

The Children's Total Exposure to Persistent Pesticides and Other Persistent Organic Pollutants (CTEPP) Study

Recording Data Collection Forms

Battelle
Columbus, OH 43201
Contract No. 68-D-99-011

Standard Operating Procedure

CTEPP-SOP-2.22

Title: Recording Data Collection Forms

Source: Battelle

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

STANDARD OPERATING PROCEDURE (SOP) FOR RECORDING DATA COLLECTION FORMS

Prepared by: _____	Date: _____
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Approved by: _____	Date: _____

1.0 Scope and Applicability

This standard operating procedure (SOP) describes the method for recording information onto the data collection forms.

2.0 Summary of Method

The CTEPP data collection forms are organized into 10 modules that are simple to administer (minimize respondent burden and maximize participation rates at each step) and that collect information that can be related to the exposure, concentration, and biological measurements. Standardized instructions are developed for each data collection form. The 10 modules are:

Form #1. Recruitment Survey: to identify individuals within the household for the purpose of participant recruitment based upon the stratification categories: (1) urban vs. rural, (2) low-income vs. middle/upper-income, and (3) children who stay at home during the day vs. children who attend day care during the day.

Form #2. House/Building Characteristics Observation Survey: to further identify and inventory the presence of pollutant sources and to document the physical characteristics of the house/building (to be completed by project staff to minimize burden on respondents). The survey used for home (Form #2) is the same as the one used for the day care center (Form #3).

Form #3. Day Care Center/Building Characteristics Observation Survey: to further identify and inventory the presence of pollutant sources and to document the physical characteristics of the day care center/building (to be completed by project staff to minimize burden on respondents).

Form #4. Parent Pre-monitoring Questionnaire: to identify individuals within the household and to describe the multiple environmental pathways and media through which they may be exposed.

Form #5. Day Care Center Pre-monitoring Questionnaire: to identify individuals and classrooms within the day care center and to describe the multiple environmental pathways and media through which they may be exposed.

Form #6. Parent Post-monitoring Questionnaire: to provide information on the child's activities and potential exposure during the 48-hour air sampling period, explain variation in the sample, and permit stratification for the monitoring results.

Form #7. Day Care Center Post-monitoring Questionnaire: to provide information on the child's activities and potential exposure during the 48-hour air sampling period, explain variation in the sample, and permit stratification for the monitoring results.

Form #8. Child Activity Diary [Children Who Don't Attend Day Care]: to collect data on the child's activity patterns and information on food consumption patterns from

the participant for use in estimating dietary exposure. Form #8 is designed for children who do not attend day care. It is very similar to Form #9.

Form #9. Child Activity Diary [Children Who Attend Day care]: to collect data on the child's activity patterns and information on food consumption patterns from the participant for use in estimating dietary exposure. Form #9 is designed for children who attend day care.

Form #10. Child Activity Diary [Day care Teacher]: to collect data on the child's activity patterns and information on food consumption patterns from the participant for use in estimating dietary exposure. This data collection form is designed to be used at the day care center.

The recruitment survey is completed by the participants of the day care sample component. For the telephone sample component, it was completed by the CTEPP Interviewing Team. Except for Child Activity Diary (Forms #8, #9, and #10), all the other data forms will be completed by the project staff. The project staff will train the participants in correctly completing these forms. The respondents will complete the data forms during the 48-hr sampling period.

3.0 Definition

Not applicable

4.0 Cautions

4.1 Project staff will follow the procedures for protecting the participant's confidentiality.

5.0 Responsibilities

5.1 The project staff will follow this SOP and the relevant instructions to complete the data collection forms or train the participants to complete the data collection forms.

6.0 Apparatus and Materials

6.1 Materials

6.1.1 Data Collection Forms

6.1.2 Instructions for Data Collection Forms

7.0 Procedures

- 7.1 Follow Instructions for Form #1/Recruitment Survey to complete the data form.
- 7.2 Follow Instructions for Form #2/House/Building Characteristics Observation Survey to complete the data form.
- 7.3 Follow Instructions for Form #3/Day Care Center/Building Characteristics Observation Survey to complete the data form.
- 7.4 Follow Instructions for Form #4/Parent Pre-monitoring Questionnaire to complete the data form.
- 7.5 Follow Instructions for Form #5/Day Care Center Pre-monitoring Questionnaire to complete the data form.
- 7.6 Follow Instructions for Form #6/Parent Post-monitoring Questionnaire to complete the data form.
- 7.7 Follow Instructions for Form #7/Day Care Center Post-monitoring Questionnaire to complete the data form.
- 7.8 Follow Instructions for Form #8/Child Activity Diary (Children Who Don't Attend Day Care) to complete the data form.
- 7.9 Follow Instructions for Form #9/Child Activity Diary (Children Who Attend Day Care) to complete the data form.
- 7.10 Follow Instructions for Form #10/Child Activity Diary (Day Care Teacher) to complete the data form.

8.0 Records

All original data forms will be stored in a secured file room. Field data will be entered into a computer database. Electronic files will be stored in the field sampling folders and archived on a CD ROM after the project is completed. All electronic files will be protected by passwords. Only authorized project personnel will be allowed to access the files. All records will be archived for three years after the completion of the study.

9.0 Quality Control and Quality Assurance

The project staff will conduct a field edit as soon as the data forms are completed. The completed data forms will also be reviewed and verified by the Field QA Officer, Field Team Leader, and Task Order Leader through internal field audits and quality control audits. Any missing data identified through the QA/QC process will be collected by the project staff by re-contacting the study participants.

10.0 References

- 10.1 J. C. Chuang, P. J. Callahan, C. W. Lyu, Y.-L. Chou, and R. G. Menton, "Characterization of Polycyclic Aromatic Hydrocarbons Exposure Among Children of Low-Income Families from Inner Cities and Rural Areas." EPA/600/R-98/163a (Volume I), EPA/600/R-98/163b (Volume II), and EPA/600/R-98/163c (Volume III), 1999.
- 10.2 J. C. Chuang, C. Lyu, Y-L Chou, P. J. Callahan, M. Nishioka, K. Andrews, M. A. Pollard, L. Brackney, C. Hines, D. B. Davis, and R. Menton, "Evaluation and Application of Methods for Estimating Children's Exposure to Persistent Organic Pollutants in Multiple Media." EPA/600/R-98/164a (Volume I), EPA/600/R-98/164b (Volume II), and EPA/600/R-98/164c (Volume III), 1999.

The following are instructions for recording Form #1 (Recruitment Survey). Form#1 is used to identify individuals within the household for the purpose of participant recruitment based upon the stratification categories: (1) urban vs. rural, (2) low-income vs. middle-income, and (3) children who stay at home during the day vs. children who attend day care during the day. Instructions are preceded by a symbol "□". Also included in the instructions are rationale for each question. Some questions are self-explanatory and do not require instructions. For the day care component, this form will be used as a Self-Administered Questionnaire (SAQ) and mailed or distributed to the selected parents (i.e., completed by the parents). For the telephone component, it will be programmed into a Computer Assisted Telephone Survey and completed by the project staff.

01. Do you currently live in a...One-Story House, One-Story Duplex, Two-Story House, Two-Story Duplex, One-Story Apartment, Multiple-Story Apartment, Trailer/Mobile Home, or Any Other Type (please specify)?

- ☐ Contaminants are tracked into homes in different ways. The design of a home affects the way contaminants are brought into the home. This question helps determine how contaminants are tracked into different home structures. Read the list. If a specific home structure is not in the given list, please choose "Any Other Type" and describe the design and layout of the home.

02. Is there an outdoor electric outlet at your home?

- ☐ An outdoor air monitor will be set-up at each participant's home to measure the surrounding air. Response to this question helps determine where the air monitor is placed and whether there is a need to run an extension cable from inside of the house to the yard. If there is a need to use an extension cable, we need to ask the permission from the participant.

03. How long have you and your family lived in your current home?

- ☐ It is important to understand how length of exposure to contaminants affects children. As a result, this question pinpoints this information so researchers can explore this area.

04. Are you planning to move out of your current home within the next 30 days?

-
- ☐ In an effort to collect a complete data set for this study, participants are asked to participate in the entire study. Subjects may be recruited one month before the field sampling, it is important to know if they plan to move.

05. Do any of your household members smoke on a regular basis?

5a. If Yes, what is the total number of cigarettes, cigars, or pipefuls of tobacco that are usually smoked inside your home each day?

- ☐ In order to understand how environmental tobacco smoke affects children, it is important to know the smoking status, and smoking frequency, of people in the home. This information also helps the analysis of air sampling results.

06. How many children aged 1½ to 5 currently live in your household? Please tell us the age of the child and if the child has been potty-trained. We also would like to know if the child is still being breast-fed.

- ☐ This is the key eligibility question. This study is interested in how contaminants affect children aged 1½ to 5. In addition, potty-training and breast-feeding are conditions that affect the collection of urine and liquid samples. These are the eligibility criteria. We will not include children who are not potty-trained and who are still being breast-fed. As a result, please indicate whether the child is potty-trained and whether the child is breast-fed.

“Currently live in the household” means the child lives there with the adult caregiver. This does not count temporary visits (e.g., holidays, summer vacation visits, or child care, etc.). If the respondent runs a home day care service, we do not count it either unless one of the age eligible child is the respondent’s child (i.e., the child lives in the household). Another example: if the child goes to a relative’s house (e.g., grandmother’s) during the day, that does not count either (if we called the grandmother’s house).

07. Does your child (children) go to a child day care (away from home)?

7a. If Yes, how many days per week and hours per day does your child (children) go to day care?

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- ☐ This study is interested in how contaminants affect children aged 1½ to 5 at home and at day care. If the child attends day care, please indicate how much time the child spends at day care. If the child goes to a baby sitter's home (or a day care center) more than 2 days per week regularly (e.g., every Monday and Thursday-even partial day), it counts as "go to a day care center."

08. What was your total household income last year?

8a. How many people (including yourself) were supported by that income?

- ☐ "Total household income last year" means the combined income of all household members in the past calendar year (i.e., from January 1 to December 31 of the past year). Please check the appropriate income level and indicate the number of people supported by this income level.

09. Does anyone in your household currently receive public assistance (such as food stamps, AFDC, WIC, or any other government supports)?

- ☐ Please check the appropriate box.

10. If your household is selected for the study, when would be the best days and times for us to visit you?

- ☐ Helps the study team schedule data collection dates with each participant.

❖ In order for us to contact you, please give us your name and contact information.

- ☐ Collect the contact information.

[DRAFT] For parents with children staying home (Telephone Sample)

Computer Assisted Telephone Interview (CATI) Telephone Scripts

IF SOMEONE ANSWERS THE PHONE, SELECT START CONSENT/INTERVIEW.

1. Hello. I am _____ from Battelle. I am calling for the National Exposure Research Laboratory of EPA. May I speak to the parent or guardian of the children in this household (OR NAME OF RESPONDENT IF OBTAINED THE NAME FROM PREVIOUS CALL)? **[NOTE: WE NEED TO KEEP THE FIRST SCRIPT AS SHORT AS POSSIBLE. THIS QUESTION HAS BEEN TESTED AND IS EFFECTIVE TO OBTAIN THE ELIGIBILITY INFORMATION, I.E., HOUSEHOLD WITH CHILDREN, BEFORE PEOPLE HANG UP ON YOU.]**

- 1 SPEAKING WITH PARENT OR GUARDIAN [SKIP TO Q3]
- 2 PARENT/GUARDIAN NOT AT HOME [SKIP TO Q6]
- 3 PARENT/GUARDIAN CALLED TO PHONE [GO TO Q2]
- 4 REFUSED, NO INFORMATION [TRY TO FIND OUT ELIGIBILITY, GO TO EXIT 1]
- 5 NOT A PRIVATE RESIDENCE [GO TO EXIT 2; CODE AS INELIGIBLE]
- 6 NO CHILDREN IN THE HOUSEHOLD [GO TO EXIT 3; CODE AS INELIGIBLE]

CONFIRM PHONE NUMBER [Is this ____ - ____ - ____?]AND READ:

EXIT 1: Thank you very much. Goodbye.

EXIT 2: Thank you very much, but we are only interviewing private residences. Goodbye.

EXIT 3: Thank you very much, but we are only interviewing households with young children. Goodbye.

2. Hello. I am _____ from Battelle. I am calling for the National Exposure Research Laboratory of EPA. We want to invite you to take part in a research study. You will receive \$100 and your child will receive a small gift for participating in the study. We sent you a letter about the study a few days ago. Did you receive the letter? (The purpose of the study is to learn about the levels of common contaminants that are often found in the everyday surroundings of young children.)

- 1 YES [SKIP TO Q4a]
- 2 NO [SKIP TO Q4c]

3. We want to invite you to take part in a research study. You will receive \$100 and your child will receive a small gift for participating in the study. We sent you a letter about the study a few days ago. Did you receive the letter? (The purpose of the study is to learn about the levels

of common contaminants that are often found in the everyday surroundings of young children.)

