The information you provide on this form will allow us to study how the structure and location of your home are related to your exposure to air pollutants. All responses are voluntary.

Section 1: All MESA Air Participants

The first two questions ask you about streets near your home. Please answer for the busiest street next to your home, where there is no building between your home and the street.

1. Are your bedroom windows facing an:
   - [ ] Alley
   - [ ] Side street with low traffic
   - [ ] Side street with considerable traffic
   - [ ] Busy road
   - [ ] Highway
   - [ ] No street

2. Are your living room windows facing an:
   - [ ] Alley
   - [ ] Side street with low traffic
   - [ ] Side street with considerable traffic
   - [ ] Busy road
   - [ ] Highway
   - [ ] No street

The next few questions will ask about your travel time during the day.

3. On average, how many hours each day do you spend doing the following during your travel time:
   a. walking or biking [ ] hours [ ] minutes
   b. in a private car or taxi [ ] hours [ ] minutes
   c. on a bus [ ] hours [ ] minutes
   d. on a train or subway [ ] hours [ ] minutes
   e. other [ ] hours [ ] minutes please specify: 

4. On average, what percent of your travel time do you spend on or next to:
   - [ ] Participant does not leave home in a typical week (Skip to Question 6)
   - Freeways, expressways, highways, toll roads, etc. [ ] %
   - Other major, heavily traveled roads or streets [ ] %
   - Residential or lightly traveled roads, streets, or paths [ ] %
5. What traffic condition best describes the majority of your travel time during the day?
   - Light traffic, moving at the speed limit
   - Heavy traffic, moving below the speed limit
   - Congested or "stop and go"
   - Heavy traffic, moving at or above the speed limit
   - Not applicable

6. Do you spend more than four weeks per year living at another address (secondary residence)?
   - Yes
   - No

   6a. How many weeks per season do you spend at your secondary residence during:
   - Winter (Dec. - Feb.)
   - Spring (Mar-May)
   - Summer (Jun-Aug)
   - Fall (Sep-Nov)

   Total Weeks:

   6b. Is total weeks at secondary residence 8 weeks or more?
   - Yes Complete section 2
   - No

7. The address used to complete your last Home Information Questionnaire is:
   Street City, State Zip

   Have you moved from this address?
   - Yes Complete sections 3 and 5
   - No

8a. If an activity address is provided below:
   During a previous MESA interview, you said that you spend 2 hours or more per day or 10 hours or more per week at a single location (working, school, volunteering, socializing, etc.) or doing a specific activity away from your home. Do you still spend time at this address?

   Street City, State Zip
   - No Go to question 8b
   - Yes

     8ai. When did you stop going to that address?  ____/______
     Month Year

     8aii. You previously reported spending XX hours per week at this address. Has the amount of time that you spend at this location changed?
     - Yes Complete section 5
     - No

8b. If activity address is missing or no longer used:
   Do you usually spend 2 hours or more per day or 10 hours or more per week at a single location (working, school, volunteering, socializing, etc.) or doing a specific activity away from your household?

   - Yes Complete sections 4 and 5
   - No
9. Since your last MESA interview, have your daily activities changed because:
   a. you have become a primary caregiver for a friend or relative?
   b. you have stopped acting as a primary caregiver for a friend or relative?
   c. someone has moved into or out of your home?
   - Yes (to a, b or c) Complete section 5
   - No

Section 2: Secondary Residence Characteristics

You mentioned that you spend at least 8 weeks per year at your secondary residence. The next few questions ask about the structure and characteristics of your secondary residence.

10. Do you use air conditioning in your secondary residence?
   - Yes
   - No (Skip to Question 11)

10a. What type of air conditioning does your secondary residence have?
   - Central A/C
   - Window unit(s). How many of them are there?
   - Other, please specify: [ ]

10b. How often was the air conditioning used in the past July?
   - Not used at all
   - A few days a month
   - More than half of the days of the month, but less than daily
   - Almost daily (thermostat used also)
   - Other, please specify: [ ]

10c. How often was the air conditioning used in the past January?
   - Not used at all
   - A few days a month
   - More than half of the days of the month, but less than daily
   - Almost daily
   - Other, please specify: [ ]

11. Please indicate the number of windows you usually had open in your secondary residence in the past summer and winter.

