HEALTH & SAFETY

Weatherization Assistance Program
Indiana Field Guide

HEALTH AND SAFETY

Without good analysis, weatherization may be at odds with the health and safety of the building and/or the occupants. Health and safety may already be compromised prior to commencement of work, i.e. - existence of carbon monoxide or combustibles too near heat source. Weatherization retrofits may precipitate the production of pollutants i.e. - production of carbon monoxide from restricted oxygen supplies to combustion equipment via airsealing. Weatherization materials may compromise health and safety i.e. - off-gassing of adhesives and sealants.
Airsealing may concentrate pollutants that prior to weatherization were ventilated by natural infiltration/ exfiltration.

STANDARD - HEALTH AND SAFETY TESTING

The health and safety of the building, the occupants or the weatherization staff shall not be compromised by any retrofit material, technique or practice. To ensure the health and safety of the building, the occupants and the Weatherization staff, relevant health and safety tests and assessments will be conducted as a part of all building analyses.

Procedure - Health & Safety Testing

- Conduct Combustion Appliance Inspections.
- Permanently remove any unvented combustion appliances.
- Conduct moisture assessment.
- Assess building for faulty/inadequate wiring.
- Assess building for fire hazards and smoke detector adequacy.
- Identify sources of VOC's stored in the building.
- Assess for presence of friable asbestos in the building.
- Record all test results in a building analysis report.
- Track identified pollutants to their source & develop mitigation strategies for identified pollutants.
- Assess the building for the presence of lead based paint.
- Identify lead-based paint hazards.

STANDARD - AMBIENT AIR TESTING

Where combustion appliances are present, ambient air will be tested for CO at the initial building audit and at the final inspection of building performance retrofit measures.

Procedure - Ambient Air Testing

- Turn on meter outside and record outdoor ambient CO levels.
- Enter building and note locations where CO above outdoor ambient levels are found.
- When measurable levels up to 35 PPM are found, ventilate the building if appropriate and determine the source. If the source is found to be:
    - Smokers – educate the client
    - Vehicle in attached garage – educate the client
    - Gas range – repair/replace as required and educate the client
    - Un-vented combustion appliances – not allowed in weatherized homes
    - Vented combustion appliances – repair/replace as required
- If measurable levels are 35 PPM or higher, remove the occupants, turn off combustion appliances, and ventilate the building before investigating the source.

Gas Cook Stove and Oven Information

Name: _____ Job#: _____

Make and Model: _____

Serial # and Condition of Appliance: _____

LP gas _____ Natural gas _____ Gas Leaks? Yes/No Repaired? Yes/No

Range Top Level? Yes/No Range Top Left in Level Condition? Yes/No

Brass Flex Connector? Yes/No Condition? Replaced? Yes/No

Exhaust Fan? Yes/No Vented to outside? Yes/No Does it Work? Yes/No

PPM Carbon Monoxide **Pre**: Inspector Date: _____
Ambient CO Level - Pre: _____ Post: _____
Left Rear Burner: _____ Right Rear Burner: _____
Left Front Burner: _____ Right Front Burner: _____
Oven Burner: _____

PPM Carbon Monoxide **Post**: Technician: Date:
Ambient CO Level - Pre: _____ Post: _____
Left Rear Burner: _____ Right Rear Burner: _____
Left Front Burner: _____ Right Front Burner: _____
Oven Burner: _____

PPM Carbon Monoxide **Inspection**: Inspector: _____ Date: _____
Ambient CO Level - Pre: _____ Post: _____
Left Rear Burner: _____ Right Rear Burner: _____
Left Front Burner: _____ Right Front Burner: _____
Oven Burner: _____

Comments/Repairs: _____

_____

_____

_____

_____

Cook Stove and Oven Protocol

- Is the appliance safe to operate? Check for gas leaks. Check the condition of the flex connector. Repair any gas leaks and replace the flex connector if it is badly kinked, in poor condition or a brass connector manufactured before 1974. The appliance shall have a user-friendly gas shut off valve on the inlet side of the flex connector.
- Does the appliance area have an operating exhaust fan that vents to the exterior of the building? Inoperable fans that vent to the outside should be repaired. All fans should be vented to the outside if possible. Mobile homes shall have an exhaust fan that vents to the outside. The fan should be switched on and left operating for the duration of the test.
- Make sure you are not breathing excessive amounts of carbon monoxide while the testing is being performed. Clear your CO instrument outside in a clean environment and document pre-testing ambient levels around the appliance. Be aware that ambient levels can change as you test. Document post-testing CO ambient levels. For worker safety, cease testing and investigate repairs if ambient CO levels exceed 35 PPM.
- Operate each range top burner on high setting. Check carbon monoxide levels 6 to 8 inches above the flame on each burner after 2 minutes of operation. The acceptable level of carbon monoxide is less than 30 PPM above the ambient level. Burners found to be making in excess of 30 PPM above the ambient level shall be cleaned or repaired.
- Remove any blockage of the air inlet holes in the oven such as aluminum foil covering the oven bottom. Close the oven and broiler drawer doors. Set the oven on broil so it runs for the duration of the test. Carbon monoxide levels should be checked at the oven exhaust port after 5 minutes or when the reading stabilizes. There will be an initial spike in the reading as the oven warms up. If the oven has a top and a bottom burner, then two readings need to be obtained. One reading with the bake/bottom burner on and the other reading with the broil/top burner on. The acceptable level of carbon monoxide for the oven is less than 150 PPM above the ambient level. Ovens found to be making in excess of 150 PPM above the ambient level shall be cleaned or repaired.

- Make sure the range top is level front to back and side to side before leaving. Any information regarding the appliance condition, operation or repairs should be noted in the comments/repair section of the information page. Educate the homeowner. The exhaust fan should be operating when the stove or oven is on. Point out the need to keep the air inlet openings in the oven free from obstruction. A dirty appliance may contribute to carbon monoxide production.

