

# 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-209-095**

**Title:** Field Staff Training

**Source:** Research Triangle Institute

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

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**FIELD  
OPERATIONS  
PROTOCOL**

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**Page 1 of 7**

**TITLE:** FIELD STAFF TRAINING

**SOURCE:** Research Triangle Institute  
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## FIELD STAFF TRAINING

### TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
<a href="#">1.0</a>	<a href="#">Scope and Application</a> .....	3
<a href="#">2.0</a>	<a href="#">Summary</a> .....	3
<a href="#">3.0</a>	<a href="#">Materials</a> .....	3
<a href="#">4.0</a>	<a href="#">Training Process and Subjects</a> .....	4
<a href="#">5.0</a>	<a href="#">Training Documentation</a> .....	6

## 1.0 SCOPE AND APPLICATION

All NHEXAS field technicians must undergo training in order that they may carry out all of the field study duties to which they may be assigned. This protocol outlines the training process, defines the training subject matter, and specifies the procedure to be used to document the training. However, this protocol is not a training manual and it does not include the subject material that will be covered during training. The protocol covers training only for NHEXAS project activities and does not include training in RTI administrative policies and procedures.

## 2.0 SUMMARY

Training will encompass several subject areas including sample collection, data management, questionnaire administration, logistical procedures, vehicle operation and maintenance, decorum, and safety. There will be two levels of training; one for the field staff that will begin the study and a second level for staff that begin work after the field study has started. Initial field staff members will participate in several weeks of training that includes practice and rehearsal. Staff members beginning their work during the study will receive basic procedural training and supervised on-the-job training. In both cases, staff members must demonstrate that they understand and can perform all required field study activities. A training file will be initiated and maintained for each staff member to document the training they receive. The primary documentation will be in the form of the Training Documentation Form (Figure 1). These forms will list each training activity; upon completion of each activity the staff member will sign and date the form to acknowledge their training and understanding of the training subject.

## 3.0 MATERIALS

### 3.1 NHEXAS Sample Collection Protocols

### 3.2 NHEXAS Field Logistical Protocols

- 3.3 NHEXAS Survey Instruments
- 3.4 Sample Collection Materials and Equipment for All Procedures
- 3.5 Study Vehicles
- 3.6 Training Documentation Forms

#### 4.0 TRAINING PROCESS AND SUBJECTS

##### 4.1 Training Process and Training Subjects for the Initial Staff

Initial staff are defined as the field staff members that will begin the field study. The following subsections outline the training process and define the training subjects for these field staff members. Unless otherwise noted, the Field Supervisor will be responsible for supervising the training activities.

###### 4.1.1 Project Overview and Protocols

- 4.1.1.1 A project overview will be provided by the Field Supervisor.
- 4.1.1.2 Staff members will read the NHEXAS QSIP Volume I.
- 4.1.1.3 Staff members will read all sample collection, field logistics, data management, shipping, and QA protocols or SOPs that will be used at the field site.
- 4.1.1.4 The Field Supervisor will provide instruction to familiarize staff members with the details of the study design.
- 4.1.1.5 The staff members will demonstrate comprehension of the written materials to the satisfaction of the Field Supervisor. The Field Supervisor will direct additional training as needed.

###### 4.1.2 Field Procedures Practice

- 4.1.2.1 Staff members will practice all sample collection activities under the guidance of an experienced ACS chemist. Multiple practice sessions will be used for the aerosol and dust collection protocols.
- 4.1.2.2 Staff members will practice data entry, data management, and data shell setup using the portable computer, printer, disk drives, and NHEXAS software. Additional training on the basics of computer usage will be applied as necessary. This training will be directed by the Field Supervisor and NHEXAS Data Manager.

- 4.1.2.3 Staff members will practice administering the participant instructions.
- 4.1.2.4 Staff members will practice administering the Time Diary and Activity Questionnaire, Technician Walk-Through Questionnaire, 24-Hour Food Diary and Food Diary Followup, and the Followup Questionnaire under the guidance of an RTI Survey Operations staff member.
- 4.1.2.5 The staff members will demonstrate the ability to perform all sample collection activities to the satisfaction of the Field Supervisor. The Field Supervisor will direct additional training as needed.
- 4.1.2.6 Staff members will perform self-completion of all sample collection and questionnaire activities.
- 4.1.2.6 Field staff members will implement the full field study plan in a rehearsal session under supervision of more experienced chemists.
- 4.1.2.7 The initial two to six weeks of actual field work will be supervised by experienced chemists.
- 4.1.3 Travel, Decorum, Communications
  - 4.1.3.1 The Field Supervisor will provide training on the NHEXAS travel plans. This includes project requirements, budget and accounting information, and project and RTI policies and procedures regarding travel.
  - 4.1.3.2 The Field Supervisor will instruct the field staff on proper decorum when visiting participant homes, dealing with local officials, and when working with auditors.
  - 4.1.3.3 Staff members will receive instruction in communication. This includes both the general communication issues and specific communication procedures to be used with participants, interviewers, and supervisors during the field study.
- 4.1.4 Vehicle Operation and Maintenance
  - 4.1.4.1 Staff members will read the RV, Suburban, and Wells Cargo trailer manuals.
  - 4.1.4.2 The operation of all vehicle components will be demonstrated for the staff members.
  - 4.1.4.3 Staff members will practice driving all study vehicles until proficiency is demonstrated to the satisfaction of the Field Supervisor.
  - 4.1.4.4 Staff members will practice operating all vehicle systems.

4.1.4.5 Staff members will be instructed about maintenance procedures and intervals.

4.1.5 Safety

4.1.5.1 Staff members will read the RTI safety manual.

4.1.5.2 Staff members will read all cautions and warnings in study protocols, equipment manuals, and vehicle manuals.

4.1.5.3 Safe driving behavior and techniques will be emphasized during training.

4.1.5.4 Chemical safety information appropriate to any chemicals carried or used by the field staff will be provided.

4.1.5.5 Personal safety during field operations and home visits will be discussed.

4.2 Training Process and Training Subjects for Staff Starting After the Study Begins

Staff members may be added to the field team after the field study has begun and while it is actively underway. An accelerated project initiation, covering the items noted in Sections 4.1.1, 4.1.3, and 4.1.5 will be provided for these staff members. Vehicle operation and maintenance training, as described in Section 4.1.4 will be provided at the field site(s). Training for sample collection, data management, questionnaire administration, and study logistics will be accomplished by supervised on-the-job training at the field site(s). Training and competency in all field study procedures will be documented as described in Section 5.0.

5.0 TRAINING DOCUMENTATION

The Field Supervisor will maintain a training file for each field staff member. All training activities will be recorded in this file. Training documentation will be done primarily through the use of the Training Documentation Form (Figure 1). A form will be used to document each training item completed by the staff member. When each training activity has been completed the staff member will initial and date the form to indicate that the activity has been performed. Some training activities will require approval by the appropriate supervisor or instructor to indicate that the staff member has demonstrated competency in the training area. Other training certificates and memoranda may be used in addition to or instead of this form to document training activities.

NHEXAS STUDY TRAINING DOCUMENTATION FORM

General Subject Area: \_\_\_\_\_

Training Activity	Completed/ Understood By the Staff Member (Initial and date)	Approved by Supervisor (Initial and date)

Figure 1. Example training documentation form.