MASTER HOME ENVIRONMENTALIST

Directions for the Do-it-yourself Home Environmental Assessment List (HEAL)

This do-it-yourself home environmental assessment will help you identify ways to make your home environment healthy. The Assessment is made up of two parts: the Survey and the Action plan. To perform a HEAL on your home, follow the directions below.

Set aside a time when the residents of your home can do the assessment together. Then:

1. Complete the Survey (pp 2-6):
   - Walk through your home and make observations.
   - Read the labels on your household products.
   - Answer the Survey questions.
   (NOTE: Survey answers are grouped under three categories of concern. While the survey cannot absolutely determine high or low risk, these are what the categories mean:
     “Higher Concern” strongly suggests that action(s) should be taken to lower the home health risk.
     “Medium Concern” suggests a careful look at action(s) that could be helpful to your health.
     “Lower Concern” implies that the need for action is low.)

2. Complete the Action Plan (pp 7-9):
   - Go line by line through the Survey (pp 2-6) and wherever an answer falls in the “higher concern” category, not the numbers listed in the column on the right. Then go to the Action Plan (pp 7-9) and check the boxes that have the corresponding numbers.
   - Prioritize each checked item on the Action Plan based on:
     - Your willingness to implement it.
     - Its significance to the residents of your household.
     - Its significance to your overall home issues. If many concerns are in one category, for example “Moisture Problems,” you may wish to focus your efforts there.
     - The advice of experts (if appropriate). For any actions where major home alterations are involved, it’s prudent to consult with professionals before making final decisions.
   - Commit to taking three actions within the next six weeks.

Chose: (1) At least one that requires behavior change (creating a new habit).
(2) At least one that can be finished quickly and with little expense or effort.

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## The Survey

### BUILDING

When was the building constructed?

<table>
<thead>
<tr>
<th>Level of Concern:</th>
<th>Lower</th>
<th>Medium</th>
<th>Higher</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>After 1978</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1978-1951</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>before 1951</td>
<td>yes</td>
<td></td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

Has there been remodeling or paint removal in the last two years?

- no
- ?
- yes

Are you or your landlord planning to remodel or repaint within the next 12 months?

- no
- ?
- yes

Has a next door neighbor removed external paint?

- no
- scraping
- sanding

What daytime indoor temperature do you maintain during heating season?

<table>
<thead>
<tr>
<th>Level of Concern:</th>
<th>Lower</th>
<th>Medium</th>
<th>Higher</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-68</td>
<td>7</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55-60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>68-75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>below 55</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>over 75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### NEARBY ENVIRONMENT

How far is your home from the following:
- factory, gas station, dry cleaners, auto body shop
- airport, railway station, bus station

- none
- 1 mile
- 4 blocks

How many blocks is your home from a busy street or highway?

- 4+
- 1-4
- less than 1

Are there unpaved roads, shoulders, or driveways adjacent to the home?

- no
- yes

During the heating season, how often do you smell smoke from neighboring woodstoves or fireplaces?

- 0-5/yr
- 1-2/ml
- 2+/wk

### DUST AND LEAD CONTROL

Is any paint peeling or flaking inside or outside the home?

- no
- ?
- yes

If yes, is the paint lead-based?

- no
- ?
- yes

What percentage of the living space is carpeted?

- 0-25%
- 26-75%
- 76-100%

If any rooms are carpeted (Circle all that apply)

- area rugs
- level loop
- shag/plush

How do you control tack-in of dust or dirt?

- remove shoes
- doormat/ hall rug
- 1 don’t

Does every door have a doormat?

- yes
- no
- none do

What types of doormats do you have?

- commercial
- rubber/ plastic
- rope

What kind of vacuum cleaner do you use?

- powerhead/ upright
- canister
- none

How often do you check the belt and/or bag?

