National Human Exposure Assessment Survey (NHEXAS)

Arizona Study

Quality Systems and Implementation Plan for Human Exposure Assessment

The University of Arizona
Tucson, Arizona 85721

Cooperative Agreement CR 821560

Standard Operating Procedure **SOP-UA-T-3.0**

Title: Field Personnel Training--General

Source: The University of Arizona

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

Field Personnel Training - General

1.0 PURPOSE AND APPLICABILITY

The purpose of this SOP is to describe basic pre- and post-field visit activities and standards which are expected of every Field Team member. This procedure must be followed to ensure consistent data custody, storage, transfer and analysis of a high quality for the NHEXAS ~~Arizona~~ Border and Other Health & Environment Projects of the University of Arizona/Battelle/Illinois Institute of Technology Consortium. ESG 7-14-97

2.0 DEFINITIONS

2.1 BATCH = A collection of individual completed HH packets which have been collated for the purpose of tracking. The HH packets are sent as a batch to be entered into the electronic database, verified and cleaned. The Data Coordinator "batches" packets received from the Field Coordinator.

2.2 BUCKET = A plastic container with a buckle top. One bucket is assigned to each household to be visited. Household identification and stage numbers are listed on the outside of the container. The bucket contains all paperwork to be completed by field staff or household respondents. It serves as the primary vehicle for securing and transporting forms, data and samples to and from the field through the course of the study.

2.3 CHAIN OF CUSTODY RECORD = A vital data tracking and quality assurance form which is attached to every field sampling data sheet (see Fig. 1).

2.4 DATA COORDINATOR = The employee of the research project who supervises data batching, entry, and verification.

2.5 FIELD = The sampling environment or the site at which data will be collected. This is almost always at the residence of the primary respondent.

2.6 FIELD KIT = A sampling tool-box containing appropriate collection and storage utensils.

2.7 FIELD COORDINATOR = The employee of the research project who supervises field data collection and operations. The Field Coordinator collates individual data into HH packets, and upon completion of all visits, sampling, and QA checks, forwards the packet to the Data Coordinator.

2.8 FORM, PHYSICAL = The paper or "hard copy" original of the data which is collected in the field. Form is also a generic term for any piece of paper data, such as records and check sheets, questionnaires, etc., which are collected for analysis.

2.9 HOUSEHOLD(HH) = The residence occupied by study respondents.

2.10 HOUSEHOLD IDENTIFICATION NUMBER(HHID) = A unique number and character combination which is assigned to each respondent household for identification purposes. This number must be recorded on all data (forms, samples, questionnaires and correspondence) generated by the household.

2.11 MATERIALS TECHNICIAN = The employee of the research project who is responsible for assembling and assigning field forms, questionnaires and equipment for field use.

2.12 N/A = Not Applicable.

2.13 PACKET = A sturdy envelope-like container that can be fully closed and is large enough to hold the physical data forms generated from sampling and surveying a study household.

2.14 QUALITY ASSURANCE(QA) = All those planned and systematic actions necessary for ensuring the accuracy, validity, integrity, preservation and utility of collected data.

2.15 QUALITY CONTROL(QC) = Those quality assurance actions providing a means to control and measure the characteristics of a datum, process, or the adherence to established parameters.

2.16 SAMPLE = That piece of physical data which is collected from the study participants for the purpose of scientific analysis.

2.17 TEAM LEADER = The member of the field team who is primarily responsible for respondent contact, data collection, field form and questionnaire completion, and site QC checks of all data.

2.18 TEAM MEMBER = The member of a field team responsible for assisting the team leader in the collection of data and quality control checks in the field.

2.19 TRACKING SYSTEM = A database system containing information about the custody, transfer and storage of hard copy data, electronic data, field samples, and field sample alloquats.

2.20 VISIT = A scheduled appointment with participating respondents at their place of residence (HH) for the collection of samples, questionnaires and other data.

3.0 REFERENCES

3.1 Lebowitz, M.D. 1993. Study Design (Revision of 31 Dec. 1993). EPA NHEXAS Cooperative Agreement.

4.0 DISCUSSION

4.1 This SOP outlines generalities in the training of field team members. Pre- and post-field visit activities and on-site data collection standards. Data retrieval and handling are the primary job responsibilities of all field team members. Team members are expected to execute their responsibilities in an exhaustive and comprehensive fashion in accordance with stated protocol.