1 YES [SKIP TO Q4a]

2 NO [SKIP TO Q4c]

4a. Do you have a few minutes so I can ask you some questions and see if your household is qualified to participate?

1 YES

2 NO [SKIP TO Q6A]

4b. That's great! First, I'd like to confirm that I dialed the correct number.

Is this ____ - ____ - ____?

1 YES [SKIP TO Q5]

2 NO [GO TO EXIT 4]

EXIT4: Thank you very much, but I seem to have dialed the wrong number. Goodbye.

[DELETE THE DATA, RETURN TO FIRST SCREEN AND DIAL THE NUMBER AGAIN.]

[IF YOU CANNOT REACH ANYONE, PRESS CTRL-ENTER AND MAKE A SOFT APPOINTMENT AND NOTE THAT NO CONTACT WITH PARENT. THE NUMBER WAS MIS-DIALED.]

4c. I'm sorry that you didn't receive the letter. The letter invites you to participate in the research study. Do you have a few minutes, so I can briefly describe the study to you; ask you some questions and see if your household is qualified to participate?

1 YES

2 NO [SKIP TO Q6A]

4d. That's great! First, I'd like to confirm that I dialed the correct number.

Is this ____ - ____ - ____?

1 YES

2 NO [GO TO EXIT 4]

EXIT4: Thank you very much, but I seem to have dialed the wrong number. Goodbye.

[DELETE THE DATA, RETURN TO FIRST SCREEN AND DIAL THE NUMBER AGAIN.]

[IF YOU CANNOT REACH ANYONE, PRESS CTRL-ENTER AND MAKE A SOFT APPOINTMENT AND NOTE THAT NO CONTACT WITH PARENT. THE NUMBER WAS MIS-DIALED.]

The next few questions will help us see if your family is eligible to participate in the study. This will only take about 2 to 3 minutes. Everything you tell me will be kept confidential.

[INTERVIEWER: PRESS CTRL/ENTER AND SELECT "INFORMATION" AND READ THE RELEVANT INFORMATION TO THE RESPONDENT IF HE/SHE HAS QUESTIONS ABOUT THE STUDY.]

05. Are there children between the ages of 1 ½ and 5 years living in your household?

1 YES [SKIP TO Q7]

2 NO [GO TO EXIT 5; CODE AS INELIGIBLE]

EXIT 5: Thank you very much, but we are only interviewing parents of children in that age range. Goodbye.

6. When would be a good time to call back to talk with the parent or guardian? For whom should I ask when I call back?

MAKE AN APPOINTMENT USING THE CALL SCHEDULER AND NOTE THAT NO CONTACT WAS MADE WITH THE PARENT OR GUARDIAN

- 6A. When would be a good time for me to call you back? And may I have your name please?

MAKE AN APPOINTMENT USING THE CALL SCHEDULER AND NOTE THE CONTACT NAME IN THE APPOINTMENT. IF THE RESPONDENT REQUESTS A RE-MAIL OF THE LETTER, CONFIRM THE NAME AND ADDRESS AGAIN.

7. Does your child (Do your children) go to a day care center (away from home)?
[PROMPT: If the child goes to a baby sitter's home more than 2 days per week regularly, it counts as "go to a day care center."]

1 YES

2 NO [SKIP TO Q8]

- 7a. How many **days per week** and **hours per day** does your child (children) go to a day care center?

[RECORD THE INFORMATION AND GO TO EXIT 6; CODE AS INELIGIBLE]

_____ days per week _____ hours per day

EXIT 6: Thank you very much, but the study only includes children who do not attend a child day care center. Goodbye.

8. How many children aged 1½ to 5 currently live in your household? Please tell us the age of the child and if the child has been potty-trained. We also would like to know if the child is still being breast-fed.				
Child's Age	Check the box if completely potty-trained (no more diaper)	Check the box if the child wears a diaper only at night	Check the box if the child can use the toilet or potty when asked	Check the box if the child is still being breast-fed

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<p>9. I would like to ask you a few questions about your home. Is your home....(READ CHOICE AND CIRCLE ONE.</p> <p>(Please check one)</p> <p>If Other type, Please Specify:</p>	<p><input type="checkbox"/> One-Story House</p> <p><input type="checkbox"/> One-Story Duplex</p> <p><input type="checkbox"/> Two-Story House</p> <p><input type="checkbox"/> Two-Story Duplex</p> <p><input type="checkbox"/> One-Story Apartment</p> <p><input type="checkbox"/> Multiple-Story Apartment</p> <p><input type="checkbox"/> Trailer/Mobile Home</p> <p><input type="checkbox"/> Any Other Type (please specify)</p>
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<p>10. Is there an outdoor electric outlet in your home?</p>	<p><input type="checkbox"/> YES</p> <p><input type="checkbox"/> NO</p>
<p>11. How long have you and your family lived in your current home?</p>	<p>_____ YEARS _____ MONTHS</p>
<p>12. Are you planning to move out of your current home within the next 30 days?</p>	<p><input type="checkbox"/> YES</p> <p><input type="checkbox"/> NO</p>

<p>13 What was your <u>total household income</u> last year? Was it....</p> <p>(Please check one)</p>	<p><input type="checkbox"/> Less than \$15,000</p> <p><input type="checkbox"/> Between \$15,001 and \$25,000</p> <p><input type="checkbox"/> Between \$25,001 and \$35,000</p> <p><input type="checkbox"/> Between \$35,001 and \$50,000</p> <p><input type="checkbox"/> More then \$50,000</p>
<p>13a How many people, including yourself, were supported by that income?</p>	<p>_____ PEOPLE</p>

14.	Does anyone in your household currently receive public assistance, such as food stamps, AFDC, WIC, or any other government support?	<input type="checkbox"/> YES <input type="checkbox"/> NO
15.	If your household is selected for the study, when would be the best days and times for us to call or visit you?	Days: _____ Times: _____
<p>In order for us to contact you, please give us your name and contact information. Thank You!</p> <p>First Name: _____ Last Name: _____</p> <p>Home Address: _____</p> <p>City: _____ State/ZIP Code: _____</p> <p>☎ Home Phone: (_____) _____ Work Phone: (_____) _____</p> <p>😊 Best Times to Call You:</p>		

Thank you for answering all my questions. We will call you within the next few weeks and let you know if you have been chosen for this study. We won't know that until after we have spoken with **everyone** who may be eligible. In the meantime, if you have any questions, please feel free to contact the Battelle project director Christopher Lyu at (919) 544-3717 or the EPA Principal Investigator Dr. Nancy Wilson at (919) 541-4723. Goodbye.

Scripts for Contacting the Daycare Center Director [DRAFT]

INFORMATION:

- ☞ The letters were mailed on [DATE].
 - ☞ Please use the following scripts in a spontaneous way (your way) to communicate the key information with the respondents.
-

Script 1. Initial Contact

- 1.1 [GREETINGS] Hello, Hi, Good Morning/Afternoon, etc.
- 1.2 My name is ____ from Battelle (a not-for-profit research organization). May I speak with Mr./Ms./Mrs. (NAME OF DIRECTOR) please?

IF ASKED WHY CALLING THE DIRECTOR, CONTINUE TO READ 1.3:

- 1.3 I am calling for the National Exposure Research Laboratory of the US EPA. I would like to follow up on a letter that was sent to Mr./Ms./Mrs. (NAME OF DIRECTOR) a few days ago. It is about a research study. (The purpose of the study is to learn about the levels of common contaminants that are often found in the everyday surroundings of young children.)

IF NOT IN OR NOT AVAILABLE:

- 1.4 When will be a good time for me to call back? [RECORD THE DATE AND TIME]
-

Script 2. Talking with the Day Care Center Director

- 2.1 [GREETINGS] (Hello, Hi, Good Morning/Afternoon, etc.) Mr./Ms./Mrs. (RESPONDENT'S NAME)
- 2.2 I am ____ from Battelle. I am calling for the National Exposure Research Laboratory of the US EPA. We sent you a letter about a research study a few days ago. Did you receive the letter? (The purpose of the study is to learn about the levels of common contaminants that are often found in the everyday surroundings of young children.)

Scripts for Contacting the Daycare Center Director [DRAFT]

☆ IF YES (received the letter):

2.3 If it's OK with you, we'd like to meet with you at your convenience and explain the study to you in person. When would be a good time for you?

IF YES: That's great!

[RECORD THE APPOINTMENT DATE IN THE TRACKING DATABASE]

Thank you very much. We'll see you on [DATE] at [TIME]. Goodbye.

IF NO: Do you have any concerns or questions about the study? (Would you please tell me why you are not interested in participating in the study?)

[TRY TO ANSWER THE QUESTIONS AND CONCERNS, REFER TO THE Q&A FOR ANSWERS]

Thank you for your time. Goodbye.

[RECORD CONCERNS AND REASONS OF REFUSAL]

[PROJECT MANAGER WILL CALL BACK TO CONDUCT REFUSAL CONVERSION IN AN ATTEMPT TO REVERSE THE REFUSAL]

☆ IF NO (did not receive the letter):

2.4 I'm sorry that you didn't receive the letter. The letter invites you to participate in the research study. We can meet with you at your convenience and explain the study to you in person. When would be a good time for you?

IF YES: That's great!

[RECORD THE APPOINTMENT DATE IN THE TRACKING DATABASE]

Thank you very much. We'll see you on [DATE] at [TIME]. Goodbye.

Scripts for Contacting the Daycare Center Director [DRAFT]

IF NO: Do you have any concerns or questions about the study? (Would you please tell me why you are not interested in participating in the study?)

[TRY TO ANSWER THE QUESTIONS AND CONCERNS, REFER TO THE Q&A FOR ANSWERS]]

Thank you for your time. Goodbye.

[RECORD CONCERNS AND REASONS OF REFUSAL]

[PROJECT MANAGER WILL CALL BACK TO CONDUCT REFUSAL CONVERSION IN AN ATTEMPT TO REVERSE THE REFUSAL]

The following are instructions for recording Form #2 and Form #3 (House/Building Characteristics Observation Survey). Form #2 (for Home) is the same as Form #3 (for Day Care Center). It is used to further identify and inventory the presence of pollutant sources and to document the physical characteristics of the house/building. This form will be completed by project staff to minimize burden on respondents. Instructions are preceded by a symbol “□”. Also included in the instructions are rationale for each question. Some questions are self-explanatory and do not require instructions.

1.17 Interview Information

- ☐ In order to document the completion of specific study tasks, project staff must complete the Interview Information.

Interviewer ID #: Record your assigned ID#.

Date: Record the date of the data collection.

Time Started: Record the time started data collection.

Time End: Record the time ended data collection.

Results: Circle “1” for “complete” and “2” for “incomplete.”

Reasons: If the survey is incomplete, please explain why the survey was not completed.

❖ Section A: House/Building Floor Plan

- ☐ Sketch the interior of the house/building and mark areas sampled with an “X”. Use a compass to determine the directions of the house/building and mark the directions on this sketch. This sketch provides a graphic layout of the home to pinpoint where the child’s activity is concentrated and where air, floor dust, and dermal samples will be gathered.

A1.Are ceiling fans used in the house/building? If yes, please indicate the locations of the ceiling fans.

- ☐ Please sketch the location of ceiling fans (if present). This provides information on how air, and possibly contaminants, are circulated in the home.

A2.Are window air conditioning units used in the house/building? If yes, please indicate the locations of window air conditioning units in each room.

- ☐ Please sketch the location of window air conditioning units (if present). Again, this provides information on air circulation in the home.

1.18 Section B: House/Building Exterior

B1. Type of Building Structure: One-Story House, One-Story Duplex, Two-Story House, Two-Story Duplex, Trailer/Mobile Home, Apartment, Other (Specify), Refused, Don't Know

- ☐ Contaminants are tracked into homes/buildings in different ways. The design of a home/building affect the way contaminants are brought into the home/building. This question helps determine how contaminants are tracked into different home/building structures. If a specific home/building structure is not in the given list, please choose "Other" and describe the design and layout of the home/building.

B2. Building Materials - Roof: Metal, Wood Shingles or Plywood, Asphalt Shingles, Other (Specify)

- ☐ This questions helps determine whether building materials affect the specific contaminants present in homes/buildings and their concentration in homes/buildings. If you are not sure, ask the home owner about the roof materials.

B3. Building Materials - Siding: Vinyl Siding Only, Brick Only, Beaded Siding, Block, Wood, Brick and Vinyl/Beaded Siding, Block and Vinyl/Beaded Siding, Other (Specify)

- ☐ This question helps determine whether building materials affect the specific contaminants present in homes/buildings and their concentration in homes/buildings. If you are not sure, ask the home owner.