- monthly
- 1-2/yr
- rarely
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INDOOR AIR
Is this a mobile home or trailer?
Is there any knows particleboard in the floor, built-in cabinets or furniture?
Does your building have asbestos (furnace insulation, Asbestos ceiling, siding, sheet vinyl flooring)?
If yes, is the asbestos in good condition (i.e., not damaged, loose, or flaking)?
Is this home in an area where radon is common?
If yes or ?, has radon level been measured?
If yes, was the level above 4 pico Curies/liter air?
If you have a garage, is it attached to the home?
How long do you let car idle in garage before driving off?
What kind of kitchen stove do you use?
Do you sometimes smell fuel from furnace of stove?
Do you use a stove fan when cooking?
Is fan vented to the outside?
Is there an unvented kerosene or gas heater?
Do you use a wood stove during cold weather?

<table>
<thead>
<tr>
<th>Level of Concern:</th>
<th>Lower</th>
<th>Medium</th>
<th>Higher</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>?</td>
<td>no</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>yes</td>
<td>?</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>somewhat</td>
<td>yes</td>
<td>53,54</td>
</tr>
<tr>
<td></td>
<td>rarely</td>
<td>sometimes</td>
<td>often</td>
<td>9,53,54</td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>yes</td>
<td>7,9,54,44,56</td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>?</td>
<td>yes</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>?</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>?</td>
<td>no</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>minimal</td>
<td>yes</td>
<td>57,58,59</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>?</td>
<td>yes</td>
<td>60 if?</td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>?</td>
<td>no</td>
<td>63 if no</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>?</td>
<td>yes</td>
<td>64</td>
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<td></td>
<td>yes</td>
<td>no</td>
<td>64</td>
<td></td>
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<tr>
<td></td>
<td>no</td>
<td>yes</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>no</td>
<td>yes</td>
<td>66,68</td>
</tr>
<tr>
<td></td>
<td>0-15 sec</td>
<td>15-30 sec</td>
<td>&gt;30 sec</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>electric</td>
<td>gas/propane</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>?</td>
<td>yes</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>sometimes</td>
<td>no</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>no-N/A</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>?</td>
<td>yes</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>rarely</td>
<td>1/wk</td>
<td>daily</td>
<td></td>
</tr>
</tbody>
</table>
The Survey

Do you smell smoke indoors when the stove/fireplace insert is in use?

<table>
<thead>
<tr>
<th>Level of Concern:</th>
<th>Lower</th>
<th>Medium</th>
<th>Higher</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>never</td>
<td>74</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HAZARDOUS HOUSEHOLD PRODUCTS

How often do you use the following products?

- Oil-based paint, stain, varnish, thinner, stripper
- Spray-on adhesives, paints or lubricants
- Rubber or contact cement, plastic glue, or epoxy
- Permanent markers or whiteboard markers
- Ammonia or chlorine-based cleaners
- Auto products (degreaser, carburetor cleaner)
- Solder (for electrical or stained glass work)
- Photo chemicals

<table>
<thead>
<tr>
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<th>Medium</th>
<th>Higher</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>never</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td></td>
</tr>
</tbody>
</table>

If yes, what precautions do you usually take to avoid inhaling these products?

- Nothing special
- Use them outside or wear a respirator
- Open a window
- Open at least 2 windows or use fan

<table>
<thead>
<tr>
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<th>Medium</th>
<th>Higher</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>never</td>
<td>76</td>
<td>76</td>
<td>76</td>
<td></td>
</tr>
</tbody>
</table>

Are any flammable products stored near fire or heat?

<table>
<thead>
<tr>
<th>Level of Concern:</th>
<th>Lower</th>
<th>Medium</th>
<th>Higher</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>never</td>
<td>79</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Are any hazardous products within reach of children?

<table>
<thead>
<tr>
<th>Level of Concern:</th>
<th>Lower</th>
<th>Medium</th>
<th>Higher</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>never</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Are any damaged, rusting or open containers?

<table>
<thead>
<tr>
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<th>Medium</th>
<th>Higher</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>never</td>
<td>81</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Are there any banned or restricted products?

(Banned products include DDT, penta, chlordane, carbon tetrachloride. Call _________ for a more complete list if you are unsure.)

<table>
<thead>
<tr>
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<th>Medium</th>
<th>Higher</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>never</td>
<td>82</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How often do you or a commercial service apply pesticides (insecticides, weed killers, rat poison) inside or outside the home? (Traps do not count.)