4.2 Data collected in noncompliance with minimum quality control checks and standards are considered questionable and of limited use to the research endeavor. Proper sample collection, custody and handling must concern all field staff.

5.0 RESPONSIBILITIES

5.1 The Field Coordinator is responsible for:

(a) overall quality of the data retrieved by the field teams,
(b) post-field QA checks of all data collected by the field teams,
(c) accepting custody of all data returned from the field.

5.2 The Team Leader is responsible for:

(a) overall quality of data collected from the HH,
(b) HH and Respondent interaction with the study,
(c) coordination and direction of team members in the field,
(d) quality assurance & control issues in the field,
(e) Chain of Custody procedures and records.

5.3 All Team Members are responsible for:

(a) obtaining all data according to protocol,
(b) properly labeling and storing the collected sample,
(c) fully completing all applicable fields on data form,
(d) quality control checks in the field.

6.0 MATERIALS AND REAGENTS

6.1 Materials

Materials required to successfully achieve the minimum standards demanded by this protocol will vary according to the data collection method employed.

6.2 Reagents - N/A

7.0 PROCEDURE

7.1 Preparation (Pre-Field Procedures)

(a) Pre-field standards expected of all team members include punctuality, professionalism, safety and reliability.

(b) The particular equipment requirements for the preparation of field visits and sampling are outlined in the appropriate sampling protocol. Field kits must be adequately stocked and maintained at all times.

(c) HH buckets will be maintained by the Team Leader for the duration of sampling during each visit series or stage.

(d) Pre-field checks of equipment are required of all Team Members.

(e) The nature of this research project requires flexibility and team members must be prepared to respond to a variety of sampling environments. "Back-up" plans and necessary supplies to respond to these different environments may become a key element in the success of the sampling visit and the research project as a whole.

(f) The Team Leader will have access to the Confidential Home Appointment Sheet (Fig. 2) which details confidential address and last name information for the purpose of HH contact. This sheet is produced through an interface of the Confidential database and the NHEXAS tracking system.

(g) This confidential information is not to be revealed to anyone without a critical need to know. No-one other than project personnel directly involved with the field sampling component of this research study would have any legitimate reason to inquire as to the identity of persons participating in this project (see UA-G-3.0).

7.1.1 Reagents - N/A

7.1.2 Standards & Blanks - N/A

7.2 In-Field Procedure

(a) Team Leader coordinates with Stage 1 interviewer and makes sure informed consent has been obtained. If not, he or she obtains consent to sampling from respondent(s) in each HH. The team leader then assigns sampling tasks to team members.

(b) Sampling will proceed according to the appropriate SOPs. All team members must adhere to accepted sample collection methods. Records of sampling and data sheets **must** be completed comprehensively and exhaustively.

(c) In-field QC checks of data and method are the responsibility of all field personnel. Specific cross-check tasks will be assigned by the Team Leader. Team members will double check each others work to insure compliance with the appropriate protocol and prevent error.

(d) Every form, questionnaire, sample and data item collected must be labeled with the HHID, type of sample, date of collection, time of collection and collecting Team Member's initials at a minimum.

(e) Before leaving the sampling environment all equipment and samples will be inventoried and sampler placement verified by the Team Leader. Arrangements for the follow-up visit will be made by the Team Leader.

(f) Samples will be stored according to protocol for transport back to the Field Office.

7.3 Post-Field

(a) Samples collected will be stored and processed upon return to the Field Office as defined in the appropriate SOP. The original completed Chain of Custody Record (Fig.1) will be secured with the sample at all times.

(b) The Team Leader will review the visit with other team members to promote a continual feedback process. The team will collectively review data and forms collected to insure completeness of data records.

(c) The Team Leader will forward the original forms to the Field Coordinator within 24 hours of collection.

(d) Team Leader will report sampling accomplished and the follow-up visit date to the Field Supervisor through the use of a Visit Summary Sheet (Fig. 3).

7.4 Analyses - N/A

7.4.1 Standards/Blanks - N/A

7.4.2 Samples - N/A

7.5 Calculations - N/A

7.6 Quality Control

7.6.1 Tolerance Limits

All data collected will be 100% QA checked.

