HEI

MICKEY LELAND NATIONAL URBAN AIR TOXICS RESEARCH CENTER

APPENDIX AVAILABLE ON REQUEST

HEI Research Report 130
NUATRC Research Report 7

Relationships of Indoor, Outdoor, and Personal Air (RIOPA)
Part I. Collection Methods and Descriptive Analyses

Weisel, Zhang, Turpin et al

Appendix H. Baseline, Technician Walk-Through, and Activity Questionnaires

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RIOPA Study

BASELINE QUESTIONNAIRE

May 1999

This instrument is based in part on the NHEXAS Questionnaires.

No part of this survey may be used without permission from RIOPA Study. Credit for all sections of this survey should be given to the RIOPA Study team.

BASELINE QUESTIONNAIRE

1. LOCATION DATA – (Technical completed – address/ID label)

A	Street Address:	Apt. #
B	City/State:	Zip Code:
C	Interviewer/Technician ID:	
D	**House Identification Number: _ _ _ _ _ (two letters & three digits, (NJ, TX,or CA))**	

2. ADULT PARTICIPANT

A	Name of Adult Participant:	
B	Completed by:	(if other than participant)
C	Relation to Participant	
D	Date: -- -- / -- -- / -- -- -- -- (month/day/year)	[ENTER FOUR DIGITS FOR YEAR]
E	Home Phone: ( ) -	
F	If not, a telephone were you can receive calls? ( ) -	
G	Work Phone: ( ) -	

3. CHILD PARTICIPANT

(If the child participant is less than 10 years old, provide the name of the individual who is providing the answers for the designated respondent)

A	Name of Child Participant:	
B	Completed by:	(if other than participant)
C	Relation to Participant	
D	Date: -- -- / -- -- / -- -- -- -- (month/day/year)	[ENTER FOUR DIGITS FOR YEAR]
E	Home Phone: ( ) -	
F	If not, a telephone were you can receive calls? ( ) -	
G	Name of School Attended by Child: _____ (CIRCLE ONE) Is it a public school? Y Is it a private school? Y	
H	Name of after school program or daycare attended by child? _____	[ENTER NO IF CHILD DOES NOT ATTEND]

Hello, my name is [INTERVIEWER'S NAME] with the RIOPA Study Team from [INSTITUTION]. We are conducting a survey in cooperation with The Mickey Leland Center for Air Toxics Research on the exposures of people to environmental contaminants. We mailed a letter to this address that explains the importance of your participation. Do you remember receiving this letter? **[IF THE LETTER WAS NOT RECEIVED, HAND A COPY OF THE LETTER TO THE RESPONDENT. ALLOW TIME FOR READING AND ANSWER ANY QUESTIONS.]**

BASELINE ON PARTICIPANTS

First, I would like to ask a few general questions about you [IF THERE ARE TWO PARTICIPANTS IN THE HOUSEHOLD, ADULT AND CHILD, ENTER ANSWERS FOR BOTH OF THEM]

4. [ENTER THE **SEX** OF PARTICIPANTS, ASK IF NOT OBVIOUS.]

	Adult	**Child**
A. Male		
B. Female		

5. What is the **birth year**? [ENTER 4 DIGITS]

	Adult	**Child**
A. Birth year		

The following question asks about your race and cultural background.

6. What is your race? [ENTER ALL THAT APPLY] Write in the country that best resembles your cultural background.

	Adult		Child	
	Race	**Culture**	**Race**	**Culture**
A White				
B Black or African-American				
C American Indian				
D Eskimo or Aleut				
E Asian or Pacific islander				
F Hispanic				
1. Mexican American				
2. Hispanic white				
3. Hispanic black				
4. Hispanic other				
G Other				

7. How much **schooling** have you completed? [READ CHOICES AND ENTER THE HIGHEST LEVEL COMPLETED OR DEGREE RECEIVED. IF CURRENTLY ENROLLED, ENTER THE LEVEL OF THE LAST COMPLETED YEAR.]

Education	**Adult**	**Child**
A. No schooling completed or kindergarten only		
B. Primary or middle school (grade 1 through 8)		
C. Some high school (grade 9 through 11)		
D. High school graduate (Grade 12 or GED)		
E. Some college or technical school.		
F. Undergraduate degree received.		
G. Some graduate school.		
H. Graduate degree received.		

8. How many **hours per week** do you usually work on your jobs and/or attend classes?

	Adult	**Child**
A. At work and/or school in (hr/week)		

9. Which of the following best describes your current **work,** if you work ten or more hours per week, **or school status**? [READ ALL CHOICES FIRST, THEN ENTER ONE]

Work/school status	Adult	Child	
A. Adult working full time			→ **GO TO 10**
B. Adult working part time			→ **GO TO 10**
C. Student and working			→ **GO TO 10**
D. Student without working			→ **GO TO 18**
E. Self employed working at home or full time homemaker			→ **GO TO 18**
F. Out of work just now but usually employed			→ **GO TO 18**
G. Retired			→ **GO TO 18**
H. Disabled or unable to work			→ **GO TO 18**
I. Preschool child			→ **GO TO 18**
J. Child attending summer camp or day camp			→ **GO TO 18**

10. What **type of business** or industry is this? [READ AS EXAMPLES: TV AND RADIO MANUFACTURING, RETAIL SHOE STORE, STATE LABOR DEPARTMENT, FARM, SCHOOL]?