B4. Building Foundation: Blocks, Slab, Crawl Space, Basement, Other (Specify)

- ☐ This question helps determine whether building materials affect the specific contaminants present in homes/buildings and their concentration in homes/buildings. If you are not sure, ask the home owner.

B5. Is there a front porch/balcony?

- ☐ This question helps determine whether the point-of-entry of contaminants affects the concentration of contaminants in homes/buildings.

B6. Is there a deck or porch/balcony in the back of the house/building?

- ☐ This question helps determine whether the point-of-entry of contaminants affects the concentration of contaminants in homes/buildings.

B7. Is there a paved driveway?

B7A. Specify the driveway: Asphalt, Concrete, Gravel, Dirt, Other (Specify)

- ☐ This question helps determine whether materials surrounding the home/building affect the specific contaminants present in homes/buildings and their concentration in homes/buildings.

B8. Is there a paved walkway from the driveway to the house/building?

B8A. Specify the walkway: Asphalt, Concrete, Gravel, Dirt, Other (Specify)

- ☐ This question helps determine whether a paved walkway from the driveway to the home/building decreases potential exposures by reducing contaminants that come from yards.

B9. Condition of Exterior Structure: Well maintained, Peeling paint, Siding in disrepair, Parts of siding or roofing lying in yard, Broken windows, Broken doors, Generally deteriorated

- ☐ Homes/buildings may react to contaminant exposures in specific ways. As a result, this question helps determine whether the condition of a home/building indicates what specific contaminant exposure has occurred and how much contaminant exposure has occurred.

B10. Describe the area outside in front of the house/building.

B10A. Muddy yard?

B10B. If yard > 50% paved, specify.

- ☐ This question helps determine if different types of yards (for example, a grassy lawn v. muddy lawn) affect the type of contaminants, and their concentration, in yards. These differences may affect children's exposures to contaminants found in yards. In an effort to understand these interactions, please describe the front of the yard as accurately as possible.

B11. Describe the area outside in the back of the house/building.**B11A. Muddy yard?****B11B. If yard > 50% paved, specify.**

- ☐ See explanation for B10. Please describe the back of the yard as accurately as possible.

B12. Describe the area outside on the left side (your left when you face the building) of the house/building.**B12A. Muddy yard?****B12B. If yard > 50% paved, specify.**

- ☐ See explanation for B10. Please describe the left side of the yard (i.e., your left side when you face the front door) as accurately as possible.

B13. Describe the area outside on the right side (your right side when you face the building) of the house/building.**B13A. Muddy yard?****B13B. If yard > 50% paved, specify.**

- ☐ See explanation for B10. Please describe the right side of the yard (i.e., your right side when you face the front door) as accurately as possible.

B14. Is there any odor outside? If yes, describe it.

- ☐ In order to understand how contaminants affect children, it is important to know the source of all contaminants. Odors outside the home/building may be an indication of local contaminants. Local contaminants also affect children, so this question helps determine whether local contaminants need to be considered in the exposure assessment of a given home/building. Left side of the house/building is your left when you face the front door; right side of the house/building is your right when you face the front door.

B15. Is there any standing water or any discharge into the yard or around the house/building? (such as discolored water/mud, etc. from industrial, sewage, or household waste)

- ☐ In order to understand how contaminants affect children, it is important to know the source of all contaminants. Standing water or discharge may be an indication of local contaminants. Local contaminants also affect children, so this question helps determine whether local contaminants need to be considered in the exposure assessment of a given home/building. If there is standing water or discharge, try and determine the source of the liquid.

B16. Is there evidence that rubbish burning was done on the property?

- ☐ Rubbish burning may affect the contaminants present in and around a home/building, and may also affect the concentration of contaminants. As a result, this question uncovers a potential source of contaminant exposure. If there is evidence of rubbish burning, please describe the condition of the yard and describe the specific evidence that indicated this situation.

B17. Is there evidence that garbage was dumped in the yard?

- ☐ Garbage dumping may affect the contaminants present in and around a home/building, and may also affect the concentration of contaminants. As a result, this question uncovers a potential source of contaminant exposure. If there is evidence of garbage dumping, please describe the location of the garbage dump, the condition of the yard, and the specific type of garbage that has been dumped in the yard.

B18. Is garbage stored in containers in the yard or around the house/ building?

- ☐ This question helps determine how different garbage storage methods affect contaminant concentrations and exposures. If garbage isn't specifically stored in containers, please describe how the home/building stores garbage and where the garbage is stored.

B19. Are there animals living in the yard or around the house/building?

- ☐ Animals may be a source of contaminant exposure. With this information, exposures between homes/buildings with animals and homes/buildings without animals, can be compared to further understand the role of animals and contaminant exposure. **If yes, describe what animals and number of animals.**

B20. Do you see animal food and/or droppings/feces in the yard or around the house/building?

- ☐ Animal food and feces may be a source of contaminant exposure, especially if a child plays in the yard and around the home/building. To get a better understanding of the exposure potential of these items, this is an important observation. Please scan the entire yard and perimeter of the home/building for animal food and feces. If you do find animal food and/or feces, please describe your findings and the location of your findings.

B21. Do you see any chemicals in the yard or around the house/building?

- ☐ Chemicals may be a source of contaminant exposure, especially if a child plays in the yard and around the home/building. Please look for the presence of chemicals in the yard and around the home/building. Pay attention to odors and changes in yard appearance. These may be indicators of chemical presence. **Chemicals include pesticides, fertilizers, fuel, etc.**

B22. Is there any noticeable chemical storage place outside the house?

- ☐ The presence of chemical storage outside the home/building may be a source of exposure. If you see a chemical storage place, please describe the storage place and its location in relation to the home/building.

1.19 Section C: House/Building Location & Surrounding Area

C1.Distance to street.

- ☐ The distance of a home/building to the street may influence a child's exposure to car exhaust. For example, if a home/building is closer to the street, a child may be at greater risk for exposure to car exhaust. As a result, please make specific measurements from the front, back, left side, and right side of the home/building, to the street. If the distance is less than 100 feet, use the measuring tape; if the distance is more than 100 feet, use your estimate (either by walking estimate or drive the car). Record the number and circle the unit (FT=Feet, YD=Yard, ML=Mile). If not applicable (e.g., back of house **does not face the street**), **record 996 and do not circle the unit.**

C2.Estimated distance to nearest neighbors (house/building).

- ☐ Children's exposure to contaminants may be influenced by the population of the community in which they live. By estimating a home/building's distance to the nearest neighbor, population density estimates can be generated. Please make specific measurements from the front, back, left side, and right side of the home/building, to the nearest neighbor. If the distance is less than 100 feet, use the measuring tape; if the distance is more than 100 feet, use your estimate (either by walking estimate or drive the car). Record the number and circle the unit (FT=Feet, YD=Yard, ML=Mile). If not applicable (e.g., front of house **does not face any neighbor**), **record 996 and do not circle the unit.**

C3A. Traffic conditions at time of observation. Specify # of cars per 2 minutes of observation.

- ☐ Variations in traffic patterns may influence contaminant exposures. For example, a child who lives on a heavily traveled street may be more exposed to car exhaust than a child who lives on a street with less traffic. Please indicate the number of cars that pass by the home/building (the front street) in 2 minutes. Record the date and time of your observation. Please also note the general traffic condition of the nearby area at the observation time. C3A should be recorded on Day-1 of the field sampling.

C3B. See C3A. C3B should be recorded on Day-2 or Day-3 of the field sampling.

C3C. See C3A. C3C should be recorded on Day-3 of the field sampling.

C4.Front entrance of building (is it at, below or above street level).

- ☐ The location of the home/building's front entrance may affect exposure potential, as well as exposure levels. The information uncovered from this question will help understand how location and home/building design interact to influence contaminant exposure.

C5.Are there stairs at the front entrance?

- ☐ This question helps further understand how home/building structure influences contaminant exposure.

C6.Surrounding area. (Residential, recreational, commercial, industrial, wooded, mixed)

- ☐ Community characteristics may affect contaminant exposure. As a result, it is important to classify the area that surrounds the homes/buildings in the study to generate community profiles that will help identify specific exposure risks. Please specify the area if "MIXED" is selected.

C7.House/building surrounding area.

- ☐ Community characteristics may affect contaminant exposure. As a result, it is important to classify the area that surrounds the homes/buildings in the study to generate community profiles that will help identify specific exposure risks. If you are not sure about any specific structure or object, ask the home owner.

C8.Sketch the location and surroundings of the house/building (please mark the child's usual play area and sampling locations). Measure the approximate dimensions of the house/building and the size of the yard (front/back/sides). Record the GPS readings- latitude and longitude. Please get the reading in front of the house.

- ☐ This sketch provides a graphic layout of where the child spends time and what contaminants may be present at these locations. The GPS information will provide extra data for the participating household/day care center, which can be linked to the census tract data.

The following are instructions for recording Form #4 (Pre-Monitoring Questionnaire for Parent). Form #4 is used to identify individuals within the household and to describe the multiple environmental pathways and media through which they may be exposed. Instructions are preceded by a symbol "☐". Also included in the instructions are rationale for each question. Some questions are self-explanatory and do not require instructions.

❖ **Interview Information**

- ☐ In order to document the completion of specific study tasks, project staff must complete the Interview Information.

Interviewer ID #: Record your assigned ID#.

Date: Record the date of the data collection.

Time Started: Record the time started data collection.

Time End: Record the time ended data collection.

Results: Circle "1" for "complete" and "2" for "incomplete."

Reasons: If the survey is incomplete, please explain why the survey was not completed.

Please rate the participant's cooperation and your assessment of the overall quality of this interview after you completed the interview with the participant. If you think the quality is questionable or unsatisfactory, please specify the reasons.

- ☐ Read the introduction before you ask the first question.

A1. How old is the house (apartment)?

- ☐ Older houses may contain materials which are contaminants (like lead paint or asbestos) and may contribute to the exposure of the child. Knowing the age of the home is important in determining what materials were used in constructing the home. The age of the home may also dictate the types of protective equipment (proper ventilation, carbon monoxide detectors, etc.) the home has. If don't know, ask who may know the age of the house/building and record the person's name and phone number.

A2. Is there any carpet (including area rugs) in your home?

- ☐ Exposure due to ingestion of dust is a major factor in the total exposure of children. The type(s) of flooring in a house is a determinant in the amount of floor dust present there. Questions A2 – A8 are designed to determine the type, age, and condition (cleanliness) of the flooring in the home.

A3. Would you please tell me which room(s) has/have carpet (area rug)?

- ☐ Record the name or assigned room# in the data fields. Please also mark the room# (or name) on the house/building floor plan (sketch in Form#2 & #3, Section A). Make sure the house/building floor plan (sketch) is consistent with the information in A3.

A4. How old is the carpet (area rug) in the (ROOM)?

- ☐ Record the information for each room with carpet or area rug.

A5. How often is the carpet (area rug) in the (ROOM) steam-cleaned?

- ☐ Record the information for each room with carpet or area rug. This is an open-ended data field. Please write down the response in the data field. It will be coded later.

A6. How often is the carpet (area rug) in the (ROOM) vacuumed?

- ☐ Record the information for each room with carpet or area rug. This is an open-ended data field. Please write down the response in the data field. It will be coded later.

A7. What (other) rooms do you have (rooms without carpet or area rugs) in your home?

- ☐ Record the name or assigned room# in the data fields. Please also mark the room# (or name) on the house/building floor plan (sketch in Form#2 & #3, Section A). Make sure the house/building floor plan (sketch) is consistent with the information in A7.

A8. How often is the floor in the (ROOM) wet-mop cleaned?

- ☐ Record the information for each room without carpet or area rug. This is an open-ended data field. Please write down the response in the data field. It will be coded later.

A9. What kind of heating and air conditioning device do you use? Please include anything you use on an occasional basis.

- ☐ Using an air conditioning or heating device to control the temperature of the home has an impact on the types of contaminants which may or may not be present in the home. Temperature control devices help guard against contaminants outside, due to the fact that when one of these devices is in use the windows are most likely closed. However, these devices also tend to re-circulate the air in the home which may contain its own contaminants. Without proper ventilation, there is no way for these pollutants to escape the house. Questions A9 – A13 determine whether or not such a device has been used in the home, how frequently the device was used, and what temperature the device was set for while it was in use. This information gives a more accurate assessment of the types of contaminants in the home. Ask A9 for all heating A/C devices used, then ask A10 - A12 for each heating A/C device.

A10. When do you usually use (HEAT/AC) during the year (from what month to what month)?

A11. When you used (HEAT/AC) in the past winter, on the average about how many hours per day did you use it?

A12. When was (HEAT/AC) last used?

A12a. What temperature do you usually set at the thermostat during the heating seasons?

A12b. What temperature do you usually set at the thermostat during the cooling seasons?

A13. For each month please tell me, do you usually close all of the exterior doors and windows because heating or air conditioning is running or because of any other reasons?