PRESSURE TESTING OF THE COMBUSTION APPLIANCE ZONE

STANDARD - CAZ TEST FOR VENTED APPLIANCES

The concept is to test vented combustion appliances under the conditions which are least likely to allow it to function properly. The lowest Btu/hr input appliance in the CAZ (Combustion Appliance Zone) is tested first and it is tested under conditions known as “Worst Case”.
“Worst Case Depressurization” is the configuration of the CAZ which is least likely to allow vented combustion appliances to be able to establish a flow and adequately vent flue products to the outside of the structure.
This is accomplished by testing for the most negative CAZ pressure caused by interactions between the mechanical and structural systems in the building. One procedure does not cover every house. Once you understand the concepts, they are adaptable to every house you will encounter.
On extremely windy days, you just may not be able to get a good number. The number is not as important as the scenario. Use longer term averaging with the digital meters. Make use of a “windy day” kit.
Determine the “Worst Case Depressurization” conditions for the house, re-create the conditions which caused the most negative pressure in the CAZ, and test your appliances under that “Worst Case Depressurization” scenario.

Procedure - CAZ Test for Vented Appliances

- Set Up Procedures
    - Turn heating appliance and water heater off. It is harder for a cold vent to establish a flow than a vent that is already warmed up.
    - Remove furnace filter if it is dirty. The air handler must be able to move as much air as possible.
    - Close all exterior windows and doors. Close all connections to the outside.
    - Close fireplace or wood stove dampers. However, we need to account for the air consumed by a fire. Use the Blower Door and set it to a flow of 300 CFM to simulate the fireplace or wood stove flow.
    - Operate all exhaust appliances, including clothes dryers. Do not operate whole house exhaust fans.
    - Close all interior doors with one exception. Do not close doors to rooms that have exhaust appliances but no supply register.
    - Set up is now complete and house is ready to determine which scenario (door open or closed, furnace fan on or off) will create the most negative CAZ pressure from this mechanical and building interaction.

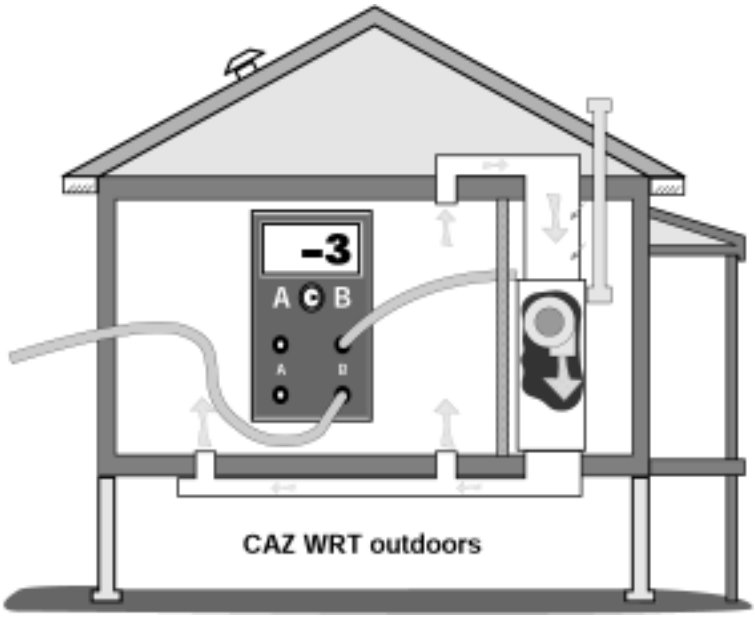
Procedure - CAZ Test for Vented Appliances

- CAZ Test
    - Set up the digital manometer to measure CAZ pressure with reference to (WRT) outside. What you are measuring is always input. Outside is your reference point.
    - If there is a door separating the CAZ from the main body of the house, testing will include the door in the open position as well as the closed position.
    - If there is a forced air furnace in the house, testing will include the furnace fan in both the on and off positions.
    - The possible testing scenarios are as follows:
        - Fan Off & CAZ Door Open
        - Fan Off & CAZ Door Closed, by closing the CAZ door.
        - Fan On & Door Closed, by operating the furnace blower without firing off the heating appliance.
        - Fan On & Door Closed, by opening the CAZ door.

The scenario which causes the most negative pressure in the CAZ is the condition known as “Worst Case Depressurization”. Re-create that “Worst Case Depressurization” scenario and test your appliances under that condition

- Spillage, draft and CO testing are done under “worst case” depressurization conditions.
- Daily Safety Test Out (DSTO) is performed without CO testing.

Pressure Testing the Combustion Appliance Zone



Duct Leaks in the CAZ can cause depressurization there. Exhaust fan operation and unbalanced airflow also contribute to depressurization.

Additional - Diagnostic Procedure for CAZ Depressurization Problems

- This procedure can be used to help determine the cause of a CAZ depressurization problem.
- Take measurements and determine whether exhaust fans, blower operation and door closure may be the cause.
- Make necessary repairs.

DIAGNOSTIC PRESSURE MEASUREMENTS DEPRESSURIZATION PROBLEMS

Preparation:
Close exterior windows and doors.
Define the CAZ.
Set up a digital manometer to read CAZ pressure WRT outside.

Pressure measurements:

I Baseline:

Set up:

House in normal wintertime conditions.

Baseline pressure: _____ Pa

II Effect of exhaust appliances:

Set up:

CAZ door open. Turn on all exhaust fans except whole house exhaust. When interior doors get closed, do not close doors to rooms that have exhaust fans in them.

Exhaust fans on: _____ Pa

Close interior doors: _____ Pa

Close CAZ door: _____ Pa

III Effect of furnace blower operation:

Set up:

Operate furnace blower. Leave interior doors closed and smoke doors to rooms that have exhaust fans. Open the door if the smoke goes into the room, otherwise, leave the door closed.

Close CAZ door: _____ Pa

Open CAZ door: _____ Pa

Open interior doors: _____ Pa

DRAFT TESTING OF VENTED COMBUSTION APPLIANCES

These tests assure that regardless of the season during which the building analysis is being performed, problems with the venting of combustion by-products can be identified and remedied.