<table>
<thead>
<tr>
<th>Level of Concern:</th>
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<th>Medium</th>
<th>Higher</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>never</td>
<td>83,84</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

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Health Authority, Washington State Department of Health, Mary Bridge Children’s Hospital and Mental Health Center and Tacoma-Pierce County Health Department.
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### The Survey

If you use pesticides, which of the following safety precautions do you wear?

<table>
<thead>
<tr>
<th>Level of Concern:</th>
<th>Lower</th>
<th>Medium</th>
<th>Higher</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>always</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>77</td>
</tr>
<tr>
<td>sometimes</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>77</td>
</tr>
<tr>
<td>never</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>77</td>
</tr>
</tbody>
</table>

- gloves
- long sleeved shirt and pants
- hat
- goggles or glasses
- dust mask (powders) or respirator (SOLVENTS)
- How do you dispose of leftover pesticides?
  - Use up or take to a household hazardous waste collection site
  - Put them in the trash?
  - Pour them down the drain
  - Keep them

<table>
<thead>
<tr>
<th>Action Steps</th>
<th>81</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
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</tbody>
</table>
YOUR HOME ACTION PLAN

(Check the boxes below corresponding to the numbers listed under Action Steps in the Survey.)

A  RESIDENTS
1  □  Pay special attention to managing dust and other indoor pollutants if you have a large household, small children, pregnant women, older people present or if there is chronic illness.
2  □  Smoking is inconsistent with clean air and good health. Top smoking or restrict it to outside the home.
3  □  Seek medical advise regarding chronic or frequent illnesses. Identify specific allergies.
4  □  Keep pets, pet beds, and associated spaces clean. Flea comb cats or dogs.
5  □  Vacuum areas frequented by pets, reduce pet access to some parts of home.
6  □  Seek additional information on least-toxic control of fleas. Call Washington Toxics Coalition.

B  BUILDING
7  □  Raise indoor temperatures to 60-68 F to reduce moisture.
8  □  Lower indoor temperatures to 60-68 F to save energy.
9  □  Lower humidity levels to 50-60%.
10 □  Raise humidity levels to 50-60%.

C  NEARBY ENVIRONMENT
11 □  Identify potential source of pollution and ensure that it is in full compliance with air pollution laws.
12 □  Identify source of smoke and ask for correction. Help neighbors learn about health risks from wood smoke, and persuade them to control it.

D  DUST AND LEAD CONTROL
13 □  Seek expert advise on reducing lead levels in the home.
14 □  Reduce track-in of dust and lead. Take off shoes or install high quality door mats at all entrances.
15 □  Before remodeling, learn safety procedures for limiting exposure to lead and dust.
16 □  Have paint tested for lead if home is pre-1978, and especially if there are children present.
17 □  Repair or remove damaged lead-based paint. Call the Health Department at 800-287-6429.
18 □  If anyone in household has allergies or asthma, consider removing carpeting.
19 □  When choosing new carpeting, select level loop carpets (tight weave) rather than plush or shag. Consider not gluing carpet down. Choose carpet with cloth backing rather than rubber.
20 □  Vacuum with an upright or powerhead vacuum.
21 □  Check bag and/or belt more often to help make sure vacuum cleaner is working properly.
22 □  Consider wearing a dust mask when vacuuming.
23 □  Increase frequency of vacuuming or cleaning.
24 □  Vacuum area rugs with a power head vacuum or send out for cleaning.
25 □  Pay special attention to vacuuming upholstered furniture and consider removing very old cot covered furniture.
26 □  Wash work clothes separately.
27 □  Wash hands more frequently.
28 □  Consider covering pillows and/or mattresses with plastic.
29 □  Open windows more frequently and keep bedroom window open at night whenever possible, provided it is safe to do so.

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YOUR HOME ACTION PLAN

30 □ Have furnace checked for proper operation.
31 □ Call the gas company immediately to check possible leak.
32 □ Have furnace ductwork cleaned regularly (about every 5 years).
33 □ Change furnace filters at least twice a year.
34 □ Have an outside combustion air supply installed for furnace.