    A. Adult's Primary job: _____

    B. Adult's Secondary job: _____

    C. Child's Primary job: _____

    D. Child's Secondary job: _____

11. What **kind of work** do you perform? [READ AS EXAMPLES, ELECTRICAL ENGINEER, STOCK CLERK TYPIST, FARMER]

    A. Adult, specify, _____

    B. Child, specify, _____

12. What are the most important activities or duties at that job? [READ IF NEEDED, TYPING, KEEPING ACCOUNTS BOOKS, FILING, SELLING CARS, OPERATING PRINTING PRESS, FINISHING CONCRETE]

    A. Adult, specify, _____

    B. Child specify, _____

Now we will ask about **work and school activities** that may have happened in the past week. [IF ON VACATION OR SICK-LEAVE, REFER TO THE LAST WEEK ACTUALLY WORKED.

13. Was most of this work or school **time spent outside** the home?

	Adult	Child
A. Yes		
B. No		
C. Don't know		

14. Do you work in a **dusty** environment?

	Adult	Child
A. Yes		
B. No		
C. Don't know		

15. Do you typically work in a **smoky** environment, like near fires, cooking stoves or heavy cigarette smoking?

	Adult	Child
A. Yes		
B. No		
C. Don't know		

16. Do you typically work with or around **chemicals**, paint, solvents or cleaners?

	Adult	Child
A. Yes		
B. No		
C. Don't know		

17. Which of these best describes the **work area** where you spend **most** of the time while at work? [READ CHOICES]

	Adult	Child
A. Office		
B. Retail/commercial		
C. Industrial		
D. Outdoors		
E. Motor vehicle		
F. Other, specify	_____	_____
G. Don't know		

The next three questions are asked to place your responses in the appropriate group. Please remember that all the data you provide is held in strict confidence. [COMPLETE TABLES]

18. Approximately how tall are you without shoes? [IF THEY REFUSE TO ANSWER ENTER YOUR BEST ESTIMATE]

A. **Adult**	_____ ft _____ in
B. **Child**	_____ ft _____ in

19. Approximately how much do you weigh? [IF THEY REFUSE TO ANSWER ENTER YOUR BEST ESTIMATE]

A. **Adult**	_____ pounds
B. **Child**	_____ pounds

20. Approximately what is the gross annual **income** for all family members in this household? [HAND CARD AND GIVE NUMBER.]

Total income	**Household**
A. Less than $16,500	
B. $16,500 - $24,999	
C. $25,000 – $49,999	
D. $50,000 - $74,999	
E. $75,000 - $99,999	
F. $100,000 or more	
G. Don't know	
H. Refuse	

HOUSING CHARACTERISTICS

The next questions are about your home. Please feel free to ask another member of your household for assistance if necessary.

21. Which best describes this **building**? Include all apartments, flats, etc., even if vacant/ [READ CHOICES AND ENTER ONE.]

A. Mobile home or trailer	
B. One family house or townhouse detached from any other house	
C. One family house or townhouse attached on one side to another unit	
D. One family house or townhouse attached on both sides to houses	
E. Building with 2 apartments, condos or co-ops	
F. Building with 3 or 4 apartments, condos or co-ops	
G. Building with 5 to 9 apartments, condos or co-ops	
H. Building with 10 to 19 apartments, condos or co-ops	
I. Building with 20 to 49 apartments, condos or co-ops	
J. Building with 50 or more apartments, condos or co-ops	
K. Other, Specify _____	

22. How many **rooms** are there in this house or apartment? Do <u>not</u> count bathrooms, porches, balconies, foyers, halls or half-rooms.

Number of rooms? _____

23. Is this house or apartment…. [READ CHOICES AND ENTER ONE.]

A. Owned by you or someone in this household?	
B. Rented?	
C. Occupied without payment, for example in exchange for maintenance?	
D. Subsidized housing?	

24. About when was this building first **built**? If not sure ask other household members [ENTER ONE]

A. 1995 to present	
B. 1985 to 1994	
C. 1975 to 1984	
D. 1960 to 1975	
E. 1945 to 1959	
F. 1900 to 1944	
G. Before 1900	
H. Don't know	

25. When did you **move into** this house or apartment? If not sure ask other household members [ENTER ONE]

A. 1995 to present	
B. 1990 to 1994	
C. 1980 to 1989	
D. 1970 to 1979	
E. 1960 to 1969	
F. 1959 or earlier	
G. Don't know	

26. In the **past year** has there been a major **renovation** to this house or apartment, such as adding a room, putting up or taking down a wall, replacing windows, or refinishing floors? When was the last one? [READ CHOICES, ENTER ONE]

A. Yes, when was the last one?		Date: _____
B. Yes, I don't know when.		
C. Not renovated		
D. Don't know		

27. Within the **last six months** were **rugs, drapes or furniture professionally cleaned**? **Inside the house? When? What items**?

	In the house	Somewhere else		
A. Yes, they were cleaned on			Date: _____	Items: _____
B. Yes, I don't know when				Items: _____
C. Not professionally cleaned				
D. Don't know				

NOTE FOR THE PROGRAMMER: In Q 26A and 27A the date needs to have day as optional but month and year are a must. E.g. 5-25-1999 = May 25, 1999 is OK; 6-1999 = June 1999 is also OK

28. Where do you get **water for general** household use? [ENTER ALL THAT APPLY]

A. Public or commercial water system. Name:_____	
B. Private well	
C. Some other source, specify_____	
D. Don't know	

29. Which **water** source is used most often for **cooking**? [ENTER ONE]

A. Tap or faucet	
B. Bottled water	
C. Both, tap and bottled	

30. Do you **treat or filter** your water at home? [IF YES, ENTER ALL THAT APPLIES]

A. No		→ **GO TO 32**
B. Softener		
C. Charcoal filter		
D. Reverse osmosis		
E. Distilling		
F. Other, Specify _____		

31. Is this treatment

A. For the entire house?	
B. On the kitchen faucet?	
C. Other, Specify _____	

32. Is there a **garage attached** to this house or apartment?

A. YES		
B. NO		→ **GO TO 36**

33. Where is the attached garage? [READ CHOICES AND ENTER ONE.)

A. Underneath the main living quarters	
B. Same level as the main living quarters	
C. Other, Specify _____	

34. Is there a doorway leading directly from the garage into the living quarters? [ENTER ONE]

A. YES	
B. NO	

35. Are automobiles, vans, trucks, or other motor **vehicles** usually parked in this **attached garage**? [ENTER ONE]

A. YES	
B. NO	

36. Are any **gas powered devices** stored in any room, basement, or attached garage in this house or apartment? Do not include cars, vans, or trucks. Do include motorcycles, gas-powered lawnmowers, trimmers, blowers, boat engines, etc. [ENTER ONE]