7.6.2 Detection Limits - N/A

7.6.3 Corrective Actions

Apparent mislabeling problems detected in the field may be corrected by the Team Members when appropriate and in compliance with SOP #UA-C-2.0. In the HH sampling site, the Team Leader supervises all work, assigns cross-checking tasks, and QC checks all completed forms. Team members work collectively and check each other's work for accuracy, precision and compliance with the appropriate SOPs. The Team Leader must QC check each form retrieved within 24 hours of collection at which time it is forwarded to the Field Coordinator for QA check. The Field Coordinator must QA check the data record within 24 hours of receipt from the Team Leader, or within 48 hours of collection by the field team.

8.0 RECORDS

8.1 General

Specific records will vary according to procedure defined in the SOP. All records will be completed exhaustively and comprehensively by assigned field members. Without proper documentation, the data collected by Team Members is not usable.

8.2 Data Sample
All sample containers will have HHID, date, time, sample type and Team Member initials recorded upon it with indelible ink. Sample containers will be processed for SOP-specified shipment and analysis upon return to the Field Office.

8.3 Chain of Custody Record (Fig. 1).

This record will serve as the primary record of sample custody after collection in the field. The Team Leader is responsible for the thorough completion of this form. The completed original Chain of Custody Record will remain with the data sample.

8.4 Confidential Home Appointment Sheet (Fig. 2).

This record is produced by a link between the confidential database and the NHEXAS tracking system. It is one of the fundamental tracking records of the NHEXAS Arizona project.

8.5 Visit Summary Sheet (Fig. 3).

This record is produced by the Team Leader at the conclusion of each HH visit. It is then submitted with all data records which have been QC checked by the Team Leader to the Field Coordinator within 24 hours of visit completion. It provides a summary of the field sampling activities by the field team on that visit.

Figure 1. Chain of Custody Record.

Chain of Custody Record
NHEXAS Arizona Project (CR-821560)
Respiratory Sciences
1435 N. Fremont Ave
Tucson, AZ 85719
(520) 626 - 4226

Sample Type: ______________________. page ____ of ____.

Generated by: ______________________/______________________
print name *signature*

Date Generated	Time	Sample ID	# of Containers	Remarks
__/__/__	__:__			

History of Sample Handling and Custody

Relinquished or Received	Signature	Date mo / day / yr	Time	Action
|Rel| or |Rec|		__/__/__	__:__	
|Rel| or |Rec|		__/__/__	__:__	
|Rel| or |Rec|		__/__/__	__:__	
|Rel| or |Rec|		__/__/__	__:__	
|Rel| or |Rec|		__/__/__	__:__	
|Rel| or |Rec|		__/__/__	__:__	
|Rel| or |Rec|		__/__/__	__:__	
|Rel| or |Rec|		__/__/__	__:__	
|Rel| or |Rec|		__/__/__	__:__	
|Rel| or |Rec|		__/__/__	__:__	
|Rel| or |Rec|		__/__/__	__:__	
|Rel| or |Rec|		__/__/__	__:__	
|Rel| or |Rec|		__/__/__	__:__	
|Rel| or |Rec|		__/__/__	__:__	
|Rel| or |Rec|		__/__/__	__:__	
|Rel| or |Rec|		__/__/__	__:__	

FORM = UA-G4.0 - 1.2

Attach Additional Pages as Necessary

Figure 2. Confidential Home Appointment Sheet.

revised see appendix A 10/15/95

Confidential Home Appointment Sheet

Last visit series ____/____/19____ Project ID ________
mo day year

Form ID = UA - T3.0 - 1.0

HHID________/_____

Team Leader______

Stage #____

Name(contact)____________________

P.IRN Name________

Street____________________

Cross Streets etc.....