STANDARD - DRAFT TESTS ON VENTED APPLIANCES

"Worst case" depressurization draft tests will be conducted on all Category 1 vented combustion appliances upon initial heating system inspections, after completion of daily shell work and during the final inspection of the home. Exceptions are for solid fuel, sealed combustion, or Category III and IV systems.

Outdoor Temperature	**Minimum Draft Pressure** Inches of Water Column	Pascals
Greater than 80 Degrees F.	.005" W.C.	1 Pa
Between 60 and 80 Degrees F.	.008" W.C.	2 Pa
Between 40 and 60 Degrees F.	.012" W.C.	3 Pa
Between 20 and 40 Degrees F.	.016" W.C.	4 Pa
Less than 20 Degrees F.	.02" W.C.	5 Pa

Procedure - Draft Tests On Vented Appliances

1) Draft testing is done under “worst case” depressurization conditions.

2) Concept - the idea is to test the lowest BTUH appliance under the conditions which are least likely to allow it to function properly.

3) Order of testing - the lowest BTUH appliance in the CAZ (usually the water heater) is always tested first in any situation.

4) For personal safety, measure ambient CO in the CAZ during operation of combustion appliances.

- Fire the appliance and determine if the unit can establish initial flow in the vent.
- Spillage is checked within the first two minutes.
- Document draft pressure after 5 minutes.
- Operation of an additional appliance should not cause a reduction in draft or spillage at any other appliance in the CAZ.
- If the appliance cannot establish flow or has spillage after two minutes, the appliance should be considered hazardous and should not be operated until repairs are made.

Daily Safety Test-Out Summary Sheet "Worst Case Depressurization" Draft Test

Revised: 5/16/06

Set-Up

Heating appliances and water heater off?	❑ Yes
Furnace filter clean or removed?	❑ Yes
All exterior windows and doors closed?	❑ Yes
Fireplace or wood stove dampers closed?	❑ Yes ❑ N/A
Clothes dryer and all other exhaust fans operating? (Do not operate whole house exhaust fans)	❑ Yes ❑ N/A
Interior doors closed? (Do not close doors to rooms that contain JUST an exhaust fan but no supply register)	❑ Yes ❑ N/A
Supply registers open? (Close supply registers in the CAZ)	❑ Yes ❑ N/A
Blower door being used to simulate 300 CFM fireplace flow?	❑ Yes ❑ N/A

CAZ Test

Gauge set up to measure CAZ WRT outside?		❑ Yes
Is there a door from the CAZ to the main body of the house?		❑ Yes ❑ No
Is there a forced air furnace?		❑ Yes ❑ No
	CAZ door:	
	Open	Closed
Furnace **Fan Off:**	____ Pa	_____ Pa
Furnace **Fan On:**	____ Pa	_____ Pa

Recreate conditions which caused the greatest negative pressure in the CAZ

Appliance Testing

Water Heater: (Test the lowest Btu/hr input appliance first)	
Fire the water heater.	
Was initiall flow established in the vent? (5 sec)	❑ Yes ❑ No
Spillage? (Should disappear within 2 minutes)	❑ Yes ❑ No
Draft pressure after 5 minutes:	_____ Pa **or** _____ W.C.

Furnace/boiler/space heater:	(Test the lowest Btu/hr input appliance first)		
Fire the heating appliance.			
Was initiall flow established in the vent? (5 sec)		❑ Yes	❑ No
Spillage? (Should disappear within 2 minutes)		❑ Yes	❑ No
Retest of smaller appliance: Spillage?	❑ Yes ❑ No		
	Draft _____ Pa **or** _____ in W.C.		
Draft pressure after 5 minutes?	_____ Pa **or** _____ in W.C.		

"Worst Case Depressurization" Draft Testing

Important

DO NOT BREATHE SPILLING FLUE PRODUCTS!

Be safe! If the appliance does not establish a flow in the vent almost immediately, abort the test and follow the "Response to Failure" procedures. Do not wait for 2 minutes to see if the spillage disappears if the flow in the vent is in the wrong direction and into the room.

Response to Failure

1) Disable portions of "Worst Case" set-up until the furnace or water heater functions properly.

2) Inform the client of what to do/not do with the house until permanent corrective action can be taken.

3) Notify your Wx Auditor/Supervisor that action is needed to repair problems with the home.

Emergency condition

If "worst case" is completely undone and the appliances still do not function under "normal" operating conditions:

- **Do not operate the appliance until safety repairs are completed!**
- **Contact your supervisor.**

Specifications:

A) Flow of flue products must be established to the exterior of the structure in the vent almost immediately.

B) There should be no spillage after 2 minutes of operation.

C) Operation of the furnace should not cause spillage or a reduction in draft pressure in any other appliance it shares combustion air with.

D) Adequate draft pressure after 5 minutes is:

Minimum Draft Pressure

Outdoor Temperature	In. of Water Column	Pascals
Greater than 80 Degrees F.	.005" W.C.	1 Pa
Between 60 and 80 Degrees F.	.008" W.C.	2 Pa
Between 40 and 60 Degrees F.	.012" W.C.	3 Pa
Between 20 and 40 Degrees F.	.016" W.C.	4 Pa
Less than 20 Degrees F.	.02" W.C.	5 Pa

STANDARD - TESTING FOR CO

All combustion appliances shall be tested for CO. Exceptions are gas dryers and solid fuel appliances. CO measurements are not to exceed 50 PPM per cell on draft hood equipped appliances or 50 PPM in the vent on sealed combustion or draft induced appliances.

Procedure - Co Testing

- Measuring CO is done during testing under “worst case” depressurization conditions.
- For personal safety, measure ambient CO in the CAZ during operation of combustion appliances.
- CO measurements are taken “pre-dilution”. On draft hood equipped units, a measurement will be taken at the flue outlets of each burner cell before the introduction of dilution air from the draft hood.
- Water heater measurements are taken under the draft hood on each side of the baffle.
- Measurements are taken at the termination or in the vent pipes of sealed combustion or draft induced appliances. (mobile homes, 80% and 90% furnaces)
- For a more detailed appliance testing procedure, see “Worst Case Depressurization” draft testing procedure in Chapter 4: Heating.