- ☐ We need an answer of Yes or No for each month. If only closed the doors and windows for partial month, please make a remark in the Note. If they closed the doors and windows for other reasons (e.g., smokes or bad smells), please also note the reasons.

A14. Is your house located within a quarter mile of any major freeway, streets with daily heavy traffic, or industrial or incineration plants that produce lots of smoke or a strange smell?

- ☐ The answer is Yes if any one of the following is true: the house is located within a quarter mile radius (1320 feet or 440 yards) of (1) major freeway or streets with daily heavy traffic, (2) industrial plants that produce lots of smoke or a strange smell, or (3) incineration plants that produce lots of smoke or a strange smell. The respondent's answer doesn't have to be very exact about the distance. If Yes, please specify what it is.

Proximity to these areas may alter the level of pollutants in the environment. Homes near heavy traffic patterns, incineration plants, etc. may have a higher level of exposure than homes not close to such an area. Questions A14 – A16 determine if the home is near one of these sources of pollutants.

A15. In general, would you say the traffic condition near your house is...(light, moderate or heavy)?

- ☐ If the respondent asks the definition of light, moderate or heavy, read the definition in the parentheses.

A16. About what time during the day do you think there is the most traffic near your house?

B1. Would you tell me the first name of everyone living in this household, their ages, and their relationships to you?

- ☐ Establishes background information for the family. Family size and age of each member may have effects on the types and levels of pollutants present in the household. Please mark the sampled adult and child with "*" in the data field. Begin with the name of the respondent.

B2. Does anyone in the household regularly smoke cigarettes, cigars, or a pipe in the house? Would you tell me who they are?

- ☐ Environmental tobacco smoke (ETS) is an important pollution source. It is important to

know of all the members of the household who smoke **in the home** to establish the levels of exposure due to ETS in the home. Questions B3 – B4 establish the levels of ETS in the home and pinpoint where in the home those levels are likely to be the highest.

B3. On average, what is the total number of cigarettes, cigars, or pipesful of tobacco per day that (PEOPLE) smoke in the house?

☐ We only count the cigarettes smoked in the house.

B4. Where do/does (PEOPLE) usually smoke in the house?

☐ Record the name or assigned room# in the data fields. Please refer to the house/building floor plan (sketch in Form#2 & #3, Section A). Make sure the house/building floor plan (sketch) is consistent with the information in B4.

B5. Are you currently employed?

☐ Establishes employment status of the household members. Potential sources of contamination may stem from the employment of a household member. Questions B5 – B17 determine the employment status of all working members of the household. These questions also determine if the jobs held by the persons living in the home are possible sources of contamination.

B6. Who do you work for?

☐ If self-employed, record as “self-employed” and skip B7.

B7. What does the (company/person) do?

☐ We are asking about the company’s business. The respondent may be a clerical staff in a manufacturing plant. If not sure, ask “what does your company make or sell?”

B8. What kind of work do you do?

B9. Is anyone else living in the household employed?

B10. Who does (he/she) work for?

B11. What does the (company/person) do?

B12. What kind of work does (he/she) do?

B13. Is any one else living in the household employed?

B14. Who does (he/she) work for?

B15. What does the (company/person) do?

B16. What kind of work does (he/she) do?

B17. Did you (or the person working in the farm) produce and sell \$1,000 or more of agricultural products in the past year?

☐ This question is asked if at least one of the household members works in the farm. This is to determine if the household meets the census definition of a “rural farm.”

B18. What are the sources of drinking water for your home? (City/county, well, bottled or other?)

☐ Drinking water is potential source of contaminants. Questions B18 – B21 establish the source(s) of drinking, cooking, and bathing water for the household. Whether the water is filtered or not, and what type of filter is used alter the types of pollutants present in home. These questions determine where water is coming from, and if it is treated before it is used by the household. Check all the applicable answers.

B19. Do you filter your drinking water?

B19a. Do you filter just the drink water or the entire water supply (that is, water for the entire house)?

B19b. What kind of filter do you use? Is it particle filter only or particle filter plus activated charcoal?

B20. What are the sources of water for cooking?

B21. What are the sources of water for bathing?

B22. Do you have any pets?

- ☐ Household pets are a potential source of exposure to contaminants. Different species carry varying types of pollutants. Questions B23 – B25 collect information on potential contaminants from the household's pets. The questions also determine the level of exposure to these pollutants the child may be exposed to due to his/her actions (how often he/she touches the pet, etc).

B23. What kind of pets do you have?

B24. Do you keep your pets inside the house or outside the house?

B25. How often does CHILD play with or touch the pets?

- ☐ Ask for the frequency and duration (e.g., 3- 4 times per day and about 30 minutes each time).

B26. Does everyone living in this household usually take off their shoes at the door before coming into the house?

- ☐ Potential contaminants such as pesticides, herbicides, fertilizers, etc. may be present outside the home. These pollutants can be tracked into the house on the shoes of people entering the home.

B27. Do you usually ask your visitors to take off their shoes at the door before they get into the house?

B28. Does anyone living in this household often walk barefoot outside the house?

- ☐ Walking barefoot outside the house may have potential dermal exposure to pollutants, and the person may bring the pollutants **into the house**.

B29. Would you tell me who?

- ☐ Record the first name or relationship to the respondent (e.g., husband).

B30. Does anyone living in this household frequently work or play in the yard that would involve contact with the soil?

B31. Would you tell me who?

- ☐ Record the first name or relationship to the respondent (e.g., husband).

B32. Does anyone in your household change automobile oil in the driveway or garage (or near your house)?

- ☐ Automobile oil is a potential source of contamination.

B33. Would you tell me who?

- ☐ Record the first name or relationship to the respondent (e.g., husband).

B34. How often (does/do)(PEOPLE IN B31) change oil in the driveway or garage?

B35. How (does/do) (they/you/he/she) dispose of the automobile oil?

B36. How do you dispose of your garbage? (Picked up by City/County, Picked up by a commercial contractor, Other)

- ☐ Garbage is a potential source of pollutants. How the garbage is disposed of may affect the level of exposure to pollutants.

- ☐ Read the introduction before you ask the questions. Emphasize the words “during the past month.”

C1. On the average, about how many hours a day did (CHILD’S NAME) stay outside the house?

- ☐ Possible contaminants may be present in the yard. Pollutant type and concentration may vary in different segments of the area surrounding the home. Questions C1 – C3 determine the probability of potential exposure. How often the child played outside, where the child played, and whether or not the child wore shoes while playing outside all have bearing on the levels of potential exposure to contaminants.

The child’s activity pattern may be different between the weekdays and during the weekend. To facilitate the respondent’s recall, prompt by asking the average hours on week days and the average hours on weekends. Record the data separately for weekday and weekend. If the child attends a day care center, ask the parent to exclude the hours spent at the day care center.

C2. Where did (he/she) usually play outside the house? (Where did he/she spend the most time outside the house?)

- ☐ Please be specific. We need to mark the location in the sketch.

C3. When (CHILD’S NAME) was outside the house, how often did (he/she) walk barefoot?

- ☐ Again, remind the respondent that we are asking about the past month.

C4. How often did (CHILD'S NAME) take something to eat or drink when (he/she) was playing outside the house?

- ☐ Ingestion of contaminants may occur due to dietary or non-dietary consumption. Questions C4 – C6 determine the likelihood of contamination due to these sources. If the child ate or drank outside or consumed non-dietary items (such as snow), his or her contamination level may have been effected. Playing with sand or dirt may also have an effect due to cross-contamination (pollutant on hands gets on food which child puts in mouth).

C5. How often did (he/she) play with sand or dirt?

C6. Have you ever seen (him/her) eat...?(dirt, sand, or snow)

C7. Where did (he/she) usually play inside the house? (Where did he/she spend the most time playing inside the house?)

- ☐ This information is used to determine the location for floor dust sample collection and to help with the interpretation of sampling results.

C8. When (CHILD'S NAME) was inside the house, how often did (he/she) walk barefoot?

C9. When (CHILD'S NAME) was inside the house, how often did (he/she) sit or play on the floor?

C10. On the average, about how many hours a day, including naptime did (he/she) sleep?

- ☐ The number of hours the child slept gives insight into the child's activity level. Sleeping reflects inactivity, which effects the child's ventilation rate. If the child attends day care, remind the parent to exclude the hours at day care.

C11. How often did (he/she) sleep or take a nap on the floor?

- ☐ Sleeping on the floor may increase the child's exposure to contaminants such as dust and pesticides, through greater inhalation, ingestion, or dermal absorption.

C12. Did (CHILD'S NAME) use a pacifier in the past month?

- ☐ Ingestion of pollutants may occur when the child places any non-dietary item in his or her mouth.

C13. In the past month did (he/she) suck or chew (his/her) thumb/fingers or toes or foot?

C14. How often did (he/she) suck or chew (his/her) thumb/fingers or toes or foot?

- ☐ Ask for the frequency and duration (e.g., 3- 4 times per day and about 30 minutes each time).

C15. When your child sucked his/her fingers, how many fingers did he/she put into his/her mouth?

- ☐ Read the response categories.

C16. Did (CHILD'S NAME) ever put his/her mouth on the floor or lick the floor?

C17. How frequently did he/she do that?

C18. Where did he/she do this most frequently at home? Please tell me the room(s) and the type of floor in the room (e.g., carpet, wood, tile, etc.).

- ☐ Record the name or assigned room# in the data fields. Also use the house/building floor plan (sketch in Form#2 & #3, Section A) as a reference (you may also use A3 and A7). Make sure the information in C18 is consistent with the information in the house/building floor plan (or in A3 and A7).

C19. How often did you cut (his/her) fingernails?

- ☐ Potential contaminants may be trapped under long finger or toe nails.

C20. How often did you cut (his/her) toenails?

C21. Is your child currently teething?

- ☐ If the child is teething, potential exposure due to non-dietary ingestion may increase. This information gives us insight into the child's daily activities, it also tells the child's potential exposure due to this path.

C22. How often did (CHILD'S NAME) put toys in (his/her) mouth?

- ☐ Potential exposure due to ingestion increases with everything the child puts in his or her mouth. Questions C22 – C26 determine the potential for exposure due to this source.

C23. Did (he/she) put any things other than toys or food in (his/her) mouth?

C24. What did (he/she) put in (his/her) mouth?

C25. INSTRUCTIONS FOR STAFF

- ☐ Now ask the parent to show you the child's most favorite toys. Ask for permission to take a picture of the toys. Record the information about the toys.

C26. How often did you wash (CHILD'S NAME)'s toys?

C27. About how many times per week did you bathe CHILD?

- ☐ Pollutants may be present daily in the child's life. The cleanliness of the child plays a large role in the ingestion, inhalation, and dermal absorption of these potential contaminants. Remind the respondent that we are asking about the past month.

C28. How often were (CHILD'S NAME) hands washed before eating meals?

C29. How often were (his/her) hands washed before eating snacks?

C30. How often were (his/her) hands washed after playing outside the house?

C31. How often were (his/her) hands washed before going to bed?

C32. What is the date of birth of CHILD?

- ☐ Date of birth is an important demographic information for data analysis. If the respondent is reluctant to tell you, ask for only month and year is fine.

C33. What is your date of birth?

- ☐ Same as C32.

C34. MEASURE THE CHILD'S WEIGHT

- ☐ Weight and height information helps us to calculate daily dosage of potential contaminants. Use our scale to measure the weight. Place the scale on a flat, hard surface.

C35. MEASURE THE CHILD'S HEIGHT

- ☐ Ask the child to stand against a wall and use the tape measure and a level to measure the height.

C36. MEASURE THE CHILD'S HAND SURFACE

- ☐ Trace the child's hand on the data sheet. Observe the child's finger nails while you are doing this.

C37. MEASURE THE PARENT'S WEIGHT

- ☐ See question C34.

C38. MEASURE THE PARENT'S HEIGHT

- ☐ See question C35.

C39. MEASURE THE PARENT'S HAND SURFACE

- ☐ See question C36.

40a. EXAMINE THE CHILD'S FINGER NAILS AND RECORD THE RESULTS. DIRTY FINGER NAILS

- ☐ See C36. Obtain the information while tracing the child's hand.

40b. EXAMINE THE CHILD'S FINGER NAILS AND RECORD THE RESULTS. LONG FINGER NAILS

- ☐ See C36. Obtain the information while tracing the child's hand.
- ☐ Confirm with the respondent for the next appointment date and time. Ask if the respondent has any comments.
- ☐ Complete the interview information on the front page. Quickly review the entire questionnaire for any apparent errors or missing data. Clarify any unclear questions and answers with the respondent before you leave.

The following are instructions for recording Form #5 (Pre-Monitoring Questionnaire for Day Care Center). Form #5 is used to identify individuals and classrooms within the day care center and to describe the multiple environmental pathways and media through which they may be exposed. Instructions are preceded by a symbol "☐". Also included in the instructions are rationale for each question. Some questions are self-explanatory and do not require instructions.

