CONTAMINANT GROUP, ENVIRONMENTAL MEDIA, AND ENVIRONMENTAL PATHWAY MODULE (CEEPM)

Reference Questions and Instructions for ATSDR and Health Department Staff Conducting Program Evaluation Activities

Instructions for using the CEEPM reference questions

- 1. Determine the environmental contaminant, environmental media and exposure pathways of interest.
- 2. Select all questions or a subset of questions from the appropriate CEEPM module.
- 3. Create a data collection instrument that includes:
 - a. instructions to the respondent or interviewer,

Standard Instructions to Respondents for the CEEPM				
Interviewer- Administered Surveys	These next items ask about some of the day-to-day activities of you and your household. In the past 6 months please tell me how often you do each one. That is, for each activity, would you say that you "never do this," "seldom do this," "sometimes do this," or "always do this." Or, would you say you "don't know" or it is "not applicable." [Hand respondent correct response card]			
Respondent Self- Administered Surveys	These items ask about some of the day-to-day activities of you and members of your household. In the past 6 months please tell me how often you or members of your household generally do each one. That is, for each activity, would you say that you "never do this," "seldom do this," "sometimes do this," or "always do this." Or, would you say you "don't know" or it is "not applicable."			
	1 means "never do this," 2 means "seldom do this," 3 means "sometimes do this," 4 means "always do this", and 5 means "don't know or the statement is not applicable to me or members of my household." Please circle the number that best represents, in the past 6 months, how often you or members of your household generally do each one.			

- b. the selected CEEPM questions, and
- c. the standard response matrix for CEEPM questions.

Standard Response Matrix and Response Coding for the CEEPM							
Never Do This	Seldom Do This	Sometimes Do This	Always Do This	Don't Know/ Not Applicable			
1	2	3	4	5			

4. The CEEPM-related items in a completed data collection instrument should look like the following example:

These next items ask about some of the day-to-day activities of you and your household. In the past 6 months please tell me how often you do each one. That is, for each activity, would you say that you "never do this," "seldom do this," "sometimes do this," or "always do this." Or, would you say you "don't know" or it is "not applicable."

	Never	Seldom	Sometimes	Always	Don't
	Do This	Do This	Do This	Do This	Know/Not
					Applicable
1. [Selected question]	1	2	3	4	5
2. [Next selected question]	1	2	3	4	5
3. [Next selected question]	1	2	3	4	5
4. [Next selected question]	1	2	3	4	5
Etc.	1	2	3	4	5

- 5. CEEPM items can be combined with items from optional modules such as:
 - Demographics
 - Health Related Quality of Life
 - Stress
 - Intention to Change
 - Knowledge and Beliefs

A. ASBESTOS

(note for asbestos - air and soil are the environmental media of concern, and inhalation is the only pathway of concern)

Media=Air, Pathway=Inhalation

- 1. Avoid outdoor activity such as working, playing, gardening, and yard work during very windy days
- 2. Bathe or brush family animals such as cats and dogs
- 3. Change clothes soon after outdoor activity such as working, playing, gardening, and yard work
- 4. Clean shoes before entering house
- 5. Cover bare soils with grass or mulch
- 6. Damp dust home rather than dry dust
- 7. Hunt on the site
- 8. Keep children from crawling or playing on the floor
- 9. Keep children from playing, biking, or doing other activities in areas with asbestos
- 10. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 11. Keep children from riding ATVs or motorized bikes on the site
- 12. Leave windows and doors open
- 13. Minimize dust by wetting-down soils before gardening, digging, building, and doing other activities that will disturb the soil
- 14. Periodically damp wash children's play areas
- 15. Play on the site by climbing, running, digging or other play
- 16. Remove shoes before entering home
- 17. Use a leaf blower
- 18. Use a vacuum with a HEPA filter
- 19. Vacuum home once a week or more often with a HEPA vacuum
- 20. Walk, jog, or bicycle on the site
- 21. Wash children's face, hands, and other exposed skin soon after outdoor play
- 22. Wash children's hair after outdoor play
- 23. Wash children's face and hands after playing with or petting family animals such as cats and dogs
- 24. Wash children's face and hands before they eat or drink
- 25. Wash children's toys
- 26. Wash dirty clothes soon after wearing outdoors