City____________________

County________ ZIP______/_____

Ph No (   ) _____ - ________

V1____/____/____

V2____/____/____

V3____/____/____

V4____/____/____

Times: ____:____ ____:____ ____:____ ____:____

IRN #	Birth Name	Relates to IRN	Status Δ	Con-sent	Base Line	Active Diary	PEF Diary	Follow Up	Diet Diary	Diet √-list	Active Pump	Derm wipe	Urine	Blood	Diet samples
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

				Codes / Comments
PID Indoors	[ ]	In VOC & HCHO	[ ]	
PID Outdoors	[ ]	Out VOC & HCHO	[ ]	[1]
Sentinel Hi-Vol	[ ]	In Pump (PM)	[ ]	[2]
Dust Floors	[ ]	Out Pump (PM)	[ ]	[3]
Soil Composite	[ ]	In Pump (VOC)	[ ]	[4]
Soil Foundation	[ ]	Out Pump (VOC)	[ ]	[5]
Water - Sampling	[ ]	Dust Surface (wipe)	[ ]	[6]
Tech Qx	[ ]	Descriptive Qx	[ ]	[7]

FORM = UA - T3.0 - 1.0

Figure 3. Visit Summary Sheet

Revised see Appendix B 10/15/95

Visit Summary Sheet

Completed by Team Leader after each visit and submitted to Field Coord. with all appropriate documentation within 24 hrs.

Stage #_____ Visit Date ____/____/____ (mo day year) Project ID NHEXAS AZ

HHID __________/____

Form ID = UA - T3.0 - 2.0 Team Leader_______ Visit Number_______

IRN level Sampling

IRN #	Birth Name	Relates to IRN	Status Δ	Con-sent	Base Line	Active Diary	PEF Diary	Follow Up	Diet Diary	Diet √-list	Active Pump	Derm wipe	Urine	Blood	Diet samples
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]			Y N	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Household Level Sampling

	Status		Status	Codes/Comments
PID Indoors	[ ]	In VOC & HCHO	[ ]	
PID Outdoors	[ ]	Out VOC & HCHO	[ ]	[1]
Sentinel Hi-Vol	[ ]	In Pump (PM)	[ ]	[2]
Dust Floors	[ ]	Out Pump (PM)	[ ]	[3]
Soil Composite	[ ]	In Pump (VOC)	[ ]	[4]
Soil Foundation	[ ]	Out Pump (VOC)	[ ]	[5]
Water Sampling	[ ]	Dust Surface (wipe)	[ ]	[6]
Tech Qx	[ ]	Descriptive Qx	[ ]	[7]
	[ ]			[8]

Next Vist ____/____/____ (mo day year)

Interested in Next Stage Y N NA

Comments / Problems:

Form ID UA - T3.0 - 2.0

Time_____:_____

Appendix A: Confidential Home Appointment Sheet

Confidential Home Appointment Sheet

mo day year

Form ID = UA - T3.0 - 1.1

HHID ______________/_____

Team Leader _______

Stage # ________

Street ______________________

Cross Streets etc.

City ______________________

County _________ ZIP ______/______

Ph No (   ) ______ - _________

V1_____/_____/_____

V2_____/_____/_____

V3_____/_____/_____

V4_____/_____/_____

Times: _____:_____ _____:_____ _____:_____ _____:_____

IRN #	Birth Name	Relates to IRN	Status Δ	Con-sent	Base Line	Active Diary	Follow Up	Diet Diary	Diet F/U	Active Pump	Derm wipe	Urine	Blood	Diet samples
☐			Y N	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐			Y N	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐			Y N	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐			Y N	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐			Y N	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐			Y N	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐			Y N	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐			Y N	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐			Y N	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
☐			Y N	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

PID Indoors	☐	Carbotrap In	☐	Thin Film Soil	☐		☐
PID Outdoors	☐	Carbotrap Out	☐	Thin Film Sill	☐		☐
Sentinel Hi-Vol	☐	PM In	☐	Dx QX	☐		☐
H2O (M,P,VOC,CARB)	☐	Pm Out	☐	Tech Qx	☐		☐
OVM In	☐	Yard Soil	☐		☐		☐
OVM Out	☐	Foundation Soil	☐		☐		☐
PF-1 In	☐	Floor Dust	☐		☐		☐
PF-1 Out	☐	Sill Wipes	☐		☐		☐

MAC: Home Appt Sheet

Census:

Tract ☐☐☐☐☐☐ BG ☐ BLK: ☐☐☐☐

[illegible] Sample [illegible]