A. YES	
B. NO	
C. Don't know	

37. Do most of the **windows** in this house or apartment open?

A. YES	
B. NO	

38. Is **air conditioning** (refrigeration) used to cool this house or apartment? [ENTER ONE]

A. YES		
B. NO		→ **GO TO 42**

39. Which **types** of air conditioning units do you use? [READ CHOICES AND ENTER ALL THAT APPLY]

A. Central unit/units		
B. Window or wall unit/units	How many rooms? _____	Which rooms? _____
C. Portable unit/units		
D. Evaporative cooler		
E. Other, specify _____		

40. During what **month** do you usually **start using air conditioning** to cool this house or apartment? During what month do you usually **stop** using air conditioning? [ENTER THE START AND STOP MONTHS]

	Start month	**Stop month**
A. January		
B. February		
C. March		
D. April		
E. May		
F. June		
G. July		
H. August		
I. September		
J. October		
K. November		
L. December		

41. At what **outdoor temperature** do you usually **start** using **air conditioning** to cool this house or apartment?.[ENTER ONE]

A. 70 – 75 °F	
B. 75 – 80 °F	
C. 80 – 85 °F	
D. 85 – 90 °F	
E. 90 – 95 °F	
F. +95 °F	

42. Which **fuels** are used for **heating** this house or apartment. [READ CHOICES IF NEEDED AND ENTER CIRCLE ALL THAT APPLY.]

A. Gas: from underground pipes serving the neighborhood		
B. Gas: bottled or from a tank		
C. Electricity		
D. Fuel oil, kerosene, etc		
E. Coal or coke		
F. Wood		
G. Solar energy		
H. Other fuel, Specify _____		
I. No fuel or no heating used		→ **GO TO 50**
J. Don't know		

43. During what month do you usually **start** using **heating** devices? During what month do you usually **stop** using heating devices? (ENTER START AND STOP MONTH)

	Start month	**Stop month**
A. January		
B. February		
C. March		
D. April		
E. May		
F. June		
G. July		
H. August		
I. September		
J. October		
K. November		
L. December		

44. At what **indoor temperature** do you usually **start** using heating devices, this may be the thermostat setting? [ENTER ONE]

A. Below 64 °F	
B. 64 – 66 °F	
C. 66 – 68 °F	
D. 68 – 70 °F	
E. 70 – 72 °F	
F. 72 – 74 °F	

45. Does this house or apartment have a **central heating** system with ducts that blow air into most rooms?

Yes	
No	

46. Do you use portable **kerosene heaters** in this house or apartment?

A. Yes, Specify how many kerosene heaters did you use last year?		
B. No		→ **GO TO 48**

47. During the heating season **how often** do you use you kerosene heater? [READ LIST AND ENTER ONE]

A. Less than once a month	
B. One to three times per month	
C. One or twice a week	
D. 3-5 times a week	
E. More than 5 times a week	

48. Is a portable or **unvented gas heater** used in this house or apartment?

A. Yes, Specify how many portable or unvented gas heaters did you use last year?		
B. No		→ **GO TO 50**

49. During the heating season **how often** is a portable or unvented gas heater used? [READ LIST AND ENTER ONE]

A. Less than once a month	
B. One to three times per month	
C. One or twice a week	
D. 3-5 times a week	
E. More than 5 times a week	

50. Is a **wood or coal-burning stove** used in this house or apartment? [READ LIST AND ENTER ONE]

A. Yes, Specify how many wood or coal burning stoves are in this house or apartment?		
B. No		→ **GO TO 53**

51. During the heating season **how often** is a wood-burning or coal-burning stove used? [READ LIST AND ENTER ONE]

A. Less than once a month	
B. One to three times per month	
C. One or twice a week	
D. 3-5 times a week	
E. More than 5 times a week	

52. What is usually **burned in the stove**? [READ LIST AND ENTER ONE]

A. Wood	
B. Coal	
C. Artificial logs	
D. Other, specify _____	

53. Is a **fireplace** used in this house or apartment? [READ LIST AND ENTER ONE]

A. Yes, Specify how many fireplaces are in this house or apartment?		
B. No		→ **GO TO 56**

54. During the heating season **how often** is a fireplace used? [READ LIST AND ENTER ONE]

A. Less than once a month	
B. One to three times per month	
C. One or twice a week	
D. 3-5 times a week	
E. More than 5 times a week	

55. **What** is burned in the fireplace? [READ LIST AND ENTER ONE]

A. Wood	
B. Artificial logs	
C. Vented Gas Flame	
D. Other, e.g. Unvented Gas or Coal, Specify _____	

56. Do you use in this house any of the following **products**? [READ LIST, ENTER ALL PRODUCTS USED]

A. Mothballs	
B. Deodorizers	
C. Room or air fresheners	
D. Scented candles	
E. Incense	
F. Other, specify _____	
G. Nothing	

57. Do you have **house pets**? [REAR LIST ENTER, MARK ALL PETS IN THE HOUSE]

A. No pets		→ **GO TO 59**
B. Dogs		
C. Cats		
D. Gerbils		
E. Hamsters		
F. Rabbits		
G. Guinea pigs		
H. Birds		
I. Other, specify _____		

58. Have you any of these **animals** routinely **inside** your home?

A. YES	
B. NO	

[FOR CHILDREN, CONTINUE WITH QUESTION 59, OTHERWISE GO TO QUESTION 61]

59. **How many** hours per week does the child spends routinely **away from the home**, for example, at daycare or an after school program or at work?