- 27. Wash hands, face, and other exposed skin soon after outdoor activity such as playing, gardening, yard work, and other outdoor work
- 28. Wash hair after outdoor activity such as playing, gardening, yard work, and other outdoor work
- 29. Wash work clothes at home
- 30. Wear work clothes home
- 31. Wet mop home once a week or more often
- 32. Work in soil at home through gardening, digging, building, repairing and other outside activities

Media=Soil, Pathway=Inhalation

- 1. Avoid outdoor activity such as working, playing, gardening, and yard work during very windy days
- 2. Bathe or brush family animals such as cats and dogs
- 3. Change clothes soon after outdoor activity such as working, playing, gardening, and yard work
- 4. Clean shoes before entering house
- 5. Cover bare soils with grass or mulch
- 6. Damp dust home rather than dry dust
- 7. Hunt on the site
- 8. Keep children from crawling or playing on the floor
- 9. Keep children from playing in muddy soils
- 10. Keep children from playing, biking, or doing other activities in areas with asbestos
- 11. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 12. Keep children from riding ATVs or motorized bikes on the site
- 13. Keep children from thumb sucking and nail biting
- 14. Leave windows and doors open
- 15. Minimize dust by wetting-down soils before gardening, digging, building, and doing other activities that will disturb the soil
- 16. Periodically damp wash children's play areas
- 17. Play on the site by climbing, running, digging or other play
- 18. Remove shoes before entering home
- 19. Use a leaf blower
- 20. Use a vacuum with a HEPA filter
- 21. Vacuum home once a week or more often with a HEPA vacuum

- 22. Walk, jog, or bicycle on the site
- 23. Wash children's face, hands, and other exposed skin soon after outdoor play
- 24. Wash children's hair after outdoor play
- 25. Wash children's face and hands after playing with or petting family animals such as cats and dogs
- 26. Wash children's face and hands before they eat or drink
- 27. Wash children's toys
- 28. Wash dirty clothes soon after wearing outdoors
- 29. Wash hands, face, and other exposed skin soon after outdoor activity such as playing, gardening, yard work, and other outdoor work
- 30. Wash hair after outdoor activity such as playing, gardening, yard work, and other outdoor work
- 31. Wash work clothes at home
- 32. Wear work clothes home
- 33. Wet mop home once a week or more often
- 34. Work in soil at home through gardening, digging, building, repairing and other outside activities

B. DIOXIN

Media=Air, Pathway=Dermal

No behavioral items

Media=Air, Pathway=Inhalation

- 1. Avoid outdoor activity such as working, playing, gardening, and yard work when you think there is an air release or burning at the site
- 2. Close windows and doors when you think there is an air release or burning at the site
- 3. Keep children from biking, playing, or doing other activities in areas of concern
- 4. Run air conditioner instead of opening windows and doors
- 5. Use a vacuum with a bag (not a bagless vacuum, shop vac, or steam cleaner)
- 6. Use a vacuum with a HEPA filter

Media=Air, Pathway=Oral

No Behavioral Items

Media=Soil, Pathway=Dermal

- 1. Keep children from biking, playing, or doing other activities in areas of concern
- 2. Wear long sleeves and pants during outdoor activity such as playing, gardening, yard work, and other outdoor work

Media=Soil, Pathway=Inhalation

No Behavioral Items

Media=Soil, Pathway=Oral

- 1. Damp dust home rather than dry dust
- 2. Follow posted signs
- 3. Keep children from thumb sucking and nail biting
- 4. Periodically damp wash children's play areas
- 5. Use a vacuum with a bag (not a bagless vacuum, shop vac, or steam cleaner)
- 6. Use a vacuum with a HEPA filter
- 7. Vacuum home once a week or more often
- 8. Wash children's face, hands, and other exposed skin soon after outdoor play

