

**Appendix D: HOUSEHOLD QUESTIONNAIRE**

1A) Date of interview: \_\_\_\_/\_\_\_\_/\_\_\_\_ (MM/DD/YY)  
 1B) Time of interview: \_\_\_\_\_ (am/pm)  
 1C) Interviewer's name:.....

2A) Zone:  1-mile       2-mile  
 2B) Cluster #: \_\_\_\_\_  
 2C) Household #: \_\_\_\_\_ (maintain consistency with TRACKING FORM in Appendix A)

3) Household type:  
 Apartment     **Attached** house       **Detached** house       Other: \_\_\_\_\_

**Demographic Questions**

4) How many adults 18 or older live in your household? \_\_\_\_\_  **DK**       **Refused**

5) Looking at these age categories, how many people in your household fall into each group?  
 \_\_ ≤ 2yrs    \_\_ 3-5yrs    \_\_ 6-9yrs    \_\_ 10-17yrs    \_\_ 18-25yrs    \_\_ 26-40yrs  
 \_\_ 41-65yrs    \_\_ 66-75yrs    \_\_ ≥76yrs       **DK**       **Refused**

**Health Outcomes**

6) In the past 30 days, have you or any household members experienced any of the following: **(Please check all that apply.)**

Category	You	Household Member	Age(s) of household members with symptoms	Symptoms
6A) Respiratory symptoms /conditions  <input type="checkbox"/> <b>DK</b> <input type="checkbox"/> <b>Refused</b>	<input type="checkbox"/>	<input type="checkbox"/>		Sore throat
	<input type="checkbox"/>	<input type="checkbox"/>		Nasal congestion
	<input type="checkbox"/>	<input type="checkbox"/>		Sinus infection
	<input type="checkbox"/>	<input type="checkbox"/>		Shortness of breath / difficulty breathing
	<input type="checkbox"/>	<input type="checkbox"/>		Cough
	<input type="checkbox"/>	<input type="checkbox"/>		Wheezing
	<input type="checkbox"/>	<input type="checkbox"/>		Worsening of existing asthma symptoms
	<input type="checkbox"/>	<input type="checkbox"/>		Worsening of existing emphysema or chronic obstructive pulmonary disease (also known as COPD)
	<input type="checkbox"/>	<input type="checkbox"/>	n/a	None
6B) Cardiovascular symptoms /conditions  <input type="checkbox"/> <b>DK</b> <input type="checkbox"/> <b>Refused</b>	<input type="checkbox"/>	<input type="checkbox"/>		Chest pain
	<input type="checkbox"/>	<input type="checkbox"/>		Irregular heart beat
	<input type="checkbox"/>	<input type="checkbox"/>		Worsening of existing high blood pressure
	<input type="checkbox"/>	<input type="checkbox"/>		Worsening of any existing chronic cardiovascular disease
	<input type="checkbox"/>	<input type="checkbox"/>		Worsening of any existing diabetes (e.g. glucose control)
	<input type="checkbox"/>	<input type="checkbox"/>	n/a	None
6C) Other Presentations  <input type="checkbox"/> <b>DK</b> <input type="checkbox"/> <b>Refused</b>	<input type="checkbox"/>	<input type="checkbox"/>		Skin irritations including rash
	<input type="checkbox"/>	<input type="checkbox"/>		Any eye conditions or irritations
	<input type="checkbox"/>	<input type="checkbox"/>		Nausea and/or vomiting
	<input type="checkbox"/>	<input type="checkbox"/>		Diarrhea
	<input type="checkbox"/>	<input type="checkbox"/>		Headache
	<input type="checkbox"/>	<input type="checkbox"/>		Heat-related illness such as hyperthermia
	<input type="checkbox"/>	<input type="checkbox"/>		Other (specify): _____
	<input type="checkbox"/>	<input type="checkbox"/>	n/a	None

Category	You	Household Member	Age(s) of household members with symptoms	Symptoms
7) Has anyone in your household experienced any of the following in the last 30 days?  <input type="checkbox"/> <b>DK</b> <input type="checkbox"/> <b>Refused</b>	<input type="checkbox"/>	<input type="checkbox"/>		Difficulty concentrating
	<input type="checkbox"/>	<input type="checkbox"/>		Trouble sleeping/nightmares
	<input type="checkbox"/>	<input type="checkbox"/>		Dizziness
	<input type="checkbox"/>	<input type="checkbox"/>		General weakness
	<input type="checkbox"/>	<input type="checkbox"/>		Loss of appetite
	<input type="checkbox"/>	<input type="checkbox"/>		Agitated behavior
	<input type="checkbox"/>	<input type="checkbox"/>		Increased alcohol consumption
	<input type="checkbox"/>	<input type="checkbox"/>		Increased drug use
	<input type="checkbox"/>	<input type="checkbox"/>		Other (specify): _____
	<input type="checkbox"/>	<input type="checkbox"/>	n/a	None

8A) Do you have health insurance?