	Hours per week away from home	
A. Yes	hr/week	
B. No		→ **GO TO 61**

60. **Where** does the child spend time when away from home, think of last week? [ENTER ALL THAT APPLY]

A. Another home	
B. A relative's home	
C. Daycare /After school center	
D. Other school	
E. Work	
F. Other, specify	_____

61. What methods of **transportation** did you usually use to go to work, school or daycare in the past week? [READ LIST AND ENTER ALL THAT APPLY]

	Adult	**Child**
A. Car, taxi , truck or van		
B. Bus or trolley bus (fuel)		
C. Streetcar or trolley car (electric)		
D. Subway or elevated		
E. Railroad		
F. Ferryboat		
G. Motorcycle		
H. Bicycle		
I. Walk		
J. Worked at home		
K. Other method, specify	_____	_____

62. How much **tobacco smoke** is there where you work or where you go to school most of the time? [ENTER ONE]

	Adult	Child
A. A lot of smoke most of the time		
B. Some smoke most of the time		
C. Some smoke occasionally		
D. Never smoky		
E. Don't know		

HEALTH STATUS

63. Overall, how would you describe your current health? [READ OPTIONS AND ENTER ONE FOR EACH PARTICIPANT]

	Adult	Child
A. Very good		
B. Fair		
C. Poor		

The next questions ask about health conditions that you may have [READ CHOICES, IF YES, PLEASE ASK THE REST OF QUESTION. IF PARTICIPANT IS UNCERTAIN, ENTER **"NO"** AND CONTINUE WITH THE NEXT CONDITION.]

64. [ASTHMA]

	Adult			Child			
	Yes	**No**	**DK**	**Yes**	**No**	**DK**	
A Do you have asthma?							**IF NO or DK → GO TO 65**
B A doctor or nurse told you that you have asthma?							
C Do you have asthma now?							
D How old were you when the first asthma symptom appeared?	___ yr			___ yr			

DK = Don't know

65. [BRONCHITIS]

	Adult			Child			
	Yes	**No**	**DK**	**Yes**	**No**	**DK**	
A Do you have bronchitis?							**IF NO or DK → GO TO 66**
B A doctor or nurse told you that you have bronchitis?							
C Do you have bronchitis now?							
D How old were you when the first bronchitis symptom appeared?	_____ yr			_____ yr			

66. Do you have any other respiratory illness? [IF YES, ENTER NAME OF ILLNESS AND COMPLETE THE TABLE]

Name of illness: _____

	Adult			Child			
	Yes	**No**	**DK**	**Yes**	**No**	**DK**	
A You do not have any respiratory illness							**IF NO or DK → GO TO 67**
B A doctor or nurse told you that you have [NAME]?							
C Do you have [NAME] now?							
D How old were you when the first [NAME] symptom appeared?	____ yr			____ yr			

67. [HEART CONDITION]

	Adult			Child			
	Yes	**No**	**DK**	**Yes**	**No**	**DK**	
A Do you have a heart condition?							**IF NO or DK → END**
B A doctor or nurse told you that you have a heart condition?							
C Do you have a heart condition now?							
D How old were you when the first heart condition symptom appeared or you were first diagnosed?	_____ yr			_____ yr			

END

RIOPA Study

TECHNICIAN WALK - THROUGH QUESTIONNAIRE

May 1999

This instrument is based in part on the NHEXAS Questionnaires. No part of this survey may be used without permission from RIOPA Study. Credit for all sections of this survey should be given to the RIOPA Study team.

TECHNICIAN WALK-TROUGH QUESTIONNAIRE

LOCATION DATA – (Technical completed – address/ID label)

Street Address: _____ Apt # _____

City/State: _____ Zip Code: _____

Interviewer/Technician ID: _____ Date Completed: _____

House Identification Number: _ _ _ _ _ (two letters & three digits NJ, TX, CA)

COMPLETE THIS QUESTIONNAIRE BY OBSERVATION. YOU MAY ASK PARTICIPANT ANY QUESTIONS THAT ARE NOT APPARENT.

QUESTIONS		ANSWERS
1. How many stories (FLOORS) are in this building? (COUNT ONLY FLOORS WITH FINISHED ROOMS FOR LIVING PURPOSES OR FINISHED BASEMENT)		# of floors = _____
2. On which floor do respondents spend most of their waking time?	A	Basement
	B	1st floor
	C	2nd floor
	D	Attic
	E	Other
3. How many rooms are in this house or apartment? DO NOT COUNT BATHROOMS, PORCHES, BALCONIES, FOYERS, OR HALLS.		# of rooms = _____
4. Are the floors of this house/apartment? (CIRCLE ALL THAT APPLY)	A	Hardwood without rugs
	B	Hardwood with area rugs
	C	Wall-to-wall carpet
	D	Cement
	E	Other, specify: _____
5. How many rooms in the house/apartment are carpeted or have rugs covering most (>50%) of the floor surface?		# of rooms carpeted = _____

