Environmental Assessment of Home in Response to a Case of Sporadic Legionellosis in a Resident or Visitor

A. Assessor

Name: _____
Title: _____
Organization: _____
Address: _____
Telephone Number: _____

B. Assessment Visit

Date: _____
Time: _____

Type of Assessment
☐ On-site assessment
☐ Telephone assessment

Address of Home:_____
City_____
County_____
District_____

C. Home characteristics

1. Type of home
   - ☐ Apartment
   - ☐ Condominium
   - ☐ Single-family dwelling
   - ☐ Mobile home
   - ☐ Other (specify)_____
2. Construction dates
   - Original construction year_____
   - Renovation dates (if applicable)_____
3. Aerosol-generating devices inside? (e.g., decorative fountain, mister, nebulizer, oxygen humidifier) ☐ Yes ☐No

   If yes, list devices, which rooms, dates of operation, cleaning and maintenance.

Device	1	2	3
Room			
Type of device			
Type of water used in the device (e.g., municipal, well, bottled non-distilled, distilled)			
Dates in operation			
Frequency of cleaning or disinfection			
Date last cleaned or disinfected			
Method of cleaning or disinfection			

D. Water supply/system

1. Source of water for home (*check all that apply*)
   - ☐ Municipal
   - ☐ Private well
   - ☐ Other (*specify*)_____
   - PWS number, if applicable: _____

2. Heating system for potable hot water

Type of System	**Date of installation**	**Date of last service**		**Usual temperature setting (°F or °C)**
		Drained/ cleaned	Temperature regulation checked	
Heater with hot water storage tank				
Thermal expansion tank			N/A	N/A
Instantaneous heater without storage of hot water				
Other (e.g., solar) *please describe*)				

3. What is the maximum hot water temperature permitted by state/local regulations:
   - At hot water heater?_____ **(°F or °C)** [*circle*]
   - At point of delivery?_____ **(°F or °C)** [*circle*]

4. Does this home use a water softener? ☐ Yes ☐No
   - If yes, date of last service_____

5. Does this home use a water filter? ☐ Yes ☐No
   - If yes, what type of water filter (e.g., sand, reverse osmosis, activated carbon, pleated polyester)?_____
   - Location of water filter (e.g., point of entry into home, on kitchen sink faucet)?
   - _____
   - Date of last service_____

6. Results of water testing

Sampling site (e.g., tap in bathroom 1, fountain)	**Cold water temperature (°F or °C)**	**Hot water temperature (°F or °C)**	**Sample: Initial or 2-minute**	**pH**	**Chlorine residual**

7. Are there any taps that are rarely used? ☐ Yes ☐No ☐ Don't know
   If yes, which one(s)?_____

8. Have there been any incidents involving the water supply in the past 6 months?
   Taste or color of potable water changed. ☐ Yes ☐No ☐ Don't know
   If yes, describe, include date range

   Water main or water system pipes broke, or other potable water system interruption or malfunction. ☐ Yes ☐No ☐ Don't know
   If yes, describe, include date range

   If yes, was soil introduced into the system? ☐ Yes ☐No ☐ Don't know
   Was the system disinfected after the break or malfunction? ☐ Yes ☐No ☐ Don't know

9. Have there been any modifications to the home water system such as grey water collection or other retrofitted water use reduction systems? ☐ Yes ☐No ☐ Don't know
   If yes, describe, include date range

D. Whirlpool spas and hot tubs

Spa or hot tub #	**1**	**2**	**3**
Location			
Filter type			
Age of filter			
Filter maintenance routine			
Disinfectant routine (chemical name, formulation, amount used, frequency used)			
Any recent "shock" treatment? Date if yes.			
Method for adding disinfectant			
Date last drained			
Date last scrubbed			

E. Humidifiers or evaporative coolers

Device #	1	2	3
Type of device			
Manufacturer			
Location			
Filter maintenance routine			
Disinfectant routine (chemical name, formulation, amount used, frequency used)			
Date last cleaned or disinfectant			
Date of last service			

F. Outdoor environment

1. Source of water for landscaping or garden (*check all that apply*)
   - ☐ Municipal
   - ☐ Private well
   - ☐ Irrigation ditch or canal
   - ☐ "Grey" water
   - ☐ Other (*specify*)_____

2. Method of watering landscaping or garden (*check all that apply*)
   - ☐ Hose with spray nozzle
   - ☐ Hose with sprinkler
   - ☐ Flood irrigation
   - ☐ Sprinklers at home water pressure
   - ☐ Sprinkler with pressurized irrigation pump
   - ☐ Other (*specify*)_____

3. Aerosol-generating devices outside? (e.g., decorative fountain, swimming pool or pond aerator, birdbath sprayer) ☐ Yes ☐No

4. Potting soil, mulch, or compost
   Are bags of potting soil, mulch, or compost evident? ☐ Yes ☐No
   Is there an indoor potting shed? ☐ Yes ☐No
   Is there an outdoor potting table? ☐ Yes ☐No

5. Distance to nearest large cooling tower? _____yds/miles ☐ >4 miles

G. Summary of pertinent findings / risk factors identified

- ☐ Aerosol-generating devices
- ☐ Hot water heater temperature < 140°F (60°C)
- ☐ Hot water temperature at faucet < 122°F (50°C)
- ☐ Hot water tank not drained periodically
- ☐ Hot water tank not periodically chlorinated
- ☐ Cold water system >68°F (20°C)
- ☐ Potable water system break, malfunction, or interruption
- ☐ Whirl pool, hot tub, or spa not serviced or maintained properly
- ☐ Humidifier or evaporative cooler sump or condenser pans not serviced or maintained adequately.
- ☐ Other (describe)

H. Recommendations

I. Resources provided

J. Additional notes.