❖ **Interview Information**

- ☐ In order to document the completion of specific study tasks, project staff must complete the Interview Information.

Interviewer ID #: Record your assigned ID#.

Date: Record the date of the data collection.

Time Started: Record the time started data collection.

Time End: Record the time ended data collection.

Results: Circle "1" for "complete" and "2" for "incomplete."

Reasons: If the survey is incomplete, please explain why the survey was not completed.

Please rate the participant's cooperation and your assessment of the overall quality of this interview after you completed the interview with the participant. If you think the quality is questionable or unsatisfactory, please specify the reasons.

- ☐ Read the introduction before you ask the first question.

A1. How old is this (building/house)?

- ☐ The age of the day care center may influence the contaminants present in the building, as well as the concentration of those contaminants. For example, an older building may have walls painted with lead paint. In order to have a complete picture of the potential contaminant exposure at day care centers, this is important information to gather. If the day care center director does not know the age of the building, please ask the director if she can retrieve the information from another source; for example, the owner of the building. If the director has another source for this information, get the name and phone number of the contact person/people.

A2. What is the total number of children aged 1½ to 5 currently enrolled in your center? Please tell me the number by the following age range: 1½ to 2, 2 - 3, 3 - 4, 4 - 5

- ☐ This study is interested in how contaminants affect children aged 1½ to 5. The age range 1½ to 5 is an eligibility requirement for study participants. As a result, this information is needed to determine the number of eligible children at each day care center. We may have collected this information during the informed consent process.

A3. How many classrooms do you have for the children aged 1½ to 5?

- ☐ Same as A2. Information will be used for random selection of children for participation.
- ☐ Please ask the day care center director for a floor plan, or sketch a floor plan with the help of the director. Record the name of each room on this floor plan. **The floor plan will be used for the selection of sampling locations.**

A4. Would you tell me which rooms have carpet or area rugs? Ask this question for each classroom and use the floor plan as a reference.

- ☐ Exposure due to ingestion of dust is a major factor in the total exposure of children. The type(s) of flooring in a house is a determinant in the amount of floor dust present there. Questions A4 – A7 are designed to determine the type, age, and condition (cleanliness) of the flooring in each classroom. Record the name or assigned room# in the data fields. Please also mark the room# (or name) on the house/building floor plan (sketch in Form#2 & #3, Section A). Make sure the house/building floor plan (sketch) is consistent with the information in A4.

A5. How old is the carpet/area rug in the (ROOM)? Ask this question for each classroom and use the floor plan as a reference.

A6. How often is the carpet (area rug) in the (ROOM) steam-cleaned? Ask this question for each classroom and use the floor plan as a reference.

- ☐ This question helps determine whether carpet/area rug cleaning is related to decreased dust

exposures and whether steam-cleaning introduces new contaminants to the day care center. This is an open-ended data field. Please write down the response in the data field. It will be coded later.

A7. How often is the carpet (area rug) in the (ROOM) vacuumed? Ask this question for each classroom and use the floor plan as a reference.

- ☐ This question also helps determine whether carpet/area rug cleaning is related to decreased dust exposures. This is an open-ended data field. Please write down the response in the data field. It will be coded later.

A8. What kind of heating and air conditioning device do you use? Please include anything you use on an occasional basis.

- ☐ Using an air conditioning or heating device to control the temperature of the home has an impact on the types of contaminants which may or may not be present in the day care center. Temperature control devices help guard against contaminants outside, due to the fact that when one of these devices is in use the windows are most likely closed. However, these devices also tend to re-circulate the air in the day care center which may contain its own contaminants. Without proper ventilation, there is no way for these pollutants to escape the building. Questions A8 – A11 determine whether or not such a device has been used in the day care center, how frequently the device was used, and what temperature the device was set for while it was in use. This information gives a more accurate assessment of the types of contaminants in the home. Ask A8 for all heating A/C devices used, then ask A9 - A11 for each heating A/C device.

A9. When do you usually use (HEAT/AC) during the year (from what month to what month)?

- ☐ This question is asked to estimate the total time children are exposed to heating/cooling system contaminants at day care, and to determine how varied exposure times influence the risks associated with different contaminants. Ask this question for all heating and air conditioning devices used in the day care center.

A10. When you used (HEAT/AC) in the past winter, on the average about how many hours per day did you use it? Ask this question for all heating and air conditioning devices used in the day care center.

A11. When was (HEAT/AC) last used?

- ☐ Provides perspective to the research team so they can document current heating/cooling system use at the day care and can better understand how this usage pattern affects the data gathered.

A12a. What temperature do you usually set at the thermostat during the heating seasons?**A12b. What temperature do you usually set at the thermostat during the cooling seasons?****A13. For each month please tell me, do you usually close all of the exterior doors and windows because heating or air conditioning is running or because of any other reasons?**

- ☐ This question examines whether open doors/windows increase ventilation in day care centers, and as a result, decrease indoor contaminants; and/or, whether open doors/windows increase outdoor contaminants in day care centers. We need an answer of Yes or No for each month. If only closed the doors and windows for partial month, please make a remark in the Note. If they closed the doors and windows for other reasons (e.g., smokes or bad smells), please also note the reasons.

A14. Is the center located within a quarter mile of any major freeway, streets with daily heavy traffic, or industrial or incineration plants that produce lots of smoke or a strange smell?

- ☐ Community characteristics may affect contaminant exposures in a day care center. As a result, it is important to identify potential contaminant sources surrounding day care centers, so these sources can be considered in an exposure assessment. The answer is Yes if any one of the following is true: the day care center is located within a quarter mile radius (1320 feet or 440 yards) of (1) major freeway or streets with daily heavy traffic, (2) industrial plants that produce lots of smoke or a strange smell, or (3) incineration plants that produce lots of smoke or a strange smell. The respondent's answer doesn't have to be very exact about the distance. If Yes, please specify what it is.

A15. In general, would you say the traffic condition near the center during your normal business hours is light , moderate, or heavy?

- ☐ Variations in traffic patterns may influence contaminant exposures. If the respondent asks the definition of light, moderate or heavy, read the definition in the parentheses.

A16. About what time during the day do you think there is the most traffic near the center?

B1. Does any of your staff, including yourself, smoke cigarettes, cigars, or a pipe on a regular basis at work or at home?

- ☐ In order to understand how different contaminants affect children, it is important to know the source of the contaminant (be it a direct or indirect source). This question asks if there are any smokers.

B2. Are they allowed to smoke inside the center?

- ☐ If a day care center permits its staff to smoke inside the building, please specify where, inside the building, staff are permitted to smoke. Use the floor plan as a reference. Make sure the location match the floor plan description.

B3. Are they allowed to smoke outside the center?

- ☐ If a day care center permits its staff to smoke outside the building, please specify where, outside the building, staff are permitted to smoke. Draw a quick sketch for the location(s) if needed.

B4. Do you provide breakfast, lunch, or snacks to the children in your center?

- ☐ Food may be a source of contaminant exposure. To pinpoint this potential exposure source, it is important to gather this information from day care centers. If a day care center provides breakfast, lunch, or snacks to children, please ask for a current menu (menu for the sampling week) so the research team knows what type of food is served. If the day care center changes its menu weekly, please ask to copy the weekly menus from the past three months.

B5. What kind of containers does the center use to serve snacks, breakfast and/or lunch to the children? If forks and spoons are used, please also tell me what they are made of.

- ☐ This question examines whether food containers and food utensils may be exposure sources, and whether contaminants found in food may be related to the containers and utensils used. Check all the applicable answers.

B6. What does your center usually use to cook or heat food?

- ☐ Different cooking methods may generate specific contaminants. For example, foods cooked on open flames or using high heat may produce contaminants. Information from this question compares different cooking methods to determine contaminant risk levels.

B7. Is it gas or electric (or other)?

B8. What are the sources of water for cooking at the center? (City/County, Well, Bottled or Other)

- ☐ Please specify all cooking water sources for the day care center.

B9. What are the sources of drinking water for the center? (City/County, Well, Bottled or Other)

- ☐ Drinking water is potential source of contaminants. Please specify all drinking water sources for the day care center.

B10. Do you filter the drinking water at the center?

- ☐ Filtering water removes certain contaminants in the water supply, and can lower exposure to these contaminants. As a result, filtering water may be a way to decrease contaminants found in water, thereby decreasing contaminant exposures from this source. To test this idea, the data gathered can be used to compare exposure levels between centers that filter their water and centers that do not filter their water.

B10A. Do you filter just the drinking water or the entire water supply (that is, water for the entire center)?

B10B. What kind of filter do you use? Is it particle filter only or particle filter plus activated charcoal?

☐ Different water filters are designed to remove different contaminant.

B11. Did anyone in your center change automobile oil in the parking lot or driveway during past year?

☐ Automobile oil is a potential source of contamination.

B12. How many times did this happen (changing automobile oil in the parking lot or driveway) during the past year?

B13. How did they dispose of the automobile oil?

☐ As the exposure to automobile oil increases around a day care center, children's exposure levels, and the concentration level of oil, may increase because the oil has been introduced to more than one area. For example, if oil is changed in the center parking lot and discarded in the center dumpster, the area surrounding the day care center has been exposed to oil in two different areas.

B14. How does the center dispose of the garbage? (Picked up by City/County, Picked up by a Commercial Contractor, or Other)

☐ Garbage is a potential source of pollutants. How the garbage is disposed of may affect the level of exposure to pollutants.

B15. Do the classrooms or the day care center have any pets?

- ☐ Questions B15 - B19 are designed to ask the classroom teachers. You may conduct this section after completing your interview with the day care director. However, if the day care director can answer the questions, it is okay to get the answers from the director (e.g., there is no pets in the day care center and the director knows the routine for cleaning the toys). Record the name of the classroom and use the floor plan as a reference. Make sure the names are matched.

B16. What kind of pets?

- ☐ Different pets may have different contaminants and different contaminant concentrations. In addition, different pets may also have different ways of exposing children to contaminants.

B17. Do you keep them inside or outside the center?

- ☐ There may be a difference between the types of contaminants associated with an indoor pet and an outdoor pet. This question examines these differences to understand what types of contaminants and exposure pathways are associated with indoor and outdoor pets. If they keep the pet both inside and outside the classroom, record as "other" and specify.

B18. How often do the children in your classroom play with or touch the pets?

- ☐ Children who come in direct contact with pets (i.e.: touch pets) may have a greater exposure risk than children who come in indirect contact with pets (i.e.: the pet inhabits the same area as a child, but the child does not touch the pet). This question explores these possible exposure differences. Ask for the frequency and duration (e.g., about once per day and about 30 minutes each time).

B19. How often do you wash (CHILD'S NAME)'s toys?

- ☐ This question examines whether washing toys decreases exposure levels by removing contaminants from toys, or whether it increases exposure levels by introducing new contaminants to toys.

B20. Has the center ever used any...(CHEMICAL)? (This includes the building where the center is located.) (paint removers, water-based paints, oil-based paints, stains/varnishes, wood deck preservatives, herbicides, insecticides or pesticides, fungicides, degreasers, kerosene, or lighter fluid/charcoal)? Could you tell me the brand name(s) of the (CHEMICAL) that was used?

- ☐ This question is designed to identify potential sources of contaminant exposure. Please circle "Yes (1)" to all contaminants that are used at the day care center, and get the specific name brand of the contaminant. For example, if the day care center used a paint remover, get the name of the paint remover. Brand name information helps determine the major components of the contaminant. If B20 = Yes, ask B21 - B24.

B21. Was it (done/used) by a commercial contractor or by your center staff? IF CONTRACTOR GET NAME AND TELEPHONE #)

- ☐ If a day care center used a contractor(s) to apply a contaminant(s), please get the name and phone number (with area code) of the contractor(s). We will contact the contractor to obtain the detailed information of the chemicals used if necessary.

B22. Where was the (CHEMICAL) used? (Was it used inside and/ or outside the center?)

- ☐ Exposure to contaminants by inhalation and absorption may vary depending on whether the contaminants were applied indoors or outdoors. This is because of circulation and ventilation differences between indoor and outdoor environments. Using the day care center floor plan as a reference, please record the specific place(s) (inside and outside the center) where each contaminant was used. Information from this question helps understand exposure differences between contaminants applied indoors and contaminants applied outdoors.

B23. How often did the center use it?

- ☐ This question examines whether exposure levels increase as contaminant applications increase.

B24. When was the last time that (CHEMICAL) was used and where was it used (INDICATE CLASSROOM)?

- ☐ Recent use of chemicals is an important information for interpreting the sampling results. Please indicate the specific location (i.e.: the classroom) of contaminant application, using the floor plan as a reference, along with the last date the chemical was used.