QUESTIONS	ANSWERS

6. Using the following statements, how would you rate the overall level of cleanliness within the residence? (CIRCLE ONE).	A B C D	Very dirty Some dust = average housekeeping "No" dust = exceptionally clean Additional comments on dust control: _____
7. Indicate nearest intersection (to help identify the house):		_____
8. Exterior siding material (INCLUDING FOUNDATION): (CIRCLE ALL THAT APPLY)	A B C D E F G	Wood Brick Vinyl/aluminum Concrete Block Stucco Asbestos/asphalt Other, specify: _____
9. Types of Foundation: (CIRCLE ALL THAT APPLY)	A B C D E F	Slab Crawl space Combination crawl space/basement Full basement Other, specify: _____ _____ Don't know
10. Does this house have a basement?	A B	Yes No [GO TO 11]

QUESTIONS	ANSWERS	
11. What type of basement is it? [CIRCLE ONE FROM "A TO D", CIRCLE "E" &/OR "F" IF APPLIES]	A	Unfinished with doors usually closed to the rest of the house
	B	Unfinished with doors usually open to the rest of the house
	C	Finished area usually used by household
	D	Finished but usually not in use by household
	E	Are there any unvented appliances, thermos, heaters, stoves, etc
	F	Other characteristic, specify _____ _____
12. Does this residence have a swimming pool?	A	Yes
	B	No [GO TO 13]
13. Where is the swimming pool located?	A	Indoors
	B	Outdoors
14. Does this house or apartment have a hot tub or jacuzzi?	A	Yes
	B	No
15. Are there any plants, factories or refineries in the immediate neighborhood that generate industrial emissions?	A	No
	B	Yes , Specify: _____

QUESTIONS		ANSWERS
16. Are there any of the following in the immediate neighborhood? (CIRCLE ALL THAT APPLY)	A	Dry cleaner within 200 feet?
	B	Dry cleaner within 0.5 mile?
	C	Gas station within 200 feet?
	D	Gas station within 0.5 mile?
	E	Furniture refinisher within 200 feet?
	F	Furniture refinisher 0.5 mile?
	G	Restaurant within 200 feet?
	H	Restaurant within 0.5 mile?
	I	Bakery within 200 feet?
	J	Bakery within 0.5 mile?
	K	Other sources of dust, smoke, odors or vapors within 200 feet? Specify: _____
	L	Other sources within 0.5 mile? Specify: _____
17. What is the approximated horizontal distance from the house or apartment to the nearest? [MARK ALL THAT APPLIES, CIRCLE EITHER M OR Y] (y = yard, m= mile)	A	Major thoroughfare _____ y m
	B	Truck loading/unloading area_____ y m
	C	Airport_____ y m
	D	Flight path _____ y m
	E	Shipping facility _____ y m
	F	Bus depot _____ _____ y m
	G	Train depot _____ y m
	H	Unpaved roads _____ y m
	I	Other, specify_____ y m
18. Are any pets present inside?	A	No
	B	Yes, List: _____
19. What is the house volume, based on the floor plan and on the perimeters measured? [ENTER VALUE IN CUBIC FEET]	A	_____ ft^3