- 9. Wash children's face and hands before they eat or drink
- 10. Wash children's toys
- 11. Wash dirty clothes soon after wearing outdoors
- 12. Wash fruits and vegetables before eating
- 13. Wash hands, face, and other exposed skin soon after outdoor activity such as playing, gardening, yard work, and other outdoor work
- 14. Wet mop home once a week or more often

No Behavioral Items

Media=Water, Pathway=Dermal

- 1. Keep children from biking, playing, or doing other activities in areas of concern
- 2. Wear long sleeves and pants during outdoor activity such as playing, gardening, yard work, and other outdoor work

Media=Water, Pathway=Inhalation

No Behavioral Items

Media=Water, Pathway=Oral

1. Keep children from biking, playing, or doing other activities in areas of concern

Media=Biota

- 1. Drink milk from local dairies
- 2. Eat fruits or vegetables grown in areas of concern
- 3. Fish on the site
- 4. Follow beef advisories
- 5. Follow egg advisories
- 6. Follow fish consumption advisories
- 7 Follow recommended fish preparation guidelines
- 8. Follow shellfish consumption advisories
- 9. Hunt on the site
- 10. Limit children's fish consumption
- 11. Use containers or raised beds for gardening

- 12. Follow traditional (subsistence) food selection practices
- 13. Follow traditional (subsistence) food preparation customs
- 14. Limit children's meat consumption from the area of concern
- 15. Limit children's milk consumption from the area of concern
- 16. Limit children's fruit and vegetable consumption from the area of concern

C. MERCURY

Media=Air, Pathway=Dermal

- 1. Wear gloves when working in soil doing gardening, digging, building, and other activities
- 2. Wear long sleeves and pants during outdoor activity such as playing, gardening, yard work, and other outdoor work

Media=Air, Pathway=Inhalation

- 1. Avoid outdoor activity such as working, playing, gardening, and yard work when you think there is an air release or burning at the site
- 2. Close windows and doors when you think there is an air release or burning at the site
- 3. Leave windows and doors open
- 4. Leave windows and doors open on windy days
- 5. Use a vacuum with a bag (not a bagless vacuum, shop vac, or steam cleaner)

Media=Air, Pathway=Oral

No Behavioral Items

Media=Soil, Pathway=Dermal

No Behavioral Items

Media=Soil, Pathway=Inhalation

No Behavioral Items

Media=Soil, Pathway=Oral

- 1. Keep children from crawling or playing on the floor
- 2. Remove shoes before entering home
- 3. Vacuum home once a week or more often
- 4. Wash dirty clothes soon after wearing outdoors
- 5. Wash fruits and vegetables before eating
- 6. Wash hands, face, and other exposed skin soon after outdoor activity such as playing, gardening, yard work, and other outdoor work

Media=Water, Pathway=Dermal

No Behavioral Items

Media=Water, Pathway=Inhalation

No Behavioral Items

Media=Water, Pathway=Oral

No Behavioral Items

Media=Biota

- 1. Fish on the site
- 2. Follow fish consumption advisories
- 3. Follow recommended fish preparation guidelines
- 4. Follow shellfish consumption advisories
- 5. Select fish lower in mercury
- 6. Limit tuna consumption
- 7. Follow traditional (subsistence) food selection practices
- 8. Follow traditional (subsistence) food preparation customs

D. METALS

Media=Air, Pathway=Dermal

No Behavioral Items

Media=Air, Pathway=Inhalation

- 1. Avoid outdoor activity such as working, playing, gardening, and yard work when you think there is an air release or burning at the site
- 2. Close windows and doors when you think there is an air release or burning at the site
- 3. Follow posted signs
- 4. Keep children from biking, playing, or doing other activities in areas of concern
- 5. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 6. Use a vacuum with a bag (not a bagless vacuum, shop vac, or steam cleaner)
- 7. Vacuum home once a week or more often
- 8. Walk, jog, or bicycle on the site

Media=Air, Pathway=Oral

No Behavioral Items

Media=Soil, Pathway=Dermal

- 1. Change clothes soon after outdoor activity such as working, playing, gardening, and yard work
- 2. Clean shoes before entering house
- 3. Follow posted signs
- 4. Keep children from biking, playing, or doing other activities in areas of concern
- 5. Keep children from crawling or playing on the floor
- 6. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 7. Keep children from riding ATVs or motorized bikes on the site
- 8. Keep children from walking or bicycling on the site
- 9. Periodically damp wash children's play areas
- 10. Remove shoes before entering home
- 11. Use a vacuum with a HEPA filter
- 12. Walk, jog, or bicycle on the site