B25e. For the most recent application, please briefly describe how the herbicide was applied. [PROMPT: SPRAY (WHERE), OR BROADCAST]

- ☐ Ask this question if B20e = Yes. Different methods of application may influence contaminant exposure levels.

B25f. For the most recent application, please briefly describe how the insecticides or pesticides was applied. [PROMPT: CRACK & CREVICE, SPRAY (WHERE), OR BROADCAST]

- ☐ Ask this question if B20f = Yes. Different methods of application may influence contaminant exposure levels.

B25g. For the most recent application, please briefly describe how the fungicides was applied. [PROMPT: CRACK & CREVICE, SPRAY (WHERE), OR BROADCAST]

- ☐ Ask this question if B20g = Yes. Different methods of application may influence contaminant exposure levels.

B26e. For the most recent herbicide application, did CHILD play/stay in the room/place...? [CHECK ALL THAT APPLY]

- ☐ Ask this question if B20e = Yes. Exposure to contaminants is dependent on a child's activity patterns. Specifically, exposure levels may increase if a child plays/stays in the room/place where contaminants are applied. Read the response categories and check all the applicable answers.

B26f. For the most recent insecticides or pesticides application, did CHILD play/stay in the room/place...? [CHECK ALL THAT APPLY]

- ☐ Ask this question if B20f = Yes. Exposure to contaminants is dependent on a child's activity patterns. Specifically, exposure levels may increase if a child plays/stays in the room/place where contaminants are applied. Read the response categories and check all the applicable answers.

B26g. For the most recent fungicides application, did CHILD play/stay in the room/place...?[CHECK ALL THAT APPLY]

- ☐ Ask this question if B20g = Yes. Exposure to contaminants is dependent on a child's activity patterns. Specifically, exposure levels may increase if a child plays/stays in the room/place where contaminants are applied. Read the response categories and check all the applicable answers.

B27e. For the most recent application, how much time did CHILD play/stay in the room/place where the herbicide was applied?

- ☐ If more than one response is checked, ask the respondent to provide an estimate of the time played/stayed in the room/place for each response selected in B26e. For example, 30 minutes **immediately after the application and 45 minutes a day after the application.**

B27f. For the most recent application, how much time did CHILD play/stay in the room/place where the insecticides or pesticides was applied?

- ☐ See B27e.

B27g. For the most recent application, how much time did CHILD play/stay in the room/place where the fungicides was applied?

- ☐ See B27e.

B28. Where do you store the above chemicals?

- ☐ Record the location(s) and use the floor plan or sketch as a reference. Make sure the location(s) can be identified on the floor plan or sketch.

Concluding Statement

- ☐ After completing the interview, thank the respondent for his/her time.
 - ☐ Discuss the food sample collection instructions with the respondent.
- 1.05 Complete the interview information on the front page. Quickly review the entire questionnaire for any apparent errors or missing data. Clarify any unclear questions and answers with the respondent before you leave.
- ☐ Confirm with the respondent for the next appointment date and time. Ask if the respondent has any comments.

The following are instructions for recording Form #6 (Parent Post-Monitoring Questionnaire). Form #6 is used to provide information on the child's activities and potential exposure during the 48-hour air sampling period, explain variation in the sample, and permit stratification for the monitoring results. Instructions are preceded by a symbol "☐". Also included in the instructions are rationale for each question. Some questions are self-explanatory and do not require instructions.

1.06 Interview Information

- ☐ In order to document the completion of specific study tasks, project staff must complete the Interview Information.

Interviewer ID #: Record your assigned ID#.

Date: Record the date of the data collection.

Time Started: Record the time started data collection.

Time End: Record the time ended data collection.

Results: Circle "1" for "complete" and "2" for "incomplete."

Reasons: If the survey is incomplete, please explain why the survey was not completed.

Please rate the participant's cooperation and your assessment of the overall quality of this interview after you completed the interview with the participant. If you think the quality is questionable or unsatisfactory, please specify the reasons.

- ☐ Read the introduction before you ask the first question.

1. Did you or (CHILD'S NAME) do anything during the 48-hour period that brought (him/her) near any of the following materials, places, or activities? If yes, where & for how long?

- ☐ Children and adults are exposed to contaminants in the home through inhalation, ingestion, or dermal (skin) contact. This question is examining the following: 1) Potential sources of contaminant exposure in the home 2) Specific location(s) of contaminant exposure in the home and 3) Differences in exposure levels as a result of time spent in a contaminated area(s). This question also compares exposure level differences between children and adults based on location of activity and time spent in contaminated areas. If yes, please specify the location and duration of exposure.

2a. Did (CHILD'S NAME) take any vitamins or medications during the 48-hour period?

- ☐ In order to analyze the data samples and make accurate conclusions from the data, it is important to know exactly what the child/adult took into his/her body during the 48-hour sampling period. Specifically, medications or vitamins may affect the body's metabolism and the uptake or elimination of contaminants. This result must be considered when analyzing a child/adult's exposure to contaminants. The data gathered from the question also provides the research team with the following: 1) Exposure level comparisons between children/adults who take medications/vitamins and children/adults who do not take medications/vitamins and 2) Exposure level differences between children who take/do not take medications/vitamins and adults who take/do not take medications/vitamins.

2b. Did you take any vitamins or medications during the 48-hour period?

- ☐ See 2a.

3a. What kind of vitamins or medications did (he/she) take?

- ☐ Record the name of the vitamins or medications.

3b. What kind of vitamins or medications did you take?

- ☐ See 3a.

4a. How much did (he/she) take?

- ☐ An increased or decreased dose of a specific medication/vitamin may affect the body's metabolism and the body's uptake or elimination of contaminants in different ways. These differences may also influence a child/adult's exposure to contaminants, and is therefore an important question to ask.

4b. How much did you take?

- ☐ See 4a.

05. Did you use your (HEAT & A/C) during the 48-hour period?

- ☐ Heating and cooling systems may be contaminants and/or assist in the circulation of contaminants in buildings. This question helps uncover how heating/cooling systems affect the specific contaminants present in a home, their concentration, and their distribution. Information gathered from this question also compares different heating/cooling systems to determine which ones have the greatest contaminant potential.

06. About how many hours during the 48-hour period was it used?

- ☐ This question is asked to estimate the **total time** during the sampling period children/adults are exposed to heating/cooling system contaminants at home, and to determine how varied exposure times influence the risks associated with different contaminants.

6a. What temperature was set at your thermostat during the 48-hour period?**07. Did anyone smoke cigarettes, cigars, or a pipe inside your home during the 48-hour period?**

- ☐ In order to understand how environmental tobacco smoke affects the collected samples, and affects children/adults in general, it is important to know the smoking status of people in the home during the 48-hour study period.

08. About how many cigarettes, cigars, or pipesful of tobacco were smoked inside your home during the 48-hour period? Ask brand name.

- ☐ In order to understand how environmental tobacco smoke affects the collected samples, and affects children/adults in general, it is important to know smoking frequency in the home during the 48-hour study period. If cigarettes, cigars, or pipesfuls of tobacco were smoked in the home, please get the specific name brand of each tobacco product. Brand name information helps determine the major contaminants found in a specific tobacco product. *We are planning to ask the respondent to help us collect cigarette buds if someone smokes at home.*

09. Did someone vacuum the floor inside your home during the 48-hour period?

- ☐ Vacuuming may increase levels of suspended particles in indoor air, and as a result, increase inhalation of contaminants in the air. This information will be considered when completing the exposure assessment, and will also help interpret the results of floor dust and indoor air samples.

10. Did you or someone cook inside the house during the 48-hour period?

- ☐ Cooking may be a contaminant exposure source, so this question examines the affect of cooking on exposure levels inside the home.

11. What (appliance) was used to cook in the house during the 48-hour period?

- ☐ This question examines whether different appliances affect exposure levels found in food and found within the home. Please specify the power source of the appliance; for example, whether the appliance is powered by electricity or gas.

12. About how many hours did you (or someone) use the (APPLIANCE) during the 48-hour period?

- ☐ Cooking frequency, with a particular appliance, may affect exposure levels in food and in the home. For example, an increase in cooking frequency may lead to an increase in exposure levels. This question examines the relationship between the two variables. It also compares the exposure potential of different appliances based on how often they are used.

13. Did you or someone cook outside the house during the 48-hour period?

- ☐ Exposure levels may vary based on the location of cooking. For example, exposure and contaminant concentration levels may be lower if cooking is done outside the home due to better circulation and ventilation conditions. This question provides information on specific exposure levels outside the home. This question also compares exposure levels between inside cooking and outside cooking.

14. What (appliance) was used to cook outside the house during the 48-hour period?

- ☐ This question examines whether different appliances affect exposure levels found in foods and found outside the home. Please specify the power source of the appliance; for example, whether the appliance is powered by electricity or gas.
- 15. About how many hours did you (or someone) use the (APPLIANCE) during the 48-hour period?**
- ☐ Cooking frequency, with a particular appliance, may affect exposure levels in food and outside the home. For example, an increase in cooking frequency may lead to an increase in exposure levels. This question examines the relationship between the two variables. It also compares the exposure potential of different appliances based on how often they are used.
- 16. Where was the appliance used outside the house during the 48-hour period?**
- ☐ The use of an outdoor appliance may affect exposure levels both outside and inside the home. For example, an outdoor appliance that is close to the home, may increase exposure levels in the home. As a result, this question examines whether the location of an outdoor appliance affects exposure levels outside the home, as well as inside the home. Please use the sketch as a reference for the location(s).
- 17. How many times did you use any of the following methods to cook or heat foods during the 48-hour period?**
- ☐ Different cooking and heating methods may introduce different contaminants and exposure levels to food and into the home. This question compares any differences that may exist.
- 18. What kinds of fat did you use in cooking (to deep-fry, fry, or stir-fry) during the 48-hour period?**
- ☐ Different cooking fats may introduce different contaminants and exposure levels to food and into the home. This question compares any differences that may exist.
- 19. Where and how often did you prepare food during the 48-hour period?**

- ☐ Food preparation areas may introduce different contaminants and exposure levels to food prepared on those surfaces. A wipe sample will be collected at the most used food preparation surface.

20. Were any of the following chemicals (materials) ever used in or around your home?

- ☐ This question is designed to identify potential sources of contaminant exposure. Please circle "Yes (1)" to all contaminants that were ever used in and around the home. In addition, get the specific name brand of the contaminant. For example, if the day care center used a paint remover, get the name of the paint remover. Brand name information helps determine the major components of the contaminant. If 20 = Yes, ask 21 - 24.

21. Was it (done/used) by a commercial contractor or by a household member?

- ☐ If the respondent used a contractor(s) to apply a contaminant(s), please get the name and phone number (with area code) of the contractor(s). We will contact the contractor to obtain the detailed information of the chemicals used if necessary.

22. Where was the (CHEMICAL) used? (Was it used inside and/ or outside your home?)

- ☐ Exposure to contaminants by inhalation and absorption may vary depending on whether the contaminants were applied indoors or outdoors. This is because of circulation and ventilation differences between indoor and outdoor environments. Using the house floor plan as a reference, please record the specific place(s) (inside and outside the home) where each contaminant was used. Information from this question helps understand exposure differences between contaminants applied indoors and contaminants applied outdoors.

23. How often was it used?

- ☐ This question examines whether exposure levels increase as contaminant applications increase.

24. When was the last time that (CHEMICAL) was used and where was it used?

- ☐ Recent use of chemicals is an important information for interpreting the sampling results.

Please indicate the specific location (e.g., rooms) of contaminant application, using the floor plan as a reference, along with the last date the chemical was used.

25e. For the most recent application, please briefly describe how the herbicide was applied. [PROMPT: SPRAY (WHERE), OR BROADCAST]

- ☐ Ask this question if 20e = Yes. Different methods of application may influence contaminant exposure levels.

25f. For the most recent application, please briefly describe how the insecticides or pesticides was applied. [PROMPT: CRACK & CREVICE, SPRAY (WHERE), OR BROADCAST]

- ☐ Ask this question if 20f = Yes. Different methods of application may influence contaminant exposure levels.

25g. For the most recent application, please briefly describe how the fungicides was applied. [PROMPT: CRACK & CREVICE, SPRAY (WHERE), OR BROADCAST]

- ☐ Ask this question if 20g = Yes. Different methods of application may influence contaminant exposure levels.

25h. For the most recent application, please briefly describe how the medicated lotions or shampoos was applied and on whom.

- ☐ Ask this question if 20g = Yes. Different methods of application may influence contaminant exposure levels. Please indicate who received the lotion/shampoo application.

26e. For the most recent herbicide application, did CHILD play/stay in the room/place...? [CHECK ALL THAT APPLY]

- ☐ Ask this question if 20e = Yes. Exposure to contaminants is dependent on a child's activity patterns. Specifically, exposure levels may increase if a child plays/stays in the room/place where contaminants are applied. Read the response categories and check all the applicable answers.