11a. In SUMMER (Jun. - Aug.): How many windows did you usually have open?
   - None
   - All
   - Some (Skip to Question 11b)

11b. In WINTER (Dec. - Feb.): How many windows did you usually have open?
   - None (Skip to Question 12)
   - All
   - Some
12. Is an air cleaner/filter used in your secondary residence (stand-alone or central)?
   - Yes
   - No (Skip to Question 13)

12a. What type of air cleaner/filter is used? (please check all that apply)
   - HEPA filter
   - Electrostatic precipitator
   - Negative ion generator
   - Ozone generator
   - Regular or fiberglass furnace filter
   - Don't know
   - Other, please specify: __________

12b. How often is the air cleaner/filter used?
   - Never
   - A few days a month
   - More than half of the days of the month, but less than daily
   - Every day or nearly every day
   - Don't know

Section 3: Primary Residence Characteristics
The next questions refer to your primary residence.

13. What type of building do you live in?
   - Single family or free-standing (Skip to Question 14)
   - Manufactured home/mobile home (Skip to Question 14)
   - Row house/townhouse/brownstone
   - Duplex/triplex, free-standing
   - High rise apartment/condo/coop (4 floors or more)
   - Low rise apartment/condo/coop (1-3 floors)
   - Other, please specify: __________

13a. What floor do you live on?
   - Basement
   - Ground floor
   - Second floor
   - Third floor or higher. Which floor? __________

14. What is the approximate age of your building?
   Age of building: ____-____ or Year built: ____-____

15. Is there an attached garage or an underneath garage in your building?
   - Yes
   - No (Skip to Question 16)

15a. Is this garage used for (choose one):
   - Parking one car
   - Parking two cars
   - Parking more than two cars
   - Storage only
   - Other, please specify: __________
16. Do you use air conditioning in your residence?
   - Yes
   - No (Skip to Question 17)

16a. What type of air conditioning does your residence have?
   - Central A/C
   - Window unit(s). How many of them are there?
   - Other, please specify:

16b. How often was the air conditioning used in the past July?
   - Not used at all
   - A few days a month
   - More than half of the days of the month, but less than daily
   - Almost daily (thermostat used also)
   - Other, please specify:

16c. How often was the air conditioning used in the past January?
   - Not used at all
   - A few days a month
   - More than half of the days of the month, but less than daily
   - Almost daily
   - Other, please specify:

17. Approximately how cool do you keep your residence in the summer during the day and overnight?

   During the day (when at home): Temperature: ____________
   - degrees F
   - degrees C

   During the night: Temperature: ____________
   - degrees F
   - degrees C

18. What are the heating sources used in your residence? Please tell me of any that are used at least once a month.

<table>
<thead>
<tr>
<th>Source</th>
<th>Yes</th>
<th>No</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiators (steam or hot water)</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Forced air (vents)</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Electric space heater</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Baseboard heat</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Gas space heater</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Kerosene space heater</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Wood burning stove</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Fireplace</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Open stove</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
   - Other, please specify:    | O   | O  | O          |
19. Approximately how warm do you keep your residence in the winter during the day and overnight?

<table>
<thead>
<tr>
<th>During the day (when at home):</th>
<th>Temperature:</th>
<th>°F</th>
<th>°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the night:</td>
<td>Temperature:</td>
<td>°F</td>
<td>°C</td>
</tr>
</tbody>
</table>

20. Does your residence have storm windows?

- Yes
- No [Skip to Question 21]
- I don’t know [Skip to Question 21]

20a. Do you use storm windows on all, most, or a few of your windows during any season?

- All
- Most
- A Few

21. Does your residence have double pane windows?

- Yes
- No [Skip to Question 22]
- I don’t know [Skip to Question 22]

21a. Are there double pane windows on all, most, or a few of your windows?

- All
- Most
- A Few

22. Please indicate the number of windows you usually had open in your residence in the past summer and winter and how often you usually left the windows open.

In **SUMMER** (Jun. - Aug.):

22a. How many windows did you usually have open?