- 13. Wash children's face, hands, and other exposed skin soon after outdoor play
- 14. Wash children's toys
- 15. Wash dirty clothes soon after wearing outdoors
- 16. Wash hands, face, and other exposed skin soon after outdoor activity such as playing, gardening, yard work, and other outdoor work
- 17. Wash work clothes at home
- 18. Wash work clothing separate from household clothing
- 19. Wear gloves when working in soil doing gardening, digging, building, and other activities
- 20. Wear long sleeves and pants during outdoor activity such as playing, gardening, yard work, and other outdoor work
- 21. Wear work clothes home
- 22. Wet mop home once a week or more often
- 23. Work in soil at home through gardening, digging, building, repairing and other outside activities

Media=Soil, Pathway=Inhalation

- 1. Avoid outdoor activity such as working, playing, gardening, and yard work during very windy days
- 2. Change clothes soon after outdoor activity such as working, playing, gardening, and yard work
- 3. Clean shoes before entering house
- 4. Damp dust home rather than dry dust
- 5. Follow posted signs
- 6. Keep children from biking, playing, or doing other activities in areas of concern
- 7. Keep children from crawling or playing on the floor
- 8. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 9. Keep children from riding ATVs or motorized bikes on the site
- 10. Keep children from walking or bicycling on the site
- 11. Periodically damp wash children's play areas
- 12. Remove shoes before entering home
- 13. Use a vacuum with a bag (not a bagless vacuum, shop vac, or steam cleaner)
- 14. Use a vacuum with a HEPA filter
- 15. Vacuum home once a week or more often
- 16. Walk, jog, or bicycle on the site

- 17. Wash children's toys
- 18. Wash dirty clothes soon after wearing outdoors
- 19. Wash hands, face, and other exposed skin soon after outdoor activity such as playing, gardening, yard work, and other outdoor work
- 20. Wash work clothes at home
- 21. Wash work clothing separate from household clothing
- 22. Wear work clothes home
- 23. Wet mop home once a week or more often
- 24. Work in soil at home through gardening, digging, building, repairing and other outside activities

Media=Soil, Pathway=Oral

- 1. Change clothes soon after outdoor activity such as working, playing, gardening, and yard work
- 2. Clean shoes before entering house
- 3. Follow posted signs
- 4. Keep children from biking, playing, or doing other activities in areas of concern
- 5. Keep children from crawling or playing on the floor
- 6. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 7. Keep children from riding ATVs or motorized bikes on the site
- 8. Keep children from thumb sucking and nail biting
- 9. Keep children from walking or bicycling on the site
- 10. Periodically damp wash children's play areas
- 11. Remove shoes before entering home
- 12. Use a vacuum with a HEPA filter
- 13. Walk, jog, or bicycle on the site
- 14. Wash children's face, hands, and other exposed skin soon after outdoor play
- 15. Wash children's face and hands before they eat or drink
- 16. Wash children's toys
- 17. Wash dirty clothes soon after wearing outdoors
- 18. Wash fruits and vegetables before eating
- 19. Wash hands, face, and other exposed skin soon after outdoor activity such as playing, gardening, yard work, and other outdoor work
- 20. Wash work clothes at home

- 21. Wear work clothes home
- 22. Wet mop home once a week or more often
- 23. Work in soil at home through gardening, digging, building, repairing and other outside activities

Media=Water, Pathway=Dermal

No Behavioral Items

Media=Water, Pathway=Inhalation

- 1. Regularly replace and maintain water filters following recommended manufacturers instructions
- 2. Test well water for metals
- 3. Use a water filter on your private well
- 4. Use well water in your home for bathing, brushing teeth, and other activities