Sentinel Filter 12-	Yard Soil 51-	Foundation Soil 53-	Floor Dust 71-
Thin Film Soil 59-	Thin Film Sill 89-	Thin Film Special 89-	
H_2O Metals 13-	H_2O Pesticides 14-	H_2O VOCs 15-	H_2O Carbaryl 16-
Solid Food 17-	Liquid Food 17-	Active VOC Carbotrap 27-	Active VOC Carbotrap 27-
OVM In 21-	OVM Out 21-	PF-1 In 25-	PF-1 Out 25-
PM In metals 31-	PM Out metals 31-	PM In pesticides 32-	PM Out pesticides 32-
Personal Air metals 41-	Personal Air Pesticides 42-	Dermal Wipes metals 91-	Dermal Wipes pesticides 93-
Sill Wipes metals 81-	Sill Wipes pesticides 83-	Blood - metals 61-	Blood - VOCs 63-
Urine sample 64-			

Appendix B: Household Summary & Packet Contents Form

HOUSEHOLD SAMPLING SUMMARY

Form Type: 1 0 1

FORM UA-C-3.0-2.1

Study: ○ 1. NHEXAS ○ 2. Border ○ 3. ____ ○ 4. ____ ○ 5. ____

Stage # ☐

Collapsed? Y ○ N ○ 8 ○

Team Leader: ____ Init. Tech ID ☐☐

Qc By: ____ Init. Tech ID ☐☐

HHID ____ F.S. ☐☐☐

QC: ✓ [ ]

	MO	DAY	YR		MO	DAY	YR	
1. V1 on:	☐☐	☐☐	☐☐	or N/A [ ]	3. V3 on: ☐☐	☐☐	☐☐	or N/A [ ]
2. V2 on:	☐☐	☐☐	☐☐	or N/A [ ]	4. V4 on: ☐☐	☐☐	☐☐	or N/A [ ]

HOUSEHOLD LEVEL *SAMPLES*

Sample Type	Collected Y	N	N/A	Sample Status	QC: ✓
PID Indoors	○	○	○	☐	[ ]
PID Outdoors	○	○	○	☐	[ ]
Sentinel	○	○	○	☐	[ ]
H2O Metals	○	○	○	☐	[ ]
H2O Pests	○	○	○	☐	[ ]
H2O VOCS	○	○	○	☐	[ ]
H2O Carb	○	○	○	☐	[ ]
OVM Indoors	○	○	○	☐	[ ]
OVM Outdoors	○	○	○	☐	[ ]
PEM Indoors	○	○	○	☐	[ ]
PEM Outdoors	○	○	○	☐	[ ]
Carbo Trap In	○	○	○	☐	[ ]
Carbo Trap Out	○	○	○	☐	[ ]
Pm Indoors	○	○	○	☐	[ ]
Pm Outdoors	○	○	○	☐	[ ]

Sample Type	Collected Y	N	N/A	Sample Status	QC: ✓
Yard Soil	○	○	○	☐	[ ]
Foundation Soil	○	○	○	☐	[ ]
Soil Thin Film	○	○	○	☐	[ ]
Floor Dust	○	○	○	☐	[ ]
Sill Wipes	○	○	○	☐	[ ]
Sill Thin Film	○	○	○	☐	[ ]
____ ☐☐	○	○	○	☐	[ ]
____ ☐☐	○	○	○	☐	[ ]
____ ☐☐	○	○	○	☐	[ ]
____ ☐☐	○	○	○	☐	[ ]
____ ☐☐	○	○	○	☐	[ ]
____ ☐☐	○	○	○	☐	[ ]
____ ☐☐	○	○	○	☐	[ ]

Status Codes:

1 = Completed
2 = Not - Completed
3= Partially Completed
4 = Re-Collected
5 = Refused
7 = Destroyed
8 = N/A
9 = Missing

Data Use Only:	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	G	H	I	J
	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

7706

HOUSEHOLD LEVEL *FORMS*

Form Type	Collected	Form Status	QC: ✓
	Y N N/A		
PID Sheet	○ ○ ○		[ ]
Sentinel	○ ○ ○		[ ]
	Y N N/A		
H2O Metals	○ ○ ○		[ ]
H2O Pests	○ ○ ○		[ ]
H2O VOCS	○ ○ ○		[ ]
H2O Carb	○ ○ ○		[ ]
	Y N N/A		
OVM & HCOH	○ ○ ○		[ ]
Active VOC	○ ○ ○		[ ]
	Y N N/A		
PM Sheet	○ ○ ○		[ ]
Soil Sampling	○ ○ ○		[ ]
	Y N N/A		
Floor Dust	○ ○ ○		[ ]