Potential Sources of CO in a Home

1 Outside Sources **2** Automobile in garage
3 Kitchen range **4** Fireplace
5 Gas dryer **6** Heating/DHW Appliances
7 Blocked chimney

VISUAL HEALTH AND SAFETY INSPECTION

STANDARD - VISUAL SAFETY INSPECTION

Prior to the commencement of weatherization, a visual inspection of potential fire hazards will be conducted. All weatherization units will have appropriately placed smoke detectors. **No testing or retrofit work will be conducted in areas where identified hazards have not been repaired or mitigated.**

Procedure - Safety Inspection

- Identify potential fire hazards including but not limited to:
    - Fuel/gas leaks; combustibles in the immediate vicinity of combustion appliances.
    - Unsafe or inadequate venting systems.
    - Combustion appliances failing to meet code standards/clearances.
    - Frayed electrical wiring.
    - Overloaded or misused electrical wiring.
- Identify potential health and safety issues including, but not limited to:
    - Asbestos
    - Lead
    - Moisture
    - Unacceptable indoor air quality
    - Structural damage
- Assess smoke detector adequacy.
- Develop strategy to mitigate identified hazards.
- Discuss identified problems with owner(s)/ occupant(s). Discuss their role in hazard prevention. Describe mitigation procedures to be conducted by the weatherization crew.

STANDARD - ELECTRICAL INSPECTION

Household electrical systems shall be inspected for potential hazards prior to the commencement of building performance retrofit work.

Procedure - Electrical Inspection

- Check for the proper sizing of fuses/breakers to wiring size in circuit panel boxes.
- Ensure that the circuit panel/fuse box has a proper, secure cover.
- Inspect for frayed wiring, improper splicing, and lack of junction boxes or covers.
- When in doubt, test outlets using an electrical circuit "Voltage Drop" tester or inspect using a qualified electrician to evaluate components of the electrical system.
- Identify any knob and tube wiring found in the dwelling. Test knob and tube wiring to see if it is live. If it is spliced into conventional circuitry, note breakers or fuses controlling the circuit. Building performance retrofits must conform to NEC or local code.
- Live knob and tube wiring can never be covered or surrounded by insulation as result of any Weatherization measure. Instruct installers to avoid insulating over or dense-packing around live knob and tube wiring while installing insulation in attics, floors or walls.
- Make repairs to eliminate hazards and enable safe and complete weatherization of the building.
- Identify appliances posing potential electrical shock hazard.
- Record problems found during the building analysis.

STANDARD: MOISTURE AND BIOLOGICALS

The health and safety of the building, the occupants, and the weatherization staff shall not be compromised by any retrofit material, technique, or practice. To ensure health and safety, relevant assessments will be conducted as part of all building analysis and notification will be given to the client that some weatherization measures may create dust or airborne particles. This may include mold. Weatherization measures installed will either alleviate or not promote the growth of new airborne particles.
Moisture and high indoor humidity can encourage the growth of many biologicals. DOE funds should not be used to test, abate, remediate, purchase insurance, or alleviate existing mold conditions identified during the audit, the work performance period, or the quality control inspection.

Procedure – Moisture and Mold Identification

- Conduct visual assessment of the entire dwelling including attic, knee wall, basement and crawlspace areas
- Measure indoor humidity levels and potential sources for excess moisture
- Existing moisture and mold conditions and sources are noted and documented on the Moisture Assessment Findings form that is signed by the local CAA, client and/or landlord and placed into the client file. A copy is to be issued to the client.
- Photographs of areas of concern or existing moisture and mold areas must be taken and placed in the client file
- Complete a Client Consent Form with Release of Liability and Waiver of Claims and place in the client file.
- Occupants are to be given a copy of the Environmental Protection Agency (EPA) brochure, “A Brief Guide to Mold, Moisture, and Your Home” as part of the client education process. The pamphlet details the health risks of mold in the home and provides simple remediation techniques that individuals can take to resolve moisture issues in their home.
- Client education is also used to address the occupant’s role in moisture problems. Solutions and educational talking points are discussed with homeowner and/or occupants to determine roles

in creation of problems and/or mitigation.

- Work scope development must address and mitigate identified moisture related issues and identify that the appropriate funding source is being charged for such activity.
- Small isolated areas of 10 square feet or less of mold can be cleaned up and Weatherization can proceed.
- Areas of larger than 10 square feet must be identified for client/ outside source clean up and/or repair and Weatherization work can not proceed until the issue is resolved.
- Small isolated areas of 10 square feet or less can be cleaned in the following manner:
- Scrub the area using a non-ammonia household detergent and a brush
- Ventilate the work area
- Disinfect with a chlorine bleach solution
- Leave bleach solution on surface for 15 minutes then rinse with water and dry quickly

Procedure – Deferral Due to Moisture Issues

If necessary, WAP services may be delayed until the problem can be referred to another agency that can take remedial action. Dwellings that are deferred due to moisture issues must follow the following process:

- Moisture Assessment form stating that work can not continue due to mold and/or moisture issues in the home must be signed by the Building Analyst completing the energy audit, the client and/or landlord, and the Building Technician crew leader. The original must be kept in the client file and a copy given to the client.
- Any deferral for mold and/or issues must contain photographs that identify the moisture issues in the home and placed in the client file. The file must also contain a description by the Building Analyst of the extent of the moisture issue, square footage of mold or effected areas, where in the building structure the areas of concern are located, etc.
- A written deferral letter with appeal information must be sent to the client.

MOISTURE ASSESSMENT FINDINGS

INDIANA WEATHERIZATION PROGRAM

Client Name:_____

Address:_____

****

The purpose of the Indiana Weatherization Assistance Program is to increase the energy efficiency of dwellings owned or occupied by low-income persons, reduce their total residential expenditures, and improve the health and safety of the building and its occupants. This moisture assessment , as part of overall building analyses, documents existing moisture issues before weatherization was performed and identifies issues that must be addressed by the property owner before work can begin on the dwelling.

Items checked on this form have been identified as potential issues in your home.

