. 27709
Phone: (919)-990-8395
- 2.5.2 For Saturday delivery, contact the field supervisor to confirm availability and to obtain a shipping address.

3.0 SAMPLES FOR SHIPMENT TO EOHSI

3.1 Dust Samples

- 3.1.1 Pack the dust samples together in a plastic bag and seal the bag.
- 3.1.2 Package the bag in an insulated shipping container to prevent movement or excessive vibration. Samples may be shipped in the same container as the soil samples.
- 3.1.3 Ship samples at ambient temperature.
- 3.1.4 Ship by overnight express. Morning or afternoon delivery is acceptable, except for Saturday when morning delivery is required.
- 3.1.5 Ship samples within 7 days of collection.

3.2 Soil Samples

- 3.2.1 Package the soil bottles in a shipping container to prevent movement or excessive vibration. Samples may shipped in the same container as the dust samples.
- 3.2.2 Ship samples at ambient temperature.
- 3.2.3 Ship by overnight express. Morning or afternoon delivery is acceptable, except for Saturday delivery when morning delivery is required.
- 3.2.4 Ship the samples within 7 days of collection.

3.3 Shipping Address

- 3.3.1 For weekday delivery, ship the samples to the following address.
Dr. Natalie Freeman
EOHSI
Room 312
681 Frelinghuysen Road
Piscataway, NJ 08855-1179
Telephone: (908) 445-0151
- 3.3.2 For Saturday delivery, contact EOHSI to confirm availability and obtain the shipping address.

4.0 SAMPLES FOR SHIPMENT TO CDC

4.1* Blood Samples (VOCs and Metals)

- 4.1.1 Package the vacutainer tubes to prevent glass-to-glass contact.
- 4.1.2 Package the tubes with appropriate packaging materials for human blood specimens.
- 4.1.3 Place the packaged tubes in an insulated shipping container to prevent movement or excessive vibration.
- 4.1.4 Ship samples with sufficient ice packs to keep the samples cold during shipment.
- 4.1.5 Ship by overnight air express with delivery by noon the next day.
- 4.1.6 Follow all air carrier shipping regulations.
- 4.1.7 Ship the samples within 5 days of collection.
- 4.1.8 Ship all blood samples to the following address.

Dr. David Ashley
Centers for Disease Control
Chamblee Building 17, Loading Dock
4770 Buford Highway
Atlanta, GA 30341
Telephone: (404) 488-7962

4.2 Urine Samples

- 4.2.1 Package the urine bottles, in their plastic bags, in an insulated shipping container to prevent movement or excessive vibration.
- 4.2.2 Ship samples with sufficient dry ice to keep the samples frozen during shipment. Typically, 10 lbs. of dry ice, cut in slabs or in blocks, is sufficient.
- 4.2.3 Ship by overnight air express with delivery by noon the next day.
- 4.2.4 Follow all air carrier shipping regulations.
- 4.2.5 Ship the samples within 10 days of collection.

4.2.6 Ship all urine samples to the following address.

For weekday delivery ship the samples to the following address.

Mr. Charles Dodson

Centers for Disease Control

Chamblee Building 17 Loading Dock

4770 Buford Highway N.E.

Atlanta, GA 30341

Telephone (404)-488-4305

4.2.7 For Saturday delivery, contact Charles Dodson to confirm availability and the correct shipping address.

5.0 SAMPLES FOR SHIPMENT TO FDA

5.1 Food and Beverage Samples

5.1.1 Tape the caps with electricians or polyethylene tape.

5.1.2 Package the plastic bottles in insulated containers to prevent movement or excessive vibration.

5.1.3 Package with sufficient ice packs to keep the samples cool during shipment. If samples are shipped frozen, they will not need ice packs.

NOTE: The samples must be packed while still cold.

5.1.4 Ship the samples by overnight air express. Delivery by noon the next day is acceptable.

5.1.5 Samples must be shipped within 6 days of collection. It is desirable to ship the samples within 3 days of collection.

5.2 Shipping Address

5.2.1 Ship samples for weekday delivery to the following address.

Ms. Tina Feld
Food and Drug Administration
Kansas City District
11630 West 80th Street
Lenexa, KS 66214
(913)-752-2170

5.2.2 For Saturday delivery, contact FDA to confirm availability and the correct shipping address.

6.0 SAMPLES FOR SHIPMENT TO EPA WATER-CONTRACT LABORATORY

6.1 Water VOC Samples

6.1.1 Make sure that all caps have been taped with electricians or polyethylene tape.

6.1.2 Package the glass vials in foam inserts to prevent glass-to-glass contact.

6.1.3 Package the vial inserts and plastic bottles in insulated containers to prevent movement or excessive vibration.

6.1.4 Package with sufficient ice packs to keep the samples cold during shipment.

NOTE: The samples must be packed while still cold.

6.1.5 Ship the samples by overnight air express with delivery by noon.

6.1.6 Samples must be shipped within 7 days of collection. It is desirable to ship the samples within 3 days of collection.

6.2 Shipping Address for Water VOC Samples

6.2.1 Ship samples for weekday delivery to the following address.

Pete Youll, Project Manager
Aqua Tech Environmental Labs, Inc.
6878 South State Route 100
Melmore, Ohio 44845
1-800-783-5991

6.2.2 For Saturday delivery, contact EPA to confirm availability and the correct shipping address.

6.3 Water Metals Samples

6.3.1 Make sure that all caps have been taped with electricians or polyethylene tape.

6.3.2 Package the samples to minimize movement or vibration.

6.3.3 These samples do not need to be shipped cold.

6.3.4 Ship the samples by overnight air express with delivery by noon.

6.3.5 Samples must be shipped within 7 days of collection.

6.4 Shipping Address for Water Metals Samples

6.4.1 Ship samples for weekday delivery to the following address.

Mark Kalmeyer, Lab Manager

Trans Enviro Inc.

19701 South Miles Rd.

Warrensville Heights, OH 44128

(216)-663-0808

EXPLANATION OF REVISIONS

Revisions Made 4/96; Denoted by *

Section 2.4

This section was added or revised because blood archival samples are now shipped to RTI.