Media=Water, Pathway=Oral

- 1. Drink bottled water
- 2. Drink unfiltered water from creeks, streams, or rivers
- 3. Follow drinking water advisories
- 4. Follow posted signs
- 5. Regularly replace and maintain water filters following recommended manufacturers instructions
- 6. Test well water for metals
- 7. Use a water filter on your private well
- 8. Use well water in your home for bathing, brushing teeth, and other activities

Metals, Media=Biota

- 1. Follow fish consumption advisories
- 2. Follow recommended fish preparation guidelines
- 3. Follow shellfish consumption advisories
- 4. Use containers or raised beds for gardening
- 5. Wash fruits and vegetables before eating
- 6. Peel root vegetables before eating
- 7. Follow traditional (subsistence) food selection practices

8. Follow traditional (subsistence) food preparation customs

E. PAHS

Media=Air, Pathway=Dermal

- 1. Follow posted signs
- 2. Keep children from biking, playing, or doing other activities in areas of concern
- 3. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 4. Keep children from riding ATVs or motorized bikes on the site
- 5. Keep children from walking or bicycling on the site
- 6. Play on the site by climbing, running, digging or other play
- 7. Ride ATVs or motorized bikes on the site
- 8. Wash children's face, hands, and other exposed skin soon after outdoor play

Media=Air, Pathway=Inhalation

- 1. Avoid outdoor activity such as working, playing, gardening, and yard work when you think there is an air release or burning at the site
- 2. Avoid outdoor activity such as working, playing, gardening, and yard work during very windy days
- 3. Close windows and doors when you think there is an air release or burning at the site
- 4. Follow posted signs
- 5. Keep children from biking, playing, or doing other activities in areas of concern
- 6. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 7. Keep children from riding ATVs or motorized bikes on the site
- 8. Keep children from walking or bicycling on the site
- 9. Leave windows and doors open
- 10. Play on the site by climbing, running, digging or other play
- 11. Ride ATVs or motorized bikes on the site
- 12. Run air conditioner instead of opening windows and doors
- 13. Use a vacuum with a bag (not a bagless vacuum, shop vac, or steam cleaner)
- 14. Use a vacuum with a HEPA filter
- 15. Wash children's face and hands after playing with or petting family animals such as cats and dogs

Media=Air, Pathway=Oral

No Behavioral Items

Media=Soil, Pathway=Dermal

- 1. Change clothes soon after outdoor activity such as working, playing, gardening, and yard work
- 2. Follow posted signs
- 3. Keep children from biking, playing, or doing other activities in areas of concern
- 4. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 5. Keep children from riding ATVs or motorized bikes on the site
- 6. Keep children from walking or bicycling on the site
- 7. Play on the site by climbing, running, digging or other play
- 8. Ride ATVs or motorized bikes on the site
- 9. Wash children's face, hands, and other exposed skin soon after outdoor play
- 10. Wash children's face and hands after playing with or petting family animals such as cats and dogs
- 11. Wash dirty clothes soon after wearing outdoors
- 12. Wash hands, face, and other exposed skin soon after outdoor activity such as playing, gardening, yard work, and other outdoor work
- 13. Wear gloves when working in soil doing gardening, digging, building, and other activities
- 14. Wear long sleeves and pants during outdoor activity such as playing, gardening, yard work, and other outdoor work
- 15. Wet mop home once a week or more often
- 16. Work in soil at home through gardening, digging, building, repairing and other outside activities

Media=Soil, Pathway=Inhalation

No Behavioral Items

Media=Soil, Pathway=Oral

- 1. Wash children's face and hands before they eat or drink
- 2. Wash children's toys
- 3. Keep children from thumb sucking and nail biting
- 4. Wash fruits and vegetables before eating

Media=Water, Pathway=Dermal

- 1. Follow posted signs
- 2. Follow water use advisories
- 3. Keep children from biking, playing, or doing other activities in areas of concern
- 4. Keep children from playing in water from an outdoor hose such as with a sprinkler or slip and slide
- 5. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 6. Keep children from walking or bicycling on the site
- 7. Play on the site by climbing, running, digging or other play
- 8. Shower in unfiltered or untreated water
- 9. Swim in local creeks, streams, rivers, ponds, or lakes
- 10. Swim in nearby creeks, streams, or rivers
- 11. Use a water filter on your private well
- 12. Use water filter(s)
- 13. Use well water in your home for bathing, brushing teeth, and other activities
- 14. Wash children's face, hands, and other exposed skin soon after outdoor play