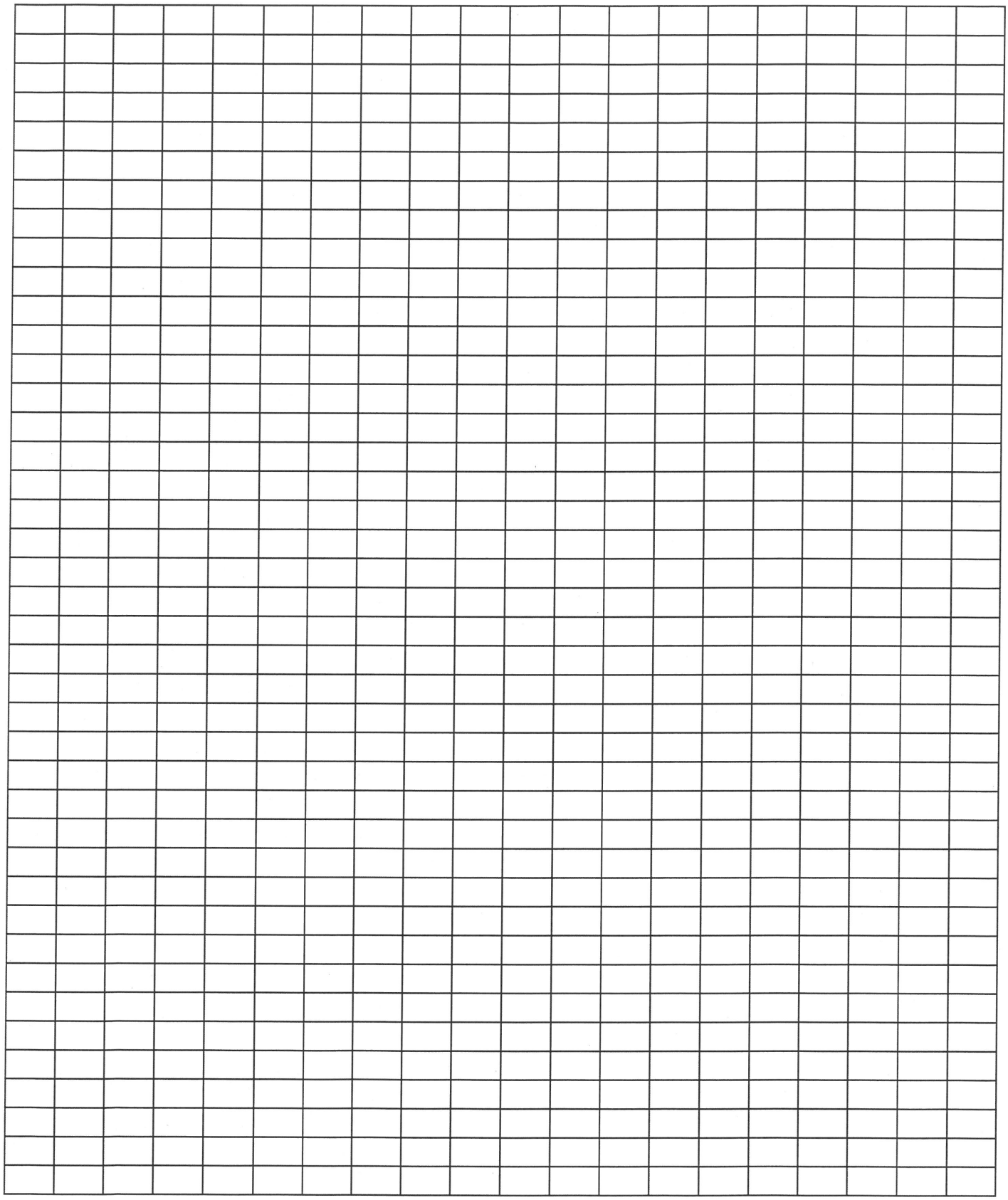
PERFORM THE FOLLOWING TASKS & ENTER THE INFORMATION REQUESTED

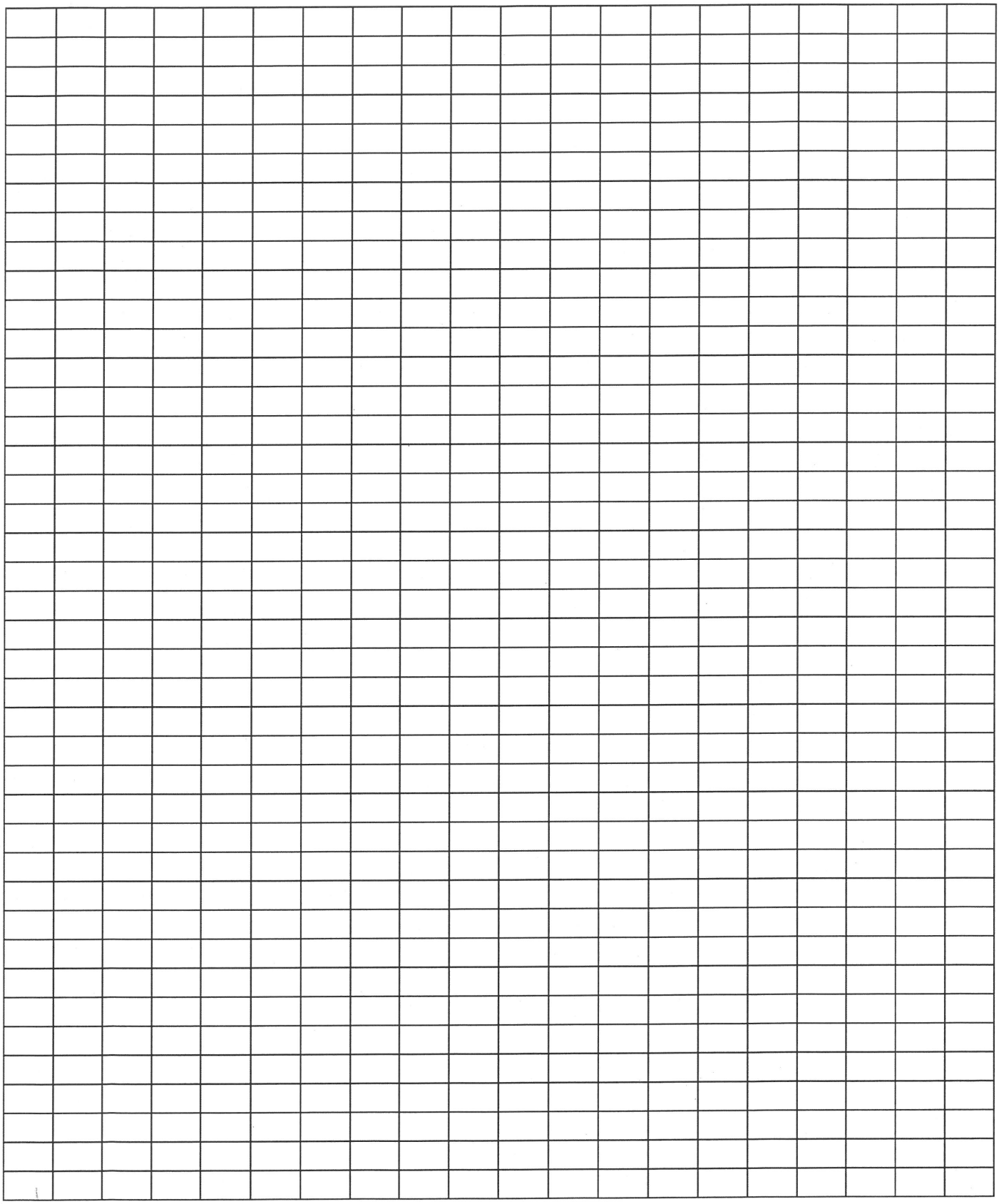
Take a Polaroid photo of the outside of the house including roadway. Also, photograph the indoor monitoring setup after installation is completed. If outdoor monitor has notable features, also take a photo of that installation.	Notes:
Identify location of stored cleaning compounds, paints, and pesticides. Identify on floor plant and describe condition of containers and storage area.	Notes:

DRAW A SKETCH OF THE FLOOR PLAN ON THE GRAPH PAPER BELOW.