26f. For the most recent insecticides or pesticides application, did CHILD play/stay in the room/place...? [CHECK ALL THAT APPLY]

☐ See B26e.

26g. For the most recent fungicides application, did CHILD play/stay in the room/place...?[CHECK ALL THAT APPLY]

☐ See B26e.

26h. For the most recent application, did CHILD play/stay in the room/place...? [CHECK ALL THAT APPLY]

☐ See B26e.

27e. For the most recent application, how much time did CHILD play/stay in the room/place where the herbicide was applied?

☐ If more than one response is checked, ask the respondent to provide an estimate of the time played/stayed in the room/place for each response selected in 26e. For example, 30 minutes immediately after the application and 45 minutes a day after the application.

27f. For the most recent application, how much time did CHILD play/stay in the room/place where the insecticides or pesticides was applied?

☐ See 27e.

27g. For the most recent application, how much time did CHILD play/stay in the room/place where the fungicides was applied?

☐ See 27e.

27h. For the most recent application, how much time did CHILD play/stay in the room/place

where the medicated lotions or shampoos was applied?

☐ See 27e.

28. Where do you store the above chemicals?

☐ Record the location(s) and use the floor plan or sketch as a reference. Make sure the location(s) can be identified on the floor plan or sketch.

29. Do you feel that any of the following activities were too much of a burden, too confusing, or caused too much inconvenience to you or your family?

☐ Get the participant's feedback.

30. Would you be interested in participating in a similar study like this one in the future?

31. What is the highest grade or level of schooling that you have completed?

- ☐ Remember to read the transition script before you ask this question. Some participants may consider the demographic questions sensitive or private.

32. Which of the following best describes your racial background?

33. Which of the following best describes (CHILD'S) racial background?

34. Do you have any comments or suggestions about the study?

Concluding Statement

- ☐ After completing the interview, please do the following: 1) Thank the respondent for his/her participation in the study 2) Complete the Interview Information sheet and 3) Review the entire questionnaire for missing information or errors as soon as possible.

The following are instructions for recording Form #7 (Day Care Center Post-Monitoring Questionnaire). Form #7 is used to provide information on the child's activities and potential exposure during the 48-hour air sampling period, explain variation in the sample, and permit stratification for the monitoring results. Instructions are preceded by a symbol "☐". Also included in the instructions are rationale for each question. Some questions are self-explanatory and do not require instructions.

1.25 Interview Information

- ☐ In order to document the completion of specific study tasks, project staff must complete the Interview Information.

Interviewer ID #: Record your assigned ID#.

Date: Record the date of the data collection.

Time Started: Record the time started data collection.

Time End: Record the time ended data collection.

Results: Circle "1" for "complete" and "2" for "incomplete."

Reasons: If the survey is incomplete, please explain why the survey was not completed.

Please rate the participant's cooperation and your assessment of the overall quality of this interview after you completed the interview with the participant. If you think the quality is questionable or unsatisfactory, please specify the reasons.

- ☐ Read the introduction before you ask the first question.

1. Did the children do anything during the 48-hour period that brought them near any of the following materials, places, or activities? If yes, where & for how long?

- ☐ If yes, please specify the location and duration of exposure.

26. Were any of the following (HEAT & A/C) used in the classroom during the 48-hour period?

- ☐ The information in questions 2 – 3a tells about the level of exposure to contaminants due to heating or air conditioning usage. Use of heat or air conditioning guards against pollutants which may be outside, but it traps and re-circulates the potentially polluted air inside. If a center did not use heating or air conditioning, they may have had the windows and doors open. If this is the case, contaminants from outside may have come in to the center, leading to a different collection of specific pollutants. The number of hours used, and the temperature at which the thermostat was set give information on how long the possible pollutants were being circulated through the center.
- 3. About how many hours during the 48-hour period was it used?**
- 3a. What temperature was set at your thermostat during the 48-hour period?**
- 04. Did anyone smoke cigarettes, cigars, or a pipe inside the classroom during the 48-hour period?**
- ☐ Tobacco smoke in the environment may lead to increased exposure to contaminants for the child. This smoke may also affect the sample collected in the day care center. Air samples and floor samples may contain remnants of tobacco or tobacco smoke.
- 05. About how many cigarettes, cigars, or pipesful of tobacco were smoked inside the classroom during the 48-hour period? (ask the brand name)**
- ☐ The number of cigarettes, cigars, or pipesful of tobacco smoked is related to the amount of environmental tobacco smoke present. Effects are more likely at higher levels of exposure to contaminants. Different brands of tobacco products contain varying levels of contaminants (such as tar and nicotine). Knowing the brand of tobacco product smoke allows for a more accurate measure of the potential contaminants in the child's environment.
- 06. Did someone sweep or vacuum the floor or rugs inside the classroom during the 48-hour period?**
- ☐ Sweeping or vacuuming the rugs or floors in the classroom may lead to increased particle suspension in and around the monitoring area. This may lead to increased contaminant levels in the air, leading to higher potential exposure for the child. Recent vacuuming or sweeping

also alters the contents samples collected by increasing or decreasing the levels of potential pollutants present in the sample.

07. Does the classroom have a daily activities schedule?

- ☐ If Yes, ask for a copy of the schedule. This information will be used to supplement and measure the accuracy of the child daily activity diary. It will also be used to determine the child's usual level of activity. The child's activity level effects the potential for exposure to contaminants in the environment.

08. How often do you follow the daily activities schedule?

9. How often did (CHILD'S NAME) put toys in (his/her) mouth?

- ☐ Read the transition script before you ask the question. The information in questions 9 – 12 determines the effects of the child's hand-to-mouth activity. Chewing or sucking on non-food items such as toys, fingers, or toes may lead to increased exposure to contaminants.

10. Did (he/she) put any things other than toys or foods in (his/her) mouth?

11. What did (he/she) put in (his/her) mouth?

- ☐ **How frequently did (he/she) put (his/her) fingers or hand in (his/her) mouth? Would you say...?**

- ☐ **Do you feel that any of the following activities were too much of a burden, too confusing, or caused too much inconvenience to you?**

- ☐ Get the participant's feedback.

- ☐ **Would you be interested in participating in a similar study like this one in the future?**

- ☐ **What is the highest grade or level of schooling that you have completed?**

- ☐ Remember to read the transition script before you ask this question. Some participants may consider the demographic questions sensitive or private.

Concluding Statement

- ☐ Finally, ask the respondent if s/he has any comments or suggestions about the study.
- ☐ After completing the interview, please do the following: 1) Thank the respondent for his/her participation in the study 2) Complete the Interview Information sheet and 3) Review the entire questionnaire for missing information or errors as soon as possible.

The following are instructions for recording Child Activity Diary (Forms #8, #9, and #10). The Child Activity Diary is used to collect data on the child's activity patterns and information on food consumption patterns from the participant for use in estimating dietary exposure. Form #8 is designed for children who do not attend day care. Form #9 is designed for children who attend day care. Form #10 is designed for the day care teachers to record the daily activities of children who attend day care. All three forms are very similar. Due to the similarity of the three forms, we will discuss instructions for Form #8 in details and go over Forms #9 and #10 for a brief discussion. Instructions are preceded by a symbol "☐". Also included in the instructions are rationale for each question. Some questions are self-explanatory and do not require instructions.

Time Period #1: _____ day, _____ (date)

From the time the air monitor was set up

Until your child finished lunch

- ☐ The child activity diary is broken into five different time periods to reduce the burden of parents who will be tracking and recording the participating child's daily activities. There are two pages of data sheets for each time period.

In order to track exposure levels during different parts of the day, please complete each time period sheet, paying particular attention to the specific time period each sheet covers. Time period #1 begins when the air monitor is set-up by the research team and ends when your child finishes lunch. Project staff: Please indicate the day and date of time period #1.

16. The air monitor was set up at: [][]:[][] AM/ PM

- ☐ Project staff: Please indicate the exact time the air monitor was set-up at your home. Be sure to indicate AM/PM.

17. Your child finished lunch at: [][]:[][] AM/ PM

- ☐ Parent: Please indicate the exact time your child finished lunch. Be sure to indicate AM/PM.

3a. How long (hours, minutes) did your child stay outdoors during this period of time?

- ☐ In order to assess your child's exposure to contaminants, it is important to know how much time he/she spent outside during time period #1.

3b. How long (hours, minutes) did you stay outdoors during this period of time?

- ☐ In order to assess your exposure to contaminants, it is important to know how much time you spent outside during time period #1. This question gathers important information that will be used to compare differences in indoor/outdoor contaminant exposures between children and adults.

4. Did your child do any of the following things during this period of time (Time Period #1)?

- ☐ Children's activities, as well as the objects children come into contact with, affect their exposure to specific contaminants and affect their contaminant exposure levels. In order to understand what activities and objects pose the greatest exposure risk to children, please indicate whether your child participated in the activities listed in this question. Please choose every activity that applies. In addition, please answer questions 4a, 4b, and 4c if your child was away from home during time period #1.

**4a. If your child went somewhere away from home, please answer 4a, 4b & 4c.
Where away from home?**

- ☐ The location of children's activities may affect their exposure to specific contaminants and their exposure levels. For example, different environments may increase or decrease a child's exposure to certain contaminants. As a result, it is important to know whether your child was away from home during time period #1. This information will be used to interpret exposure results, and will be considered in exposure assessments.

4b. How did your child go there?

- ☐ This question examines whether different transportation methods affect exposure to specific contaminants and exposure levels. For example, a child who walks to a friend's home may have a greater exposure risk to certain outdoor contaminants than a child who is driven to a friend's home.

4c. Time needed to get there and return?

- ☐ In order to understand how exposure levels are related to length of exposure (or how long a child is exposed to specific contaminants) please indicate how long it took your child to get from home to his/her destination, and from this destination back home.
- ☐ **Total time away from home?**

- ☐ Please indicate how long your child was away from home. This includes travel time (or the time you calculated in the above question).
- ☐ **Where (which room) did your child spend most time indoors at home?**
- ☐ **Where did your child spend most time outdoors at home?**
- 7a. Did you take your child's hand wipe sample before he/she washed hands and prepared for lunch? Also record Time hand-wipe done and Time child's last handwash before hand-wipe.**
- ☐ The hand wipe samples are used to analyze your child's exposure to contaminants through the skin. Knowing when you took your child's hand wipe sample is important because washing one's hands changes the level of contaminants present on the skin and also changes exposure levels.
- 7b. Did you take your own hand wipe sample? Also record Time hand-wipe done and Time last handwash before hand-wipe.**
- 8a. Did you collect the same amount of foods that your child ate and drank?**
- ☐ In order to accurately estimate contaminant exposure levels from food and drink, an exact sample of what your child ate and drank during time period #1 is needed. A smaller or larger sample of what your child ate and drank will affect the contaminants present and the exposure levels.
- 8b. Did you collect the same amount of foods that you ate and drank?**
- 1.09 Please write down any snacks and meals that your child ate and drank (including water) during this period of time: Child's lunch & snacks.**
- ☐ In order to estimate your child's potential exposure to contaminants in food and water, it is important to know exactly what your child ate and drank during time period #1. Please be specific about the contents of your child's lunch and snacks. For example, if your child had a ham sandwich for lunch, please include any condiments, cheese, or vegetables that were part of the sandwich. A detailed description of this sandwich would be: a ham sandwich on white bread with mustard, Swiss cheese and tomato. In addition, if your child ate and/or drank anything that was not prepared at home, please indicate where the food and/or drink was prepared. For example, if your child had a McDonald's hamburger for lunch, please indicate the hamburger came from McDonald's.

1.10 Please write down any snacks and meals you ate and drank (including water) during this period of time: Your lunch and snacks.

1.11 This question asks about your child's activity level and the kind of surface where he/she spent time on the activities during this period of time (Time Period #1). Please take a moment to think about your child's activities during this period of time (Active Play, Quiet Play, or Napping/Sleeping) and estimate the total amount of time your child spent on each type of surface doing Active Play, Quiet Play, or Napping/Sleeping. Also included in this question is the type of clothing worn by your child during this period of time.

☐ Project Staff: Before completing this section, please read the definitions of active play and quiet play. There are nine activity locations this question references (four indoor locations and five outdoor locations). Follow the steps to complete question #11.

1 First, think about the child's activities during this time period (for example, about 1 hour 45 minutes total for this time period). Think about how much time s/he spent indoors and how much time s/he spent outdoors. **If s/he did not spend time inside the home, go to step #9.**

11.02 If the child spent time indoors, think about approximately how much time the child spent doing something on carpet/rug floor. Write down the time in **Box a** (for example, about 45 minutes).

11.03 Think about the 45 minutes, how much time the child spent doing active play on carpet/rug floor. Check one box for the time (for example, 30 - 60 minutes).

11.04 Think about the 45 minutes, how much time the child spent doing quiet play on carpet/rug floor. Check one box for the time (for example, less than 30 minutes).