1. MOISTURE AREAS

Existing conditions (check all that apply)

_____ Damp atmosphere in house

_____ Client complaint of allergy-like symptoms

_____ Visible mold growth (if yes - go to #2)

_____ Evidence of water penetrating the home (stains, moist areas)

_____ Evidence of conditions that might allow water in the home (poor grading, bad flashing, bad/missing gutters)

_____ Actual construction defect or deterioration that allows water into the home (roof, decks, windows concrete slabs, lack of vapor barrier)

_____ Plumbing defects (leaking drains, pipes or toilet seals, missing caulk on sinks or tubs)

_____ HVAC problems (dirty, moist filters, poor condensation drainage)

_____ Dryer vented indoors, inadequate ventilation for a kitchen, bath or other high moisture area

_____ Any source of condensation

2. MOLD/MILDEW AREAS

	Existing Mold/ Mildew	Sq Ft of area
_____Primary bath	_____	_____
_____Second bath	_____	_____
_____Kitchen	_____	_____
_____Laundry area	_____	_____
_____Basement walls	_____	_____
_____Basement shower stall	_____	_____
_____Crawlspace	_____	_____
_____Exterior walls	_____	_____
_____Attic/Ceilings	_____	_____
_____Other_____	_____	_____

3. UNSANITARY CONDITIONS (may cause odors, viruses or bacteria in house)

_____ Insect pests in work area
_____ Excessive animal feces/carcasses in work area
_____ Excessive bird/bat feces/carcasses in attic
_____ Raw sewage in house/basement/crawlspace

Additional Comments:_____

_____

These are the existing conditions as of the date below. Weatherization will / will not be able to proceed due to items identified on this form.

_____ _____
Client Signature Date

_____ _____ _____
Agency Representative Agency Phone Number Date

The moisture assessment findings completed by the Building Analyst on _____do / do not reflect current moisture issues found in the dwelling on _____. Any changes to the original assessment have been noted and initialed by the appropriate Building Technician.

_____ _____
Certified Building Technician Date

Notes

CLIENT CONSENT FORM

RELEASE OF LIABILITY AND WAIVER OF CLAIMS

NOTICE: The health and safety of the building, the occupants, or the weatherization staff shall not be compromised by any retrofit material, technique or practice. To ensure health and safety, relevant assessments will be conducted as part of all building analysis. Some weatherization activities may create dust or other airborne particles, including but not limited to: insulation, mold, or lead. All measures installed in the building will alleviate and/or not promote the growth of new airborne particles.

FOR AND IN CONSIDERATION of the State of Indiana, the Indiana Family and Social Services Administration, and _____ hereafter referred to as Community Action Agency (CAA), its agents and employees assisting in the provision of weatherization services to our dwelling, I/WE DO HEREBY RELEASE the State of Indiana, the Indiana Family and Social Services Administration, and the CAA its agents or employees from any and all liability for losses, damages, costs, personal injury, death, or other claims because of, or in relation to the installation, location, or malfunction of measures performed.

I understand that by participating in the Indiana Weatherization Assistance Program (WAP) measures performed become my personal property and it is my responsibility to maintain and repair installed measures to keep the building systems in working condition.

Please initial where applicable:

_____ I have received a copy of the EPA pamphlet, "Protect Your Family From Lead in Your Home", informing me of the potential risk of lead hazard exposure from WAP activities to be performed on my dwelling. I confirm that I have received the lead pamphlet before weatherization work began on my home.

_____ I have received a copy of the EPA pamphlet, "Mold, Moisture, and Your Home", informing me of the potential risks of mold and high moisture levels in my home. I have also received a copy of the moisture assessment form that was completed on my home.

_____ I understand that smoke and/or carbon monoxide detectors installed in my home are my personal property and must be maintained in order to continue good working conditions. An operational test was performed and the unit(s) were working properly when installed.

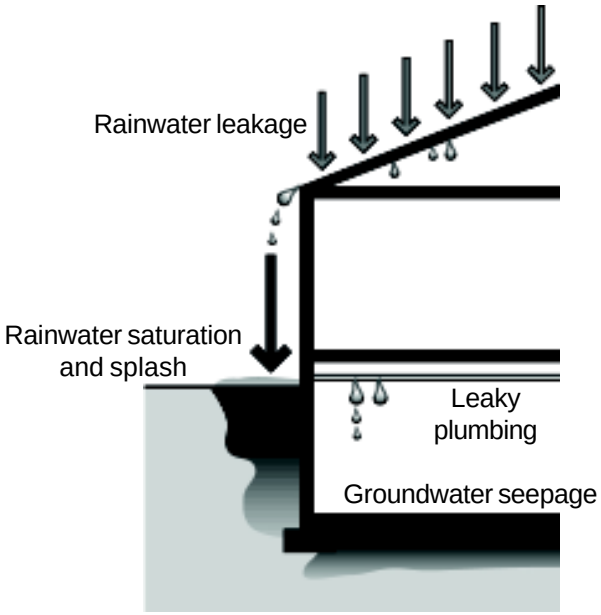
My signature below denotes that I fully understand the above waiver and its release of liability. I have chosen to go forward with the weatherization process, accepting any and all risks of injury or damages.

_____	_____	_____
Printed Name	Signature	Date

Water Vapor Sources

A variety of indoor sources contribute water vapor to the home. Condensation occurs near these sources and in the home's coldest areas.

Water Leakage and Seepage



The leakage and seepage of liquid water is a major cause of moisture problems.

Lead-Safe Work Practices Policy for Indiana Weatherization Programs

The Family and Social Services Administration is committed to ensuring that Indiana's Weatherization Program:

1. Protect Community Action Agency employees, their families, and residents of homes being weatherized from lead poisoning;
2. Comply with the new Housing and Urban Development (HUD)[1] and Environmental Protection Agency (EPA) regulations[2] as well as long-standing Occupational Safety and Health Administration (OSHA)[3] and other regulations[4] regarding lead-based paint; and
3. Reduce the likelihood that someone may claim that weatherization work resulted in lead poisoning.
4. Refer to the new law that went into effect on July 1, 2002 that strengthens the rules regarding lead. The DOE rule must be followed.