Include each of the following:

1. Measure and enter the outside perimeter of the house _____ unit: _____
2. Measure and enter the inside perimeter of the house. _____ unit: _____
3. Location of doors and windows. Label large window areas such as bay, picture, or sliding door windows.
4. Identify location of samplers, CATs, and sources of PFT analysis.
5. Show North on site sketch.
6. Indicate ceiling height if other than 8 ft. Be specific in rooms with vaulted ceilings and include information and maximum ceiling height.
7. Identify and label any obvious source such as vent or gas dryer, solvent storage shed, or other notable feature on the inside or outside of the house.
8. Mark distance and location of the nearest street.
9. Show the location of the central heating and air conditioned inlets and major ventilation units.





RIOPA Study

ACTIVITY QUESTIONNAIRE

May 1999

This instrument is based in part on the NHEXAS Questionnaires.

No part of this survey may be used without permission from RIOPA Study. Credit for all sections of this survey should be given to the RIOPA Study team.

ACTIVITY QUESTIONNAIRE

(IF THE PARTICIPANT IS LESS THAN 10 YEARS OLD, PROVIDE THE NAME OF THE INDIVIDUAL WHO IS GIVING THE ANSWERS FOR THE CHILD)

Name of Participant: _____

Completed by: _____ (if other than participant) _____

Relation to Participant _____

Home Phone: _____ Date: _____

Work Phone: _____

LOCATION DATA – (Technical completed – address/ID label)

Street Address: _____ Apt/Space # _____

City/State: _____ Zip Code: _____

Interviewer/Technician ID: _____ Date Completed: _____

House Identification Number: _ _ _ _ _ (two letters & three digits, NJ, TX, CA)

ACTIVITY QUESTIONNAIRE

Complete the first four questions at the beginning of the study period.

Questions 1 and 2 refer to activities that happened last year.

	Date	No. of Rooms
1. In the **past year** was the inside of this house or apartment **painted**? When was the last one? On how many rooms? [READ CHOICES, ENTER ONE]		
A. Yes, it was painted on		
B. Yes it was painted but I don't know when		
C. Not painted		
D. Don't know		
2. In the **past year** was **new carpeting or rugs** installed? [READ CHOICES, ENTER ONE]		
B. Yes, it was carpeted on		
C. Yes it was installed but I don't know when		
D. No new carpet installed		
E. Don't know		

Questions 3 to 4 ask about things that you may have done or been in contact with, during the week before the study. Please check either No or Yes.

	No	Yes
3. Did you go to the dry cleaners during the past week?		
4. Did you bring home any item from the cleaners that were dry-cleaned during the past week?		

Complete the rest of the questionnaire at the end of the study period (refer only to the last 48 hours).

Questions 5 to 16 ask about things that you may have done or been in contact with, during the 48 hours of the study. Please check either No or Yes.

	No	Yes
5. Did you pump gas (self-service) in the last 48 hours?		
6. Did you spill gasoline on your skin ?		
7. Did you sit in a car while it was being refueled (full service)? [IF NO →GO TO QUESTION 9]		
8. Were the car windows open when refueling?		
9. Did you spend at least 15 minutes in an enclosed garage with a parked car that had the engine running or had been recently parked?		
10. What is the make, model and year of the car? MAKE:_____ MODEL:_____ YEAR:_____		
11. Did you clean a fireplace or wood stove?		
12. Did you start or tend a fire in a fireplace or wood stove?		
13. Did you use an outdoor grill or burn wood, leaves, or trash?		
14. Were any tobacco products smoked in the home?		
15. Did you wear any face or body powder, hair spray, deodorant or perfume sprays, after shave?		
16. Did you use air freshener?		

Questions 17 to XX refer to activities you may have done. For each question, answer No or Yes, if Yes, please enter the <u>amount of time</u> in hours and minutes in the "hrs" and "min" columns. All questions refer to the <u>last 48 hours</u>.

	No	Yes	
		hrs	min
17. Did you travel on roadways or highways in the last 48 hours?			
18. Did you spend time indoors, besides your home, with someone who was smoking?			
19. Did you spend tome in a vehicle with someone who was smoking?			
20. Did you spend time swimming in indoor or outdoor pools?			
21. Did you spend time using cleaning supplies (cleaners, waxes, and polishes) ?			
22. Did you spend time in an enclosed workshop or garage used as a workshop?			
23. Were doors and windows at your house left open for ventilation?			
24. Did you take a bath?			
25. Did you take a shower?			
26. Did any other members of the household took showers? If Yes, enter total time that all members of the household were in shower.			
27. Did you write using felt-tip markers or highlighters?			
28. Were there any candles, oil or incense burnt in the house?			

The next set of questions are about things that may have <u>happened in your home</u>. Please think <u>only about the last 48 hours</u>. In the past 48 hours, the time of the study, were any of the following <u>items used in your home</u>? If Yes write for how long in hours and minutes. If DK if item was used enter D in No column.

		Yes	
	No	hrs	min
29. Was a central air conditioner used?			
A. No DK **GO TO THE NEXT QUESTION**			
B. Yes, At what temperature is it set? T: _____ °F			
What type is it? And for how long was it used?			
C. Re-circulate			
D. Outdoor intake			
E. Don't know.			

	No	Yes hrs	Yes min
30. Have you or anybody in the household used a window or wall air conditioning unit(s) in the last 48 hours?			
A. No DK **GO TO THE NEXT QUESTION**			
If yes, select B, C or D to best describe the type of unit. Then, enter the rooms and the amount of time that the unit was on. [SELECT ONE]			
B. Re-circulating List Rooms _____			
C. Outdoor air List Rooms _____			
D. Don't know List Rooms _____			
31. A whole house attic fan?			
32. An evaporative cooler?			
33. A portable or ceiling fan?			
34. A window fan blowing in, not an A/C unit?			
35. An exhaust fan above the stove or a bathroom fan)?			
36. A wood or coal burning stove or furnace?			
A. No **GO TO THE NEXT QUESTION**			
B. If Yes, for how long?			
C. When you used the wood or coal burning stove did you see or smell unusually heavy smoke or other fumes coming into the room?			