- Yes       No       DK       Refused

8B) Do you have a regular physician?

- Yes       No       DK       Refused

8C) Do you have transportation to receive medical care?

- Yes       No       DK       Refused

8D) **If yes to questions 6A-C or 7:** did you or any member of your household seek help for any of the above physical or mental health conditions at any of the following locations? Please check all that apply:

- Community health center       Mental health clinic       Family doctor       ER       Social Services  
 Urgent care center       Free clinic       Other (specify): \_\_\_\_\_  
 Name of clinic \_\_\_\_\_  
 No       DK       Refused

8E) If no, why not?

- Symptoms not bad enough       Have no insurance       Have no physician       Have no transportation  
 Other (specify): \_\_\_\_\_       DK       Refused

9A) Do you, your household members, or any visitors smoke in your home?

- Yes       No       DK       Refused

9B) How frequently do you, your household members, or any visitors smoke in your home?

- Never       ≥ Once daily       ≥ Once weekly       ≥ Once monthly       DK       Refused

10) Do you use a gas stove for cooking in your home?

- Yes       No       DK       Refused

**SURVEY CONTINUED ON NEXT PAGE**

11A) Is an air cleaner or purifier regularly used inside your home?

- Yes       No       DK       Refused

11B) If **YES**, looking at the options below, what type is it? (**check all that apply**)

- DK       Refused
- Ionic Breeze or similar device
  - Ozone generator
  - Filter - Is the filter on an:
    - air conditioning (AC) system
    - other device; please specify: \_\_\_\_\_
  - Other (please specify): \_\_\_\_\_

12A) Is an air conditioning (AC) system used inside your home?

- Yes       No       DK       Refused

12B) If **YES**, looking at the options below, what type is it? (**check all that apply**)

- DK       Refused
- Central AC system
  - Window unit
  - Other (please specify): \_\_\_\_\_

12C) Do you use natural gas to heat your home or water boiler?

- Yes       No       DK       Refused

13) In the last 3 days: today or yesterday or the day before yesterday, have you either breathed fumes from or had any of the following on your skin (**check all that apply**)?

- DK       Refused
- Air fresheners or room deodorizer
  - Gasoline
  - Bug or insect spray
  - Paint thinner, brush cleaner, or furniture stripper
  - Varnish, lacquer, wood stain, or wet paint
  - Solid toilet bowl deodorants
  - Mothballs
  - Fingernail polish or remover
  - Burning candles or incense
  - Other types or sources of fumes (please specify): \_\_\_\_\_

**Now I am going to ask you questions about yourself only, not about other members in the household.**

14) Are you a current smoker?

- Yes       No       DK       Refused

15) What is your age and sex?

- Age: \_\_\_\_       DK       Refused       Male       Female       Refused

16) How long have you lived in the Eight Mile community? \_\_\_\_\_ (specify days / months / years)

- DK       Refused

17A) What year did you move into this home? \_\_\_\_\_ (yyyy, e.g. 2010)  DK  Refused

17B) If moved here within the past 12 months, then ask:  
What month did you move in? \_\_\_\_\_ (mm, eg 06 for June)  DK  Refused

18) What is your race/ethnicity?  
 White, Non-Hispanic  Black, Non-Hispanic  Hispanic  Asian  
 Other: \_\_\_\_\_  DK  Refused

19) Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?  
Number: \_\_\_\_\_  DK  Refused

20) Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?  
Number: \_\_\_\_\_  DK  Refused

21) During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?  
Number: \_\_\_\_\_  DK  Refused

22) Looking at the options below, what is your estimated annual household income in 2012?  
 \$0-<\$5,000  \$5,000-<\$10,000  \$10,000-<\$15,000  
 \$15,000-<\$20,000  \$20,000-<\$25,000  \$25,000-<\$35,000  
 \$35,000-<\$50,000  \$50,000-<\$75,000  >\$75,000  DK  Refused

23A) What is your current employment status?  
 Employed  Under-employed  Unemployed - seeking work  DK  Refused  
 Unemployed - student  Unemployed - retired  Unemployed - homemaker

**If employed, ask:**

23B) Do you work within or near the Eight Mile community?  
 Yes  No  DK  Refused

23C) What type of work do you do?  
Specify: \_\_\_\_\_  DK  Refused

**SURVEY CONTINUED ON NEXT PAGE**



Now I am going to ask you a few questions about the **strongest** odor you smell.

25D) Where do you smell the **strongest** odor?

- Indoors, at home             Outdoors, at home  
 Indoors, at work             Outdoors, at work  
 Other (please specify): \_\_\_\_\_  DK             Refused

25E) On a scale of 1 to 10, 1 being ok, to 10 being extremely bad, how severe is the odor or smell at its strongest?