E MOISTURE PROBLEMS
35 □ Clean drip pan at least every three months.
36 □ Clean refrigerator coils at least every six months.
37 □ Repair water leaks and remove or repair any damaged material.
38 □ Reduce kitchen humidity by covering pots, running ventilating fan, or opening windows.
39 □ Consider removing kitchen or bathroom carpeting.
40 □ Use fan or open windows to reduce bathroom moisture.
41 □ Bathroom fan should be vented to the outside and preferably have a timer.
42 □ Repair water leaks in bathroom.
43 □ Clean up mold with chlorine bleach solution (1 cup per gallon of water)>
44 □ Remove carpeting if possible.
45 □ Clean and disinfect areas contaminated by sewage backup.
46 □ Check drainage, downspouts, and foundation damp proofing.
47 □ Remove basement carpeting .
48 □ Use a dehumidifier in basement.
49 □ Cover crawlspace floor with 6 mil polyethylene, anchor with sand, gravel or bricks.
50 □ Ventilate crawlspace.
51 □ Consult with a specialist on correcting a basement moisture problem.
52 □ Vent clothes dryer to outside.
53 □ Ventilate home by opening windows whenever weather permits. Repair or Replace windows that cannot be opened.
54 □ Minimize water producing activities: take shorter showers, keep lids on pots, use exhaust fans.
55 □ Correct specific drainage problems. Check downspouts, foundation, slope, etc.
56 □ Remove water damaged materials.

F INDOOR AIR
57 □ Have air tested for formaldehyde levels. Call 253-798-7674.
58 □ Seal sources of formaldehyde that cannot be removed. Use a polyurethane or acrylic sealer.
59 □ Remove sources of formaldehyde if levels are very high and/or sources cannot be sealed.
60 □ Test material for asbestos.
61 □ Leave asbestos in place.
62 □ Cover/isolate asbestos.
63 □ Inquire about asbestos removal. Go to: psca.org or call 800 552-3565
64 □ Have home tested for radon.
65 □ Consult Radon Hotline (800-323-9727) for information on reducing radon levels.
66 □ Clean garage floor, remove hazardous products to shed.
YOUR HOME ACTION PLAN

67 □ avoid idling car in garage. Drive off immediately after starting.
68 □ Install door mat between garage and home.
69 □ Call the gas company about possible gas leak in stove.
70 □ Install stove fan.
71 □ Use stove fan when cooking.
72 □ Vent stove fan to outside.
73 □ Avoid using unvented kerosene or gas heater inside the home.
74 □ Have fireplace/stove checked.

G   HAZARDOUS HOUSEHOLD PRODUCTS
75 □ Use less hazardous products if possible. Call Washington Toxics Coalition (206-632-1545) for suggestions.
76 □ Use hazardous solvent-based products outdoors or open two windows and use a fan.
77 □ Wear gloves and goggles when using corrosive products or pesticides.
78 □ Wear appropriate protective gear when applying pesticides: long sleeved shirt and long pants, a non-permeable hat, and a dust mask for powders or a respirator for solvents.
79 □ Move flammable materials away from source of ignition.
80 □ Move hazardous products to area protected from children.
81 □ Call Health Department at 800-287-6429 about removal of hazardous products.
82 □ Call Health Department 800-287-6429 about removal of banned products. Pesticides that are still legal to use may be used up as directed. If you do not want to use these products, take them to a household hazardous waste collection site. Call the Hazards Line ___________ for more information.
83 □ Reduce or eliminate use of indoor pesticides by employing non-chemical controls or using less-hazardous products. Call Washington Toxics Coalition
84 □ Avoid calendar applications of pesticides. Treat specific problems only when necessary and use non-chemical controls or less-hazardous chemicals if possible.
85 □ Consider performing activity outdoors.
86 □ Consider performing activity in garage.
87 □ Consider performing activity in room separate from home.
88 □ Consider installing ventilation system in room where activity is done.
89 □ Learn more about the risks and investigate safety equipment for engaging in this activity.
90 □ Do not put pesticides down the drain or in the trash. Call 800-287-6429.

HOME ACTION PLAN SUMMARY:

To improve the health of my/our home, I/we will take these actions in the next six weeks:

1. 
2. 
3. 

Signed: ____________________________________________

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