- None [Skip to Question 22c]
- All
- Some

22b. How often did you open windows?

- A few days a month
- More than half of the days of the month, but less than daily
- Almost daily
- Other, please specify:  

---

*Exam 5 MESA Air Questionnaire -- Page 6*
**In WINTER (Dec. - Feb.):**

### 22c. How many windows did you usually have open?
- None  **(Skip to Question 23)**
- All
- Some

### 22d. How often did you open windows?
- A few days a month
- More than half of the days of the month, but less than daily
- Almost daily
- Other, please specify: ____________

### 23. Is an air cleaner/filter used in your residence (stand-alone or central)?
- Yes  
- No  **(Skip to Question 24)**
- Don't know  **(Skip to Question 24)**

#### 23a. What type of air cleaner/filter is used? (please check all that apply)
- HEPA filter
- Electrostatic precipitator
- Negative ion generator
- Ozone generator
- Regular or fiberglass furnace filter
- Don't know
- Other, please specify: ____________

#### 23b. How often is the air cleaner/filter used?
- Never
- A few days a month
- More than half of the days of the month, but less than daily
- Every day or nearly every day
- Don't know
Section 4: Activity

The next few questions refer to the activity that perform 2 hours or more per day, or 10 hours or more per week.

24. If you go to a specific location for your activity, what is the street address? (Please give physical address; no PO Box)
   - Not Applicable; I do not go to a specific location. (Skip to Question 26)

   Street
   City State ZIP

24a. Is this an indoor location or an outdoor location?
   - Indoor location
   - Outdoor location

25. What do you do at this location?
   - School (Skip to Question 26)
   - Work
   - Volunteer
   - Other, please specify:

   25a. Briefly describe the industry you work or volunteer in:

   25b. Briefly describe your activities when you work or volunteer:

   25c. Are you regularly exposed there to vapors, gases, dusts, or fumes?
   - Yes
   - No

26. How many people smoke when they are in your immediate work/volunteer area or during your specified activity?
Interviewer: Did the Participant give a specific indoor location for Question 24? (i.e. does the participant work/volunteer or perform an indoor activity for more than 2 hours per day or 10 hours per week?)

○ If yes, continue with question 27.

○ If no, skip to Question 31.

You previously answered that you work, volunteer, or do an activity indoors. The next questions ask for information on the characteristics of the building at that location.

27. What type of building do you go to?

○ Small residential style building (3 floors or fewer)
○ Small retail style business (strip mall, neighborhood store, etc.)
○ Large retail style building (large mall, etc.)
○ Office-type building (low or high-rise)
○ Industrial or warehouse
○ Other, please specify: ______________________

28. Does the building use mechanical or natural ventilation?

○ Mechanical (for example, central heating and/or air conditioning)
○ Natural (for example, open windows and doors)
○ Both
○ Other, please specify: ______________________
○ Don't know

29. Is there a parking garage or underground garage in your building?

○ Yes
○ No
○ Don't know

30. If the building uses windows and doors for ventilation when you are there, how often are the windows or doors open during:

<table>
<thead>
<tr>
<th></th>
<th>Never (0%)</th>
<th>Almost Never (25%)</th>
<th>Sometimes (50%)</th>
<th>Often (75%)</th>
<th>Always (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter (Dec - Feb):</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Summer (Jun - Aug):</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
○ Building does not use window and doors for ventilation
### Section 5: Time/Location

31. We are now going to talk about how you typically spend your time in the summer and in the winter. The information you describe in the next questions will be used to estimate your exposure to indoor and outdoor air pollution from different locations. While no one does exactly the same thing each and every week, try to think about the habits and routines you have, on average. With that in mind, let's start with a typical week in the winter, December through February. Let's begin with Sunday. On most Sundays in the winter, do you leave your house, including just going outside in your yard or patio? If so, what time do you usually leave your house on a Sunday?

