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.)

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

OMB No. 0920-0008
<table>
<thead>
<tr>
<th>Category</th>
<th>You</th>
<th>Household Member</th>
<th>Age(s) of household members with symptoms</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>7) Has anyone in your household experienced any of the following in the last 30 days?</td>
<td>☐</td>
<td>☐</td>
<td></td>
<td>Difficulty concentrating</td>
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<td></td>
<td>☐</td>
<td>☐</td>
<td></td>
<td>Trouble sleeping/nightmares</td>
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<td>☐</td>
<td>☐</td>
<td></td>
<td>Dizziness</td>
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<td>☐</td>
<td>☐</td>
<td></td>
<td>General weakness</td>
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<td>☐</td>
<td>☐</td>
<td></td>
<td>Loss of appetite</td>
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<td>☐</td>
<td>☐</td>
<td></td>
<td>Agitated behavior</td>
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<td>☐</td>
<td>☐</td>
<td></td>
<td>Increased alcohol consumption</td>
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<td></td>
<td>☐</td>
<td>☐</td>
<td></td>
<td>Increased drug use</td>
</tr>
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<td></td>
<td>☐</td>
<td>☐</td>
<td></td>
<td>Other (specify): ____________________________</td>
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<tr>
<td></td>
<td>☐</td>
<td>☐</td>
<td>n/a</td>
<td>None</td>
</tr>
</tbody>
</table>

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?
□ DK □ Refused

Age: ___ □ 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, e.g. 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
□ Unemployed - student □ Unemployed - retired □ Unemployed - homemaker □ DK □ Refused

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
Exposure Questions

24) In the past **six (6) months**, have you smelled a suspicious or strange gas odor in or near the Eight Mile community?

- □ Yes
- □ No
- □ DK
- □ Refused

**IF NO, DK or REFUSED, SKIP TO QUESTION 26**

25) **If yes,**

25A) When did you first notice this odor or smell?

Month: ___ (mm) Year: ______ (yyyy)

- □ DK
- □ Refused

25B) How would you describe the smell of the odor?

- □ Skunk
- □ Rotten Eggs
- □ Onions
- □ DK
- □ Refused
- □ Other (please specify):______________

25C) Where and how often do you smell the odor?

- □ DK
- □ Refused

- **INDOORS, AT HOME**
  - □ Every day
  - □ 1 – 3 days per week
  - □ 4 - 6 days per week
  - □ approx. once monthly
  - □ less than once monthly
  - □ DK
  - □ Refused

- **OUTDOORS, AROUND HOME**
  - □ Every day
  - □ 1 – 3 days per week
  - □ 4 - 6 days per week
  - □ approx. once monthly
  - □ less than once monthly
  - □ DK
  - □ Refused

- **INDOORS, AT WORK**
  - □ Every day
  - □ 1 – 3 days per week
  - □ 4 - 6 days per week
  - □ approx. once monthly
  - □ less than once monthly
  - □ DK
  - □ Refused

- **OUTDOORS, AROUND WORK**
  - □ Every day
  - □ 1 – 3 days per week
  - □ 4 - 6 days per week
  - □ approx. once monthly
  - □ less than once monthly
  - □ DK
  - □ Refused

- **OTHER, PLEASE SPECIFY:** _____________________________________________________
  - □ Every day
  - □ 1 – 3 days per week
  - □ 4 - 6 days per week
  - □ approx. once monthly
  - □ less than once monthly
  - □ 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
□ Other (please specify): ____________________________ □ DK □ Refused

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, ≥ 95°F □ High humidity □ Rainy □ Sunny □ Windy
□ Not affected by weather
□ Other (please specify): ____________________________ □ DK □ Refused

25I) How did the odor or smell affect your physical health since you first noticed it?
□ Decreased  □ Increased  □ No Change
□ Other (please specify): ____________________________ □ DK □ Refused

25J) How did the odor or smell affect your mental health since you first noticed it?
□ Decreased  □ Increased  □ No Change
□ Other (please specify): ____________________________ □ DK □ Refused

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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Decreased</th>
<th>Increased</th>
<th>No Change</th>
<th>DK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time outdoors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opening house windows</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of air conditioning (AC) unit at home</td>
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<td></td>
</tr>
<tr>
<td>Use of air filters, cleaners, purifiers, fresheners or deodorizer inside home</td>
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</tbody>
</table>

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, ≥ 95°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