Media=Water, Pathway=Inhalation

No Behavioral Items

Media=Water, Pathway=Oral

- 1. Follow posted signs
- 2. Swim in nearby creeks, streams, or rivers
- 3. Drink bottled water
- 4. Drink unfiltered water from creeks, streams, or rivers
- 5. Drink tap water from area of concern
- 6. Drink water from outdoor hose
- 7. Follow drinking water advisories
- 8. Follow water use advisories
- 9. Keep children from biking, playing, or doing other activities in areas of concern
- 10. Keep children from drinking water from outdoor hose
- 11. Keep children from playing in water from an outdoor hose such as with a sprinkler or slip and slide

- 12. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 13. Keep children from walking or bicycling on the site
- 14. Play on the site by climbing, running, digging or other play
- 15. Regularly replace and maintain water filters following recommended manufacturers instructions
- 16. Shower in unfiltered or untreated water
- 17. Swim in local creeks, streams, rivers, ponds, or lakes
- 18. Use a water filter on your private well
- 19. Use well water in your home for bathing, brushing teeth, and other activities
- 20. Use water filter(s)

Media=Biota

- 1. Drink milk from local dairies
- 2. Eat fruits or vegetables grown in areas of concern
- 3. Follow beef advisories
- 4. Follow fish consumption advisories
- 5. Follow recommended fish preparation guidelines
- 6. Follow shellfish consumption advisories
- 7. Hunt on the site
- 8. Limit children's fish consumption
- 9. Follow traditional (subsistence) food selection practices
- 10. Follow traditional (subsistence) food preparation customs

F. PCBS

Media = Air, Pathway = Dermal

No behavioral items

Media=Air, Pathway=Inhalation

- 1. Avoid outdoor activity such as working, playing, gardening, and yard work when you think there is an air release or burning at the site
- 2. Close windows and doors when you think there is an air release or burning at the site
- 3. Follow posted signs

Media=Air, Pathway=Oral

No behavioral items

Media=Soil, Pathway=Dermal

1. Follow posted signs

Media=Soil, Pathway=Inhalation

- 1. Damp dust home rather than dry dust
- 2. Use a vacuum with a bag (not a bagless vacuum, shop vac, or steam cleaner)

Media=Soil, Pathway=Oral

- 1. Damp dust home rather than dry dust
- 2. Follow posted signs
- 3. Keep children from thumb sucking and nail biting
- 4. Periodically damp wash children's play areas
- 5. Use a vacuum with a bag (not a bagless vacuum, shop vac, or steam cleaner)
- 6. Use a vacuum with a HEPA filter
- 7. Vacuum home once a week or more often
- 8. Wash children's face, hands, and other exposed skin soon after outdoor play
- 9. Wash children's face and hands before they eat or drink
- 10. Wash children's toys
- 11. Wash dirty clothes soon after wearing outdoors

- 12. Wash fruits and vegetables before eating
- 13. Wash hands, face, and other exposed skin soon after outdoor activity such as playing, gardening, yard work, and other outdoor work
- 14. Wet mop home once a week or more often
- 15. Keep children from biking, playing, or doing other activities in areas of concern
- 16. Keep children from crawling or playing on the floor
- 17. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 18. Keep children from riding ATVs or motorized bikes on the site
- 19. Keep children from walking or bicycling on the site
- 20. Play on the site by climbing, running, digging or other play
- 21. Remove shoes before entering home
- 22. Ride ATVs or motorized bikes on the site
- 23. Wear gloves when working in soil doing gardening, digging, building, or other activities
- 24. Work in soil at home through gardening, digging, building, repairing, and other outside activities

Media=Water, Pathway=Dermal

No behavioral items

Media=Water, Pathway=Inhalation

No behavioral items

Media=Water, Pathway=Oral

- 1. Drink unfiltered water from creeks, streams, or rivers
- 2. Follow posted signs
- 3. Swim in nearby creeks, streams, or rivers