#### WINTER (Dec. - Feb.)

<table>
<thead>
<tr>
<th>CODE</th>
<th>LOCATION DESCRIPTION</th>
<th>SUN or Typical Weekend Day</th>
<th>MON or Typical Weekday</th>
<th>TUES</th>
<th>WED</th>
<th>THURS</th>
<th>FRI</th>
<th>SAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Home indoors (including sleeping)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2</td>
<td>Home outdoors</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3</td>
<td>Work, volunteer, school, indoors</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4</td>
<td>Work, volunteer, school, outdoors</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5</td>
<td>In transit (car, bus, train, bike, walk, etc.)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6</td>
<td>Other indoor places</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7</td>
<td>Other outdoor places</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

**TOTAL**

**Did you round?**
- ☐ Yes
- ☐ No

Interviewer should total the hours

Interviewer to complete if the total does not equal 24 hours

**Is the amount of time you spend indoors and outdoors daily the same in the summer as in the winter?**
- ☐ Yes → END of questionnaire
- ☐ No → skip question 33
Now think about the activities you do or the places that you usually visit in an average week during the summer, June through August. Again, let’s start with Sunday. On most Sundays in the summer, do you leave your house, including just going outside in your yard or patio? If so, what time do you usually leave your house on a Sunday during the summer?

### NUMBER OF HOURS EACH DAY

<table>
<thead>
<tr>
<th>CODE</th>
<th>LOCATION DESCRIPTION</th>
<th>SUN or Typical Weekend Day</th>
<th>MON or Typical Weekday</th>
<th>TUES</th>
<th>WED</th>
<th>THURS</th>
<th>FRI</th>
<th>SAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Home indoors (including sleeping)</td>
<td>☐ Sun</td>
<td>☐ Mon</td>
<td>☐ Mon</td>
<td>☐ Tues</td>
<td>☐ Wed</td>
<td>☐ Wed</td>
<td>☐ Thurs</td>
</tr>
<tr>
<td>2</td>
<td>Home outdoors</td>
<td>☐ Sun</td>
<td>☐ Mon</td>
<td>☐ Mon</td>
<td>☐ Tues</td>
<td>☐ Wed</td>
<td>☐ Wed</td>
<td>☐ Thurs</td>
</tr>
<tr>
<td>3</td>
<td>Work, volunteer, school, indoors</td>
<td>☐ Sun</td>
<td>☐ Mon</td>
<td>☐ Mon</td>
<td>☐ Tues</td>
<td>☐ Wed</td>
<td>☐ Wed</td>
<td>☐ Thurs</td>
</tr>
<tr>
<td>4</td>
<td>Work, volunteer, school, outdoors</td>
<td>☐ Sun</td>
<td>☐ Mon</td>
<td>☐ Mon</td>
<td>☐ Tues</td>
<td>☐ Wed</td>
<td>☐ Wed</td>
<td>☐ Thurs</td>
</tr>
<tr>
<td>5</td>
<td>In transit (car, bus, train, bike, walk, etc.)</td>
<td>☐ Sun</td>
<td>☐ Mon</td>
<td>☐ Mon</td>
<td>☐ Tues</td>
<td>☐ Wed</td>
<td>☐ Wed</td>
<td>☐ Thurs</td>
</tr>
<tr>
<td>6</td>
<td>Other indoor places</td>
<td>☐ Sun</td>
<td>☐ Mon</td>
<td>☐ Mon</td>
<td>☐ Tues</td>
<td>☐ Wed</td>
<td>☐ Wed</td>
<td>☐ Thurs</td>
</tr>
<tr>
<td>7</td>
<td>Other outdoor places</td>
<td>☐ Sun</td>
<td>☐ Mon</td>
<td>☐ Mon</td>
<td>☐ Tues</td>
<td>☐ Wed</td>
<td>☐ Wed</td>
<td>☐ Thurs</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>☐ Sun</td>
<td>☐ Mon</td>
<td>☐ Mon</td>
<td>☐ Tues</td>
<td>☐ Wed</td>
<td>☐ Wed</td>
<td>☐ Thurs</td>
</tr>
</tbody>
</table>

**Was the total equal to 24 hours?**

- Yes
- No

---

For MESA Field Center Use Only:

- **Administered:**
  - O In Clinic
  - O Via Telephone

- **Interviewer ID:**
- **Reviewer ID:**
- **Data Entry ID:**