Therefore, FSSA is requiring the Community Action Agencies to follow this policy in the design and implementation of their weatherization projects. The Weatherization Program manager is primarily responsible for implementation of this policy. FSSA believes that this policy will have a minor impact on the extent of weatherization services provided by the agency. Only in unusual situations will a weatherization service that would otherwise be conducted be stopped because of lead-based paint hazards.

FSSA believes that Community Action Agencies can maintain this high level of weatherization service by making extensive and regular use of the x-ray fluorescence (XRF) equipment that FSSA is providing to each agency. The XRF will allow the building analyst to quickly and accurately determine where lead-based paint and lead dust hazards are in the home and design projects to avoid generating problems. By taking time up front to identify the location of lead-based paint and carefully designing the weatherization work, most weatherization projects can continue without the use of extensive and costly abatement practices.

[1] 24 CFR Part 35
[2] 40 CFR Part 745
[3] 29 CFR 1926.62. See also 29 CFR Part 1910 Subpart I regarding personal protective equipment.
[4] 327 Indiana Administrative Code 23

This policy consist of seven parts:

I. Special Requirements for HUD-Assisted Property
II. Project Design
III. Lead-Safe Work Practices
IV. Training
V. Deferral of Weatherization Services
VI. Liability Insurance
VII. Funding Considerations
VIII. Glossary

Appendix A Sample Hazard Reduction Completion Notice Format

I. Special Requirements for HUD-Assisted Property

The U.S. Housing and Urban Development (HUD) has adopted residential lead-based poisoning prevention rules. These rules were generally effective on September 15, 2000. However, HUD extended the compliance dates on a staggered schedule with the final date being September 15, 2001.

The rules do not apply to weatherization projects when any one of the six conditions are true:

1) Residences built after 1977;
2) Owner or occupant provides agency with a copy of an inspection report signed by a **lead inspector licensed by the Indiana Department of Environmental Management (IDEM)** that indicates no lead-based paint is present;
3) The amount of disturbed lead-based paint is less than following thresholds:
    a) For interior surfaces, either two square feet per room or 10% of a small component;
    b) For exterior surfaces, 20 square feet;
4) Residence is not HUD-assisted housing (including **HUD Section 8** vouchered housing);
5) HUD funds are not being used to **weatherize, rehabilitate, or repair** the residence;
6) Residence is designated exclusively for the elderly or disabled.

If any of these six conditions are true, then the HUD rules do not apply. In general, for those homes that fall within the HUD rules, the lead-safe work practices described later in this policy will ensure compliance with the HUD rule. However, HUD requires that these additional precautions be taken:

1) **Clearance Examination:** When the weatherization work is completed, the owner and occupants may not reenter the work area until the agency has a clearance report signed by an IDEM-licensed risk assessor or inspector. If the work area includes a bedroom, bathroom, or kitchen, the housing may not be entered

until the clearance report is signed. In interior areas, the clearance exam requires dust wipe samples of window sills and floors for each room disturbed plus adjacent rooms. Currently, these samples must be sent to an EPA-approved lab for analysis. It often takes two days to get the results back.

FSSA anticipates that HUD will allow the NITON XRF with the dust wipe accessory to be a substitute for the lab analysis. Until that approval is granted, the dust wipe samples must be analyzed by both the NITON XRF to ensure the work was done properly and the EPA-approved lab to meet HUD regulations.

2) **Trained Workers:** All workers on the site must be either:

   a) Licensed by IDEM as a worker or supervisor;

   b) Supervised by an IDEM-licensed lead supervisor; or

   c) Trained at a HUD-approved training course (see training section).

3) **Hazard Reduction Notice:** Occupants must receive a special "Hazard Reduction Activity" notice within 15 days after the work is completed. A sample form is provided in Appendix A of this policy.

II. Project Design

Community Action Agencies shall consider lead-based paint issues on all weatherization projects. Unless the agency knows that the residence is built after 1978 or knows that lead-based is not present in the residence[5], the agency must determine what weatherization services should be provided for a residence in one of two ways: either presume the paint is lead-based paint or test the paint to determine whether it is or is not lead-based paint. While anyone can make the presumption, only an IDEM-licensed inspector may determine whether paint is or is not lead-based paint. The NITON XRFs provided by FSSA are the key instrument used to make this determination.

If the paint is assumed to be lead-based paint, any work that disturbs more than minor (de minimis) amounts of paint must be done using a full-set of lead-safe work practices. If the paint is not lead-based paint, the agency may not be making the most efficient use of weatherization funds or providing all appropriate weatherization services. In practice, the agency will not be able to do any interior work that disturbs lead-based paint.

Community Action Agencies may choose which approach to take on a particular residence. However, FSSA strongly encourages the agencies to use the XRFs. In most cases, they will reduce the overall cost of the project by avoiding the unnecessary use of lead-safe work practices. In addition, the owner and occupants, as well as future owners and occupants, will know where the lead-based paint is so they can take appropriate precautions.

When lead-based paint is present, FSSA has made the following determinations regarding the cost and need for lead-safe work practices.

1) Minor Paint Disturbance

Some lead-safe work practices must be used whenever lead-based paint is disturbed. The work practices generally consist of wetting down paint to be disturbed and cleaning up when completed. However, when more than de minimis amounts of lead-based paint are disturbed (see below), a full-set of lead-safe work practices must be used.

[5] The only legal method that an agency may know that a residence built before 1978 does not contain lead-based paint is through a report signed by an IDEM-licensed inspector. That report must be provided to the owner and occupant of the residence. The owner must provide future tenants and/or buyers of the residence with a copy of the report.

2) Exterior Paint

Lead-safe work practices on exterior paint are reasonable and modest as long as a child's regular play area is not near the work. A dust wipe sample is not needed on exterior work and special precautions to protect the floor and furniture are not needed. Because of the likelihood that the paint disturbance will exceed 20 square feet, it is generally better to always plan to use the full set of work practices.

3) Interior Paint

The full set of lead-safe work practices on interior area are not too costly only when the room is not carpeted and either the furniture can be easily removed or easily covered and cleaned. Often, this limits work to a bathroom, kitchen or hallway. In all cases, the number of rooms and the amount of paint disturbed should be kept to a minimum.