Media=Biota

- 1. Hunt on the site
- 2. Fish on the site
- 3. Eat fruits or vegetables grown in areas of concern
- 4. Follow beef advisories
- 5. Follow recommended fish preparation guidelines

- 6. Follow shellfish consumption advisories
- 7. Limit children's fish consumption
- 8. Follow traditional (subsistence) food selection practices
- 9. Follow traditional (subsistence) food preparation customs
- 10. Follow fish consumption advisories
- 11. Wash fruits and vegetables before eating
- 12. Peel root vegetables before eating

G. VOLATILES

Media=Air, Pathway= Dermal

- 1. Keep children from biking, playing, or doing other activities in areas of concern
- 2. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 3. Keep children from riding ATVs or motorized bikes on the site
- 4. Keep children from walking or bicycling on the site
- 5. Play on the site by climbing, running, digging or other play
- 6. Ride ATVs or motorized bikes on the site
- 7. Walk, jog, or bicycle on the site
- 8. Wash children's face, hands, and other exposed skin soon after outdoor play
- 9. Wash dirty clothes soon after wearing outdoors
- 10. Wash work clothing separate from household clothing
- 11. Wear long sleeves and pants during outdoor activity such as playing, gardening, yard work, and other outdoor work
- 12. Work in soil at home through gardening, digging, building, repairing and other outside activities

Media=Air, Pathway=Inhalation

- 1. Keep children from biking, playing, or doing other activities in areas of concern
- 2. Keep children from playing in water from an outdoor hose such as with a sprinkler or slip and slide
- 3. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 4. Keep children from riding ATVs or motorized bikes on the site
- 5. Keep children from walking or bicycling on the site
- 6. Leave windows and doors open
- 7. Leave windows and doors open on windy days
- 8. Limit exposure to steam in your home from such things as a dishwasher, boiling water, or hot tub
- 9. Limit time showering and bathing
- 10. Play on the site by climbing, running, digging or other play
- 11. Regularly replace and maintain water filters following recommended manufacturers instructions
- 12. Ride ATVs or motorized bikes on the site

- 13. Open bathroom window when showering or bathing
- 14. Run bathroom fan when showering or bathing
- 15. Shower and bathe in cooler water
- 16. Shower in unfiltered or untreated water
- 17. Use a vacuum with a bag (not a bagless vacuum, shop vac, or steam cleaner)
- 18. Walk, jog, or bicycle on the site
- 19. Wash work clothing separate from household clothing
- 20. Work in soil at home through gardening, digging, building, repairing and other outside activities
- 21. Follow recommended ventilation practices
- 22. Use a water filter on your private well
- 23. Use water filter(s)
- 24. Use well water in your home for bathing, brushing teeth, and other activities

Media=Air, Pathway=Oral

No Behavioral Items

Media=Soil, Pathway= Dermal

- 1. Bathe or brush family animals such as cats and dogs
- 2. Change clothes soon after outdoor activity such as working, playing, gardening, and yard work
- 3. Clean shoes before entering house
- 4. Keep children from biking, playing, or doing other activities in areas of concern
- 5. Keep children from playing in muddy soils
- 6. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 7. Keep children from riding ATVs or motorized bikes on the site
- 8. Keep children from thumb sucking and nail biting
- 9. Keep children from walking or bicycling on the site
- 10. Play on the site by climbing, running, digging or other play
- 11. Remove shoes before entering home
- 12. Ride ATVs or motorized bikes on the site
- 13. Vacuum home once a week or more often
- 14. Walk, jog, or bicycle on the site
- 15. Wash children's face, hands, and other exposed skin soon after outdoor play

- 16. Wash children's face and hands after playing with or petting family animals such as cats and dogs
- 17. Wash children's face and hands before they eat or drink
- 18. Wash children's toys
- 19. Wash dirty clothes soon after wearing outdoors
- 20. Wash fruits and vegetables before eating
- 21. Wash work clothes at home
- 22. Wash work clothing separate from household clothing
- 23. Wear long sleeves and pants during outdoor activity such as playing, gardening, yard work, and other outdoor work
- 24. Wet mop home once a week or more often
- 25. Work in soil at home through gardening, digging, building, repairing and other outside activities