- 1     2     3     4     5     6     7     8     9     10             DK             Refused

25F) Has the severity of the odor or smell changed since you first noticed it?

- Decreased     Increased     No Change             DK             Refused  
 Other (please specify): \_\_\_\_\_

25G) Looking at the options below, what times of the day do you smell the odor (**check all that apply**)?

- 6am - <7:59am             8am - <9:59am             10am - <11:59am             12pm - < 1:59pm  
 2pm - <3:59pm             4pm - <5:59pm             6pm - <7:59pm             8pm - <9:59pm  
 10pm - <11:59pm             12am - <5:59am             DK             Refused

25H) Is the smell worse during any of the following weather conditions (**check all that apply**)?

- Warmer,  $\geq 95^{\circ}\text{F}$              High humidity             Rainy             Sunny             Windy  
 Not affected by weather  
 Other (please specify): \_\_\_\_\_  DK             Refused

**For the following questions, you can answer “increased”, “decreased” or “no change”**

25I) How did the odor or smell affect your **physical** health since you first noticed it?

- Decreased     Increased     No Change             DK             Refused  
 Other (please specify): \_\_\_\_\_

25J) How did the odor or smell affect your **mental** health since you first noticed it?

- Decreased     Increased     No Change             DK             Refused  
 Other (please specify): \_\_\_\_\_

25K) Have you or any household members changed any of the following activities since the odor or smell began?

Refused

Time outdoors	<input type="checkbox"/> Decreased	<input type="checkbox"/> Increased	<input type="checkbox"/> No Change	<input type="checkbox"/> DK
Opening house windows	<input type="checkbox"/> Decreased	<input type="checkbox"/> Increased	<input type="checkbox"/> No Change	<input type="checkbox"/> DK
Use of air conditioning (AC) unit at home	<input type="checkbox"/> Decreased	<input type="checkbox"/> Increased	<input type="checkbox"/> No Change	<input type="checkbox"/> DK
Use of air filters, cleaners, purifiers, fresheners or deodorizer inside home	<input type="checkbox"/> Decreased	<input type="checkbox"/> Increased	<input type="checkbox"/> No Change	<input type="checkbox"/> DK

**SURVEY CONTINUED ON NEXT PAGE**

26A) Did you or any member of your household seek help for any of physical or mental health conditions possibly resulting from the odor? If so, which of the following locations did you visit? Please check all that apply:

- Community health center       Mental health clinic       Family doctor       ER       Social Services  
 Urgent care center       Free clinic       Other (specify): \_\_\_\_\_  
 Name of clinic \_\_\_\_\_  
 No       DK       Refused

26B) If no, why not?

- Symptoms not bad enough       Have no insurance       Have no physician       Have no transportation  
 Other (specify): \_\_\_\_\_       DK       Refused

27) What is/are your main concern(s) at this time?

- None       DK       Refused

**Thank you for your time. Do you have any questions?**

**Questions 28A – H are for the interviewer him/herself at the end of the household survey (they are not to be answered by the household member):**

28A) Interviewer's age?

Age: \_\_\_\_\_ (years)

28B) Interviewer's sex?

- Male     Female

28C) Interviewer's race/ethnicity?

- White, Non-Hispanic     Black, Non-Hispanic     Hispanic     Asian     Other: \_\_\_\_\_

28D) Can you personally (interviewer) smell any odor outside the current household?

- Yes       No       DK

28E) If yes, on a scale of 1 to 10, 1 being ok, to 10 being extremely bad, how severe is the odor or smell?

- 1     2     3     4     5     6     7     8     9     10       DK

28F) How would you describe the smell of the odor?

- Skunk       Rotten Eggs       Onions       DK  
 Other (please specify): \_\_\_\_\_

28G) What are the weather conditions like at the time of the interview?

- Warm,  $\geq 95^{\circ}\text{F}$        High humidity       Rainy       Sunny       Windy  
 Other (please specify): \_\_\_\_\_       DK

28H) Are you experiencing any new physical symptoms since you began this field study? (**Please check all that apply.**)

- None  
 Sore throat       Nasal congestion       Sinus infection       Shortness of breath  
 Cough       Wheezing       Chest pain       Irregular heart beat  
 Nausea and/or vomiting       Diarrhea       Headache       Dizziness  
 General weakness       Loss of appetite       Agitated behavior       Difficulty concentrating  
 Skin irritations including rash       Any eye conditions or irritations       Heat-related illness such as hyperthermia  
 Worsening of existing asthma symptoms       Worsening of existing chronic obstructive pulmonary disease / emphysema  
 Worsening of existing high blood pressure       Worsening of existing chronic cardiovascular disease  
 Worsening of existing diabetes (e.g. glucose control)       Other (specify): \_\_\_\_\_

**END OF SURVEY**