If the agency chooses to have an IDEM-licensed inspector use the XRF, the agency should use the following procedure to determine how best to provide weatherization services.

Step 1 Determine If Problem Might be Present

1) Presume that lead-based paint is present unless one of the following conditions apply:

   a) The residence was built after 1977; or

   b) The owner or occupant provides the analyst with a copy of an inspection report signed by a **lead inspector licensed by IDEM** that indicates no lead-based paint is present;

2) If lead-based paint is present or presumed to be present, assess whether the paint is seriously deteriorated (i.e. that a workman's presence just walking around the residence is enough to stir up lead-based paint laden dust residues) - the XRF may be used to determine the amount of lead in the dust using a dust wipe sample;

3) If the lead-based paint is seriously deteriorated, defer all weatherization work, document your decision, recommend that children in the home get a blood lead test, and contact local health department for guidance. Otherwise, go to Step 2.

Step 2 Assess the Extent of the Problem

1) Identify where paint may need to be disturbed;

2) Use an XRF to determine if the paint is lead-based paint;

3) Document results for owner and occupant of residence in a signed inspection report per IDEM requirements; and

4) Decide how to proceed:

   a) If no lead-based paint is found, go to Step 6 item 1) below and continue with full weatherization services; and

   b) If lead-based paint is found, ensure that work on furnace includes the use of a HEPA vacuum to collect any dust that must be disturbed and go to Step 3.

Step 3 Avoid Disturbing Any Lead-Based Paint

1) Identify options to provide the service without disturbing lead-based paint;

2) Determine whether an option can achieve the full weatherization benefits with no loss in effectiveness;

3) If a practical option exists, go to Step 6 and implement that option using only those lead-safe work practices that the building analyst or licensed risk assessor determines may be needed to avoid disturbing lead-dust and ;

4) If a weatherization service cannot practically be done without disturbing lead-based paint, then go to Step 4.

Step 4 Disturb Only Exterior Paint

1) Identify options to provide the service by disturbed only exterior lead-based paint;

2) Determine whether a child's regular play area that consists of a porous surface such as sand, soil, or grass is within five feet of paint to be disturbed;

3) If such a play area is found:

   a) Ensure that the play area is more than five feet from the paint to be disturbed; and

   b) Recommend to the occupants that the play area be moved away from any lead-based paint (whether weatherization work is done or not);

4) Determine whether an option can achieve the full weatherization benefits with no loss in effectiveness;

5) If a practical option exists, go to Step 6 item 1) and implement that option using exterior lead-safe work practices identified in Section III below; and

6) If a weatherization service cannot practically be done without disturbing only exterior lead-based paint, then go to Step 5.

Step 5 Narrow the Scope of Interior Lead-Based Paint Disturbance

1) Identify options to do the project by disturbing:

   a) As little interior lead-based paint as possible – with the goal of getting the disturbance less than two square feet overall and less than 10% of an interior component of interior lead-based paint; and

   b) Interior lead-based paint in uncarpeted rooms that have:

      i) Few items of furniture;

      ii) Furniture that can be easily moved; or

      iii) Furniture that has hard surfaces that can be easily cleaned;

2) Determine whether an option can achieve the full weatherization benefits with no loss in effectiveness;

3) If a practical option exists, go to Step 6 and implement that option using interior lead-safe work practices identified in Section III below in as few rooms as possible and:

   a) Take and analyze dust wipe samples (and required blanks) from a window sill and floor in each room where paint is being disturbed and in each adjacent room using EPA procedures; and

   b) Providing renovation notice to owner and occupants as required by EPA (see Step 6, item 2);

4) If a weatherization service cannot practically be done without disturbing less than two square feet of interior lead-based paint or less than 10% of an interior component in carpeted rooms with many pieces of furniture that cannot be easily moved or cleaned, then do not provide the specific weatherization service.

Step 6 Provide Notices to Owner and Occupant

1) Lead Inspection Report: Whenever an XRF is used:

a) Prepare a lead inspection report summarizing the results of the XRF tests;

b) Sign the copy (must be done by an IDEM-licensed inspector);

c) Give a copy of the lead inspection report to the owner and adult occupant of the residence; and

d) Tell the owner that the owner must provide a copy of the report to future tenants and buyers.

2) Notice of Renovation: Whenever more than two square feet of interior painted surface on a single component may be disturbed when providing weatherization services:

a) Give an EPA Pamphlet entitled *Protect Your Family From Lead In Lead In Your Home*, to the owner and adult occupant of the residence by certified mail between 5 and 60 days before the work begins or in person less than 60 days before the work begins;

b) If the EPA Pamphlet is delivered in person, obtain a written acknowledgment from the owner and adult occupant[6] that each has received the EPA Pamphlet on a form that says:

[6] EPA provides alternatives when an adult occupant is unavailable or refuses to sign. See 40 CFR 745.88. If this occurs on weatherization projects, it is better to work through the issues that proceed without a written acknowledgment from the occupant.

Acknowledgment of Receipt of EPA Pamphlet

"I have received a copy of the pamphlet, Protect Your Family From Lead In Your Home, informing me of the potential risk of lead hazard exposure from renovation activity to be performed in my dwelling unit. I received this pamphlet before work began.

Address of Unit Undergoing Renovation: _____

_____	_____	_____
Printed Name	*Signature*	*Date*

c) If lead-based paint in a common area for multiple residences is disturbed:

i) Provide a notice to each resident describing the:

(1) General nature and locations of the planned renovation activities;

(2) Expected starting and ending dates; and

(3) Statement of how the occupant can obtain the EPA Pamphlet, at no charge, from the renovator;

ii) Prepare, sign and date a statement describing the steps taken to notify all occupants and to provide the pamphlet; and

iii) Revise notice if scope, locations or dates change before the changes occur.