Media=Soil, Pathway= Inhalation

No Behavioral Items

Media=Soil, Pathway=Oral

- 1. Bathe or brush family animals such as cats and dogs
- 2. Keep children from biking, playing, or doing other activities in areas of concern
- 3. Keep children from thumb sucking and nail biting
- 4. Wash children's face and hands after playing with or petting family animals such as cats and dogs
- 5. Wash children's face and hands before they eat or drink
- 6. Wash children's toys

Media=Water, Pathway= Dermal

- 1. Change clothes soon after outdoor activity such as working, playing, gardening, and yard work
- 2. Fill pool with unfiltered water
- 3. Follow drinking water advisories
- 4. Follow water use advisories
- 5. Keep children from biking, playing, or doing other activities in areas of concern
- 6. Keep children from playing in muddy soils
- 7. Keep children from playing in water from an outdoor hose such as with a sprinkler or

- slip and slide
- 8. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 9. Play on the site by climbing, running, digging or other play
- 10. Regularly replace and maintain water filters following recommended manufacturers instructions
- 11. Run tap water for a few minutes before using the water for drinking, food preparation, showering, etc
- 12. Shower in unfiltered or untreated water
- 13. Swim in local creeks, streams, rivers, ponds, or lakes
- 14. Swim in nearby creeks, streams, or rivers
- 15. Use a water filter on your private well
- 16. Use outdoor hose for watering plant, car washing, and other outdoor uses
- 17. Use water filter(s)
- 18. Use well water in your home for bathing, brushing teeth, and other activities
- 19. Walk, jog, or bicycle on the site
- 20. Wash children's face, hands, and other exposed skin soon after outdoor play
- 21. Wash children's face and hands before they eat or drink
- 22. Wash dirty clothes soon after wearing outdoors
- 23. Wash work clothes at home
- 24. Wear long sleeves and pants during outdoor activity such as playing, gardening, yard work, and other outdoor work
- 25. Work in soil at home through gardening, digging, building, repairing and other outside activities

Media=Water, Pathway= Inhalation

- 1. Limit time in hot tub
- 2. Limit exposure to steam in your home from such things as a dishwasher, boiling water, or hot tub
- Follow water use advisories
- 4. Limit time showering and bathing
- 5. Regularly replace and maintain water filters following recommended manufacturers instructions
- 6. Shower in unfiltered or untreated water
- 7. Swim in local creeks, streams, rivers, ponds, or lakes
- 8. Use water filters

9. Use well water in your home for bathing, brushing teeth, and other activities

Media=Water, Pathway=Oral

- 1. Wash children's face and hands before they eat or drink
- 2. Mix commercial baby formula using tap water
- 3. Swim in nearby creeks, streams, or rivers
- 4. Drink bottled water
- 5. Drink unfiltered water from creeks, streams, or rivers
- 6. Drink tap water from area of concern
- 7. Drink water from outdoor hose
- 8. Fill pool with unfiltered water
- 9. Follow drinking water advisories
- 10. Follow water use advisories
- 11. Keep children from biking, playing, or doing other activities in areas of concern
- 12. Keep children from drinking water from outdoor hose
- 13. Keep children from playing in water from an outdoor hose such as with a sprinkler or slip and slide
- 14. Keep children from playing, climbing, running, digging, or doing other activities on the site
- 15. Keep children from swallowing pool water
- 16. Play on the site by climbing, running, digging or other play
- 17. Regularly replace and maintain water filters following recommended manufacturers instructions
- 18. Shower in unfiltered or untreated water
- 19. Swim in local creeks, streams, rivers, ponds, or lakes
- 20. Use a water filter on your private well
- 21. Use well water in your home for bathing, brushing teeth, and other activities
- 22. Use outdoor hose for watering plant, car washing, and other outdoor uses
- 23. Use water filter(s)
- 24. Run tap water for a few minutes before using the water for drinking, food preparation, showering, etc

Media=Biota

No Behavioral Items