	No	Yes hrs	Yes min
37. An oil burning furnace?			
A. No **GO TO THE NEXT QUESTION**			
B. Yes, for how long?			
C. When you used the oil burning stove did you see or smell unusually heavy smoke or other fumes coming into the room?			
38. A kerosene space heater?			
A. No **GO TO THE NEXT QUESTION**			
B. Yes, for how long?			
C. When you used the kerosene space heater did you see or smell unusually heavy smoke or other fumes coming into the room?			
39. An unvented gas fired space heater?			
A. No **GO TO THE NEXT QUESTION**			
B. Yes, for how long?			
C. When you used the gas fire space heater did you see or smell an unusually heavy smoke or other fumes coming into the room?			
40. Have you or anybody in the household lit a fireplace in the last 48 hours?			
A. No **GO TO THE NEXT QUESTION**			
B. Yes, for how long?			
C. When you used the fireplace did you see or smell an unusually heavy smoke or other fumes coming into the room?			
41. Have you or anybody in the household used the oven or range to warm the kitchen? (eg early in the morning)			
42. A forced-air central heat? If Yes, for how long?			
43. An electrostatic precipitator? If Yes, for how long?			
44. An ultrasonic humidifier? If Yes, for how long?			
45. Other air cleaning devices? If Yes, for how long?			
A. Portable HEPA filter			
B. Odor reducers			
C. Other, specify_____			
46. A dishwasher? If Yes, for how long?			
47. A clothes washer? If Yes, for how long?			

	No	Yes hrs	Yes min
48. A clothes dryer? If Yes, for how long?			
49. Dry cleaning brought into the house? If Yes, how many hours after the start of the study period was brought into the house?			
50. Furniture or floor wax/polish? If Yes, for how long?			
51. Nail polish remover? If Yes, for how long?			

The following questions are about things that <u>you may have used</u> or may have been <u>used by someone near you</u> in the last <u>48 hours</u>. Enter all that applies, if <u>Yes write for how long</u>.

	No	Yes hrs	Yes min
52. Paints or solvents (paint thinners and removers, typewriter corrective fluids)?			
A. No GO TO THE NEXT QUESTION			
B. Did you handle them yourself? If Yes, for how long?			
C. Were you near somebody else who handled them? If Yes, for how long?			
53. Glues and adhesives, such as contact cement, super glues, and aerosol adhesives that contain chemical solvents?			
A No GO TO THE NEXT QUESTION			
B Did you handle them yourself? If Yes, for how long?			
C Were you near somebody else who handled them? If Yes, for how long?			
54. Gasoline lawn mower?			
A No GO TO THE NEXT QUESTION			
B Did you handle them yourself? If Yes, for how long?			
C Were you near somebody else who handled them? If Yes, for how long?			
55. Chain saw or other gasoline equipment?			
A No GO TO THE NEXT QUESTION			
B Did you handle them yourself? If Yes, for how long?			
C Were you near somebody else who handled them? If Yes, for how long?			

	No	Yes hrs	Yes min
56. Sander and/or saw?			
A No GO TO THE NEXT QUESTION			
B Did you handle them yourself? For how long?			
C Were you near somebody else who handled them? For how long?			
57. Pesticides sprayed?			
A No GO TO THE NEXT QUESTION			
B Did you handle them yourself?			
C Were you near somebody else who handled them?			
58. Vacuuming?			
A No GO TO THE NEXT QUESTION			
B Did you handle them yourself?			
C Were you near somebody else who handled them?			
59. Sweeping indoors?			
A No GO TO THE NEXT QUESTION			
B Did you handle them yourself?			
C Were you near somebody else who handled them?			
60. Dusting?			
A No GO TO THE NEXT QUESTION			
B Did you handle them yourself?			
C Were you near somebody else who handled them?			
61. Did you use or were you near somebody else who used cleaning solutions (including household cleaners and chemicals)?			
A No GO TO THE NEXT QUESTION			
Yes, Which ones? _____			
B Did you handle them yourself?			
C Were you near somebody else who handled them?			
62. Gardening			
A No GO TO THE NEXT QUESTION			
B Did you handle them yourself?			
C Were you near somebody else who handled them?			

	No	Yes hrs	Yes min
63. Woodworking?			
A No GO TO THE NEXT QUESTION			
B Did you handle them yourself?			
C Were you near somebody else who handled them?			
64. Metal working/welding?			
A No GO TO THE NEXT QUESTION			
B Did you handle them yourself?			
C Were you near somebody else who handled them?			
65. Broiling, smoking, grilling or frying <u>inside</u> the house?			
A No GO TO THE NEXT QUESTION			
B Did you handle them yourself?			
C Were you near somebody else who handled them?			
D Did you turn on the kitchen or stove exhaust fan?			
66. Broiling, smoking, grilling or frying <u>outside</u> the house?			
A No GO TO THE NEXT QUESTION			
B Did you handle them yourself?			
C Were you near somebody else who handled them?			
D What is the distance from the grill to the house ? _____ ft			
67. During the last 48 hours (the study period) did you or anyone else <u>park</u> a car or other motor vehicle in			
A. A garage attached to your home?			
B. A detached garage?			
C. A carport attached to your home?			
68. During the last 48 hours (the study period) did you or anyone else <u>start</u> a car or other motor vehicle in:			
A A garage attached to your home?			
B A detached garage?			
C A carport attached to your home?			

	Yes	No	D/N
69. During the last 48 hours (the study period) was there any diesel vehicles parked around the house?			
70. During the last 48 hours (the study period) have you operated or been near diesel engines, e.g. bus terminal, truck stop)			

N/A: Not Applicable D/N: Don't know

END