Form Type	Collected	Form Status	QC: ✓
	Y N N/A		
Tech QX	○ ○ ○		[ ]
Descriptive QX	○ ○ ○		[ ]
_____	Y N N/A		
	○ ○ ○		[ ]
_____	○ ○ ○		[ ]
_____	○ ○ ○		[ ]
_____	○ ○ ○		[ ]

Status Codes:

1 = Completed
2 = Not - Completed
3= Partially Completed
4 = Re-Collected
5 = Refused
7 = Destroyed
8 = N/A
9 = Missing

Comments: _____

Comments: _____

Data Use Only:	0 1	2 3	4 5	6 7	8 9	A B	C D	E F	G H	I J
	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○

INDIVIDUAL LEVEL *FORMS*

HH Summary

IRN #	Consent Form	Status	Baseline QX	Status	Activity Diary	Status	Follow Up QX	Status	QC: ✓
	Y N N/A		Y N N/A		Y N N/A		Y N N/A		
01	○ ○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
02	○ ○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
03	○ ○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
04	○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
05	○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
	Y N N/A		Y N N/A		Y N N/A		Y N N/A		
06	○ ○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
07	○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
08	○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
09	○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
10	○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]

IRN #	Diet Checklist	Status	Diet Diary	Status	Diet Follow Up	Status	_____	Status	QC: ✓
	Y N N/A		Y N N/A		Y N N/A		Y N N/A		
01	○ ○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
02	○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
03	○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
04	○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
05	○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
	Y N N/A		Y N N/A		Y N N/A		Y N N/A		
06	○ ○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
07	○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
08	○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
09	○ ○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]
10	○ ○	☐	○ ○ ○	☐	○ ○ ○	☐	○ ○ ○	___	[ ]

Other Form Code ☐☐

INDIVIDUAL LEVEL *SAMPLES*

Sample Type	Collected	From IRN #	Sample Status	Field Form	Form Status	Comments	QC: ✓
	Y N N/A			Y N N/A			
Dermal (M)	○ ○ ○	☐	☐	○ ○ ○	☐		[ ]
Dermal (P)	○ ○ ○	☐	☐	○ ○ ○	☐		[ ]
	Y N N/A			Y N N/A			
Blood	○ ○ ○	☐	☐	○ ○ ○	☐		[ ]
Blood (VOC)	○ ○ ○	☐	☐	○ ○ ○	☐		[ ]
	Y N N/A			Y N N/A			
Urine Sample	○ ○ ○	☐	☐	○ ○ ○	☐		[ ]
Food Sample	○ ○ ○	☐	☐	○ ○ ○	☐		[ ]
Bev Sample	○ ○ ○	☐	☐	○ ○ ○	☐		[ ]
	Y N N/A			Y N N/A			
Personal Air (M)	○ ○ ○	☐	☐	○ ○ ○	☐		[ ]
Personal Air (P)	○ ○ ○	☐	☐	○ ○ ○	☐		[ ]
	Y N N/A			Y N N/A			
1	○ ○ ○	☐	☐	○ ○ ○	☐		[ ]
2	○ ○ ○	☐	☐	○ ○ ○	☐		[ ]
3	○ ○ ○	☐	☐	○ ○ ○	☐		[ ]
4	○ ○ ○	☐	☐	○ ○ ○	☐		[ ]

O Samp 1 O Samp 2

O Samp 3 O Samp 4

Comments: ______________________________

Office Use Only

Form Status:
1 ...
2 ...
3 P Comp
4 Re...
5 Ref
7 Dest
8 N/A
9 Mis

		Tech. ID	MO	DAY	YR
QC:	____ Init.	☐☐	☐☐ /	☐☐ /	☐☐
QA:	____ Init.	☐☐	☐☐ /	☐☐ /	☐☐

		Tech. ID	MO	DAY	YR
DE:	____ Init.	☐☐	☐☐ /	☐☐ /	☐☐
DP Batch:	☐☐☐	QXV:	F S U M 1		

Chain of custody initiated (sig.): ______________________

Consigned to packet on: [ ] ____/____/____ Box UA G4-2.0

Page ... Init

Data Use Only:	0 ○	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○	8 ○	9 ○	A ○	B ○	C ○	D ○	E ○	F ○	G ○	H ○	I ○	J ○

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