11.05 Think about the 45 minutes, how much time the child spent napping or sleeping on carpet/rug floor. Check one box for the time (for example, None).

11.06 Think about the 45 minutes, what type of clothing did s/he wear while playing or doing something on carpet/rug floor. Check all the appropriate boxes for the clothing (for example, Long-sleeve, Short-sleeve, Legs partially covered).

11.07 Repeat **step#2 through step#6** for the child's activities on hard surface floor (**Box b**) and on upholstery and bedding (**Box c**).

11.08 If there are other indoor activities (e.g., went shopping, visited friends's home), record in Box d.

11.09 Think about the child's outdoor activities during this time period. If the child spent time outdoors, think about approximately how much time the child spent doing something on grass. Write down the time in **Box e** (for example, about 30 minutes).

11.10 Think about the 30 minutes, how much time the child spent doing active play on grass surface. Check one box for the time (for example, 30 - 60 minutes).

- 11.11** Think about the 30 minutes, how much time the child spent doing quiet play on grass. Check one box for the time (for example, None).
- 11.12** Think about the 30 minutes, how much time the child spent napping or sleeping on grass. Check one box for the time (for example, None).
- 11.13** Think about the 30 minutes, what type of clothing did s/he wear while playing or doing something on grass. Check all the appropriate boxes for the clothing (for example, Short-sleeve, Legs partially covered).
- 11.14** Repeat **step#9 through step#13** for the child's activities on dirt/soil surface (**Box f**), paved surface (**Box g**), and on wooden deck (**Box h**).
- 11.15** If there are other outdoor activities (e.g., went shopping, in transportation, visited friends's home), record in Box i.

Time Period #2: _____ day, _____ (date)

From the time your child finished lunch

Until his/her bedtime (not napping)

- ☐ In order to track exposure levels during different parts of the day, please complete each time period sheet, paying particular attention to the specific time period each sheet covers. Time period #2 begins when your child finishes lunch and ends when your child goes to bed for the evening (a nap is not considered bedtime). Project staff: Please indicate the day and date of time period #2. Time period #2 is almost identical to Time Period #1. Once you are familiar with the recording of Time period #1, it should be easy to record the rest of the time periods.

1. Your child finished lunch at: [][]:[][] AM/ PM

- ☐ Please indicate the exact time your child finished lunch. Be sure to indicate AM/PM.

2. Your child went to bed at: [][]:[][] AM/ PM

- ☐ Please indicate the exact time your child went to bed. Be sure to indicate AM/PM.

3a. How long (hours, minutes) did your child stay outdoors during this period of time?

3b. How long (hours, minutes) did you stay outdoors during this period of time?

4. Did your child do any of the following things during this period of time (Time Period #2)?

**4a. If your child went somewhere away from home, please answer 4a, 4b & 4c.
Where away from home?**

4b. How did your child go there?

4c. Time needed to get there and return?

Total time away from home?

☐ **Where (which room) did your child spend most time indoors at home?**

☐ **Where did your child spend most time outdoors at home?**

7a. Did you take your child's urine sample after lunch and before the afternoon snack?

☐ Follow the urine collection instructions.

7b. Did you take your own urine sample?

☐ Follow the urine collection instructions.

8a. Did you take your child's hand wipe sample before he/she washed hands and prepared for dinner? Also record Time hand-wipe done and Time child's last handwash before hand-wipe.

8b. Did you take your own hand wipe sample? Also record Time hand-wipe done and Time last handwash before hand-wipe.

9a. Did you take your child's urine sample after dinner and before he/she went to bed?

9b. Did you take your own urine sample?

10a. Did you collect the same amount of foods that your child ate and drank?

10b. Did you collect the same amount of foods that you ate and drank?

- ☐ Please write down any snacks and meals that your child ate and drank (including water) during this period of time: Child's dinner and snacks.
- ☐ Please write down any snacks and meals you ate and drank (including water) during this period of time.
- ☐ This question asks about your child's activity level and the kind of surface where he/she spent time on the activities during this period of time (Time Period #2). Please take a moment to think about your child's activities during this period of time (Active Play, Quiet Play, or Napping/Sleeping) and estimate the total amount of time your child spent on each type of surface doing Active Play, Quiet Play, or Napping/Sleeping. Also included in this question is the type of clothing worn by your child during this period of time.

Time Period #3: _____ day, _____ (date)

From the time your child woke up

Until your child finished lunch

- ☐ In order to track exposure levels during different parts of the day, please complete each time period sheet, paying particular attention to the specific time period each sheet covers. Time period #3 begins when your child wakes up and ends when your child finishes lunch. Project staff: Please indicate the day and date of time period #3.

1. Your child woke up at: : AM/ PM

- ☐ Please indicate the exact time your child woke up. Be sure to indicate AM/PM.

2. Your child finished lunch at: : AM/ PM

- ☐ Please indicate the exact time your child finished lunch. Be sure to indicate AM/PM.

3a. How long (hours, minutes) did your child stay outdoors during this period of time?

3b. How long (hours, minutes) did you stay outdoors during this period of time?

4. Did your child do any of the following things during this period of time (Time Period #3)?**4a. If your child went somewhere away from home, please answer 4a, 4b & 4c.****Where away from home?****4b. How did your child go there?****4c. Time needed to get there and return?****Total time away from home?**☐ **Where (which room) did your child spend most time indoors at home?**☐ **Where did your child spend most time outdoors at home?****7a. Did you take your child's urine sample after he/she woke up?****7b. Did you take your own urine sample after you woke up?****8a. Did you take your child's hand wipe sample before he/she washed hands and prepared for lunch? Also record Time hand-wipe done and Time child's last handwash before hand-wipe.****8b. Did you take your own hand wipe sample? Also record Time hand-wipe done and Time last handwash before hand-wipe.****9a. Did you collect the same amount of foods that your child ate and drank?****9b. Did you collect the same amount of foods that you ate and drank?****10. Please write down any snacks and meals that your child ate and drank (including water) during this period of time: Child's breakfast, lunch, and snacks.**☐ **Please write down any snacks and meals you ate and drank (including water) during this period of time.**

- ☐ This question asks about your child's activity level and the kind of surface where he/she spent time on the activities during this period of time (Time Period #2). Please take a moment to think about your child's activities during this period of time (Active Play, Quiet Play, or Napping/Sleeping) and estimate the total amount of time your child spent on each type of surface doing Active Play, Quiet Play, or Napping/Sleeping. Also included in this question is the type of clothing worn by your child during this period of time.

Time Period #4: _____ day, _____ (date)

From the time your child finished lunch

Until his/her bedtime (not napping)

- ☐ In order to track exposure levels during different parts of the day, please complete each time period sheet, paying particular attention to the specific time period each sheet covers. Time period #4 begins when your child finishes lunch and ends when your child goes to bed for the evening (a nap is not considered bedtime). Project staff: Please indicate the day and date of time period #4.

1. Your child finished lunch at: [] [] : [] [] AM/ PM

- ☐ Please indicate the exact time your child finished lunch. Be sure to indicate AM/PM.

2. Your child went to bed at: [] [] : [] [] AM/ PM

- ☐ Please indicate the exact time your child went to bed. Be sure to indicate AM/PM.

3a. How long (hours, minutes) did your child stay outdoors during this period of time?

3b. How long (hours, minutes) did you stay outdoors during this period of time?

4. Did your child do any of the following things during this period of time (Time Period #4)?

4a. If your child went somewhere away from home, please answer 4a, 4b & 4c.

Where away from home?

4b. How did your child go there?

4c. Time needed to get there and return?

Total time away from home?

☐ **Where (which room) did your child spend most time indoors at home?**

☐ **Where did your child spend most time outdoors at home?**

7a. Did you take your child's urine sample after lunch and before the afternoon snack?

7b. Did you take your own urine sample?

8a. Did you take your child's hand wipe sample before he/she washed hands and prepared for dinner? Also record Time hand-wipe done and Time child's last handwash before hand-wipe.

8b. Did you take your own hand wipe sample? Also record Time hand-wipe done and Time last handwash before hand-wipe.

9a. Did you take your child's urine sample after dinner and before he/she went to bed?

9b. Did you take your own urine sample?

10a. Did you collect the same amount of foods that your child ate and drank?

10b. Did you collect the same amount of foods that you ate and drank?

☐ **Please write down any snacks and meals that your child ate and drank (including water) during this period of time: Child's dinner and snacks.**

- ☐ Please write down any snacks and meals you ate and drank (including water) during this period of time: Your dinner and snacks.
- ☐ This question asks about your child's activity level and the kind of surface where he/she spent time on the activities during this period of time (Time Period #4). Please take a moment to think about your child's activities during this period of time (Active Play, Quiet Play, or Napping/Sleeping) and estimate the total amount of time your child spent on each type of surface doing Active Play, Quiet Play, or Napping/Sleeping. Also included in this question is the type of clothing worn by your child during this period of time.

Time Period #5: _____ day, _____ (date)

From the time your child woke up

Until the time the air monitor was removed

- ☐ In order to track exposure levels during different parts of the day, please complete each time period sheet, paying particular attention to the specific time period each sheet covers. Time period #5 begins when your child wakes up and ends when the research team removes the air monitor. Project staff: Please indicate the day and date of time period #5.

☐ Your child woke up at: [][]:[][] AM/ PM

- ☐ Please indicate the exact time your child woke up. Be sure to indicate AM/PM.

☐ The air monitor was removed at: [][]:[][] AM/ PM

- ☐ Please indicate the exact time the air monitor was removed. Be sure to indicate AM/PM.

3a. How long (hours, minutes) did your child stay outdoors during this period of time?

3b. How long (hours, minutes) did you stay outdoors during this period of time?

4. Did your child do any of the following things during this period of time (Time Period #5)?**4a. If your child went somewhere away from home, please answer 4a, 4b & 4c.****Where away from home?****4b. How did your child go there?****4c. Time needed to get there and return?****Total time away from home?****5. Where (which room) did your child spend most time indoors at home?****6. Where did your child spend most time outdoors at home?****7a. Did you take your child's urine sample after he/she woke up?****7b. Did you take your own urine sample after you woke up?****8a. Did you collect the same amount of foods that your child ate and drank?****8b. Did you collect the same amount of foods that you ate and drank?****9. Please write down any snacks and meals that your child ate and drank (including water) during this period of time: Child's breakfast and snacks.**

☐ Please write down any snacks and meals you ate and drank (including water) during this period of time.

☐ This question asks about your child's activity level and the kind of surface where he/she spent time on the activities during this period of time (Time Period #5). Please take a moment to think about your child's activities during this period of time (Active Play, Quiet Play, or Napping/Sleeping) and estimate the total amount of time your child spent on each type of surface doing Active Play, Quiet Play, or Napping/Sleeping. Also included in this question is the type of clothing worn by your child during this period of time.

Child's Usual Eating Habits

Project staff: explain the dietary survey and provide examples to the respondent. Key information to be conveyed to the respondent includes: 1) questions are about the participating child's usual eating habits over the past year; 2) there are three questions for each fruit item; 3) there are two questions for each vegetable item; 4) one question for all other food items; and 5) the final section is about cooking practice.

F1. Over the past year how often did your child eat(apples, pears, grapes, peaches, nectarines, bananas, cantaloupe, honeydew, watermelon, oranges, tangerines, strawberries, grapefruit, any other kinds of fresh fruit- please specify)?

☐ If F1 = Rarely or Never, you may skip F2 and F3.

F2. How often did you wash the fresh fruits before your child ate them?

F3. How often did you peel fresh fruits before your child ate them?

F4. Over the past year how often did your child eat(broccoli, cauliflower, string beans, green beans, corn, mustard greens, turnip greens, collards, spinach, cabbage, carrots, tomatoes, potatoes, any other kind of fresh vegetables?)

☐ If F4 = Rarely or Never, you may skip F5.

F5. How often did you wash the fresh vegetables before your child ate them (or before you cooked them)?

F6. If you washed fruits or vegetables, please briefly describe how you usually washed them before your child ate them or before you cooked them.

F7. Over the past year how often did your child eat or drink...? (Food items 1 - 47)

F8. Over the past year how often did your child eat foods that were prepared by a restaurant (any kind of restaurant)?

F9. What did you use to cook or heat food?

F10. Was it gas or electric?

- F11. How often did you use any of the following methods to cook or heat foods? (Grill, broil, roast/bake, deep-fry, fry, stir-fry or saute, microwave, steam, stew, slow cooking or simmer, boil, any other?)**
- F12. What kinds of fat did you usually use in cooking (to deep-fry, fry, or stir-fry)? (Vegetable oil, corn oil, peanut oil, butter, margarine, bacon fat, lard, fatback, olive oil, any other?)**
- F13. What did you use to store food?**
- F14. Where and how often did you usually prepare food at home?**