III. Lead-Safe Work Practices

Community Action Agencies shall use the following lead-safe work practices whenever known or presumed lead-based paint is disturbed. Please note that additional work practices are required when the work is covered by the HUD rule (see Section I for more information). The Building Technician Crew Leader is responsible for ensuring that these work practices are followed:

1) General: When any lead-based paint is disturbed:

a) Tell the occupants to stay out of the work area;

b) Ensure that workers can wash their hands and face when leaving work area;

c) Ensure that workers do not smoke, eat, drink, chew tobacco or gum, or apply cosmetics in the work area;

d) If desired wear a respirator or dust mask[7];

e) Obtain a Ground-Fault Circuit Interrupter (GFCI) if electrical equipment will be used;

f) Do not use any of the following methods to remove the paint:

i) Open-flame burning or torching;

ii) Machine sanding or grinding without high-efficiency particulate air (HEPA) local exhaust control;

iii) Abrasive blasting without HEPA local exhaust control;

iv) Heat guns at temperatures above 1100°F or charring the paint;

[7] A respirator is not needed to do the work. If one is used it should be a fitted respirator or a dust mask respirator labeled "100% efficiency."

v) Dry sanding or dry scraping except:

(1) In conjunction with heat guns (low temperature)

(2) Within 1.0 ft of electrical outlets; or

(3) When treating defective paint spots totaling no more than:

(a) 2 sq. ft. in any one interior room or space; or

(b) 20 sq. ft. on exterior surfaces; and

vi) Paint stripping in a poorly ventilated space using a volatile stripper that is a hazardous chemical under OSHA as applicable to the work.

g) Lightly spray the paint with water before disturbing it and try keep it wet and use wet sanding/scraping methods whenever disturbing the paint;

h) If equipment is going to be reused, wash it thoroughly before leaving residence;

i) Dispose of all lead-based paint, debris, coveralls, and plastic covering in regular trash; and

j) Dispose of all water contaminated with lead-based paint in a sanitary sewer system.[8]

2) Minor Paint Disturbances: When less that 2 square feet per room or 10% of a component of lead-based paint is disturbed inside or less than 20 square feet of lead-based paint is disturbed outside:

a) Follow general requirements described in item 1) above;

b) Tape a plastic bag or sheeting on the horizontal surface below the paint to collect paint chips and any dust that may be formed;

c) After work is done, wipe the surface with a baby wipe or towel;

d) Dispose of wipe, bag and other debris in the regular trash; and

e) Wash hands and face when work is complete.

[8] While septic systems may be used for the water, it is better to absorb the water onto paper or other adsorbent and dispose of it with the other trash.

3) Exterior Paint Disturbances: To be used when more than 20 square feet of exterior lead-based paint is disturbed.

a) Follow general requirements described in item 1) above;

b) String barrier tape saying "WARNING" or "DANGER" or "DO NOT ENTER" at least five feet beyond area where lead-based paint will be disturbed;

c) Post OSHA warning signs near the exterior work so it can be easily read from 20 feet away from the edge of the exterior worksite.[9]

d) Ensure that everyone who enters the work area wears plastic coveralls, shoe covers, and hair covering and removes them when leaving the work area;

e) Seal any windows, doors, dryer exhausts or other openings in the work area;

f) Either remove or cover any equipment in the work area with plastic sheeting;

g) Place six-mil thick plastic sheeting on wall below the paint to be disturbed and on the eight feet from the wall in a manner that it captures the water (15 feet if disturbed paint is on the second floor);

h) Place a 2" x 4" board or similar device along the outer edges of the plastic to capture water;

i) Wash off any siding that is removed;

j) Repair any deteriorated paint and fix cause of deterioration;

k) Remove plastic, clean-up any debris, and dispose in trash so that no deteriorated paint and visible paint remains.

[9] The sign must say "WARNING / LEAD WORK AREA / POISON / NO SMOKING OR EATING." If the occupant's primary language is not English, the sign must, to the extent practicable, be posted in the occupant's primary language.

4) Interior Areas:

a) Follow general requirements described in item 1) above;

b) Ensure that the occupant has received the EPA Pamphlet *Protect Your Family From Lead In Lead In Your Home*;

c) Post OSHA warning signs at the main and secondary entryways to the building.[10]

d) Ensure that everyone who enters the work area wears plastic coveralls, shoe covers, and hair covering and removes them when leaving the work area;

e) Remove throw-rugs and other furniture that can be removed.

f) Cover remaining furniture and horizontal surfaces with plastic sheeting extending the sheeting on the floor up the wall about 18";

g) Seal any air supply or return into the work area;

h) Repair any deteriorated paint and fix cause of deterioration;

i) Remove plastic, clean-up any debris and dispose in trash so that no deteriorated paint and visible paint remains;

j) Wipe walls and horizontal surfaces to remove dust;

k) Arrange to have dust wipe samples taken and assayed using the NITON XRF by an IDEM-licensed risk assessor or inspector before residents reenter the work area; and

l) Ensure that:

i) Dust levels have not increased from the pre-work levels; and

ii) EPA dust clearance standards of 40 :g/ft^2 on the floor and 250 :g/ft^2 on the window sill are met for the room where the interior paint is disturbed; and

iii) Report[11] summarizing the results signed by the risk assessor or inspector are given to the owner and occupant; and

iv) Owner is told that the report must be provided to future owners and occupants.

[10] See footnote #5

[11] This report does not have to be a clearance examination that meets HUD standards unless the property is covered by 24 CFR 35.1340 of the HUD Residential Lead-Based Poisoning Prevention Regulations

IV. Training

The Community Action Agencies shall ensure that their employees and contractors have the following training and licenses. By the deadlines noted, the agency's weatherization program manager must notify FSSA's Weatherization Program Consultant in writing that the deadlines have been met.

1) Building Analyst

a) Building Analysts or other who use an x-ray fluorescent device or perform a clearance examination must:

i) Be trained to use the XRF; and

ii) Obtain a license as a lead inspector and risk assessor from IDEM.

b) Building Analysts who evaluate a residence that is **covered by the HUD Lead Poisoning Regulation** (see Section II. above) must:

i) Be trained to use the XRF; and

ii) Obtain a license as a lead inspector and risk assessor from IDEM.

c) Within one month after this policy is final, Building Analysts must be trained on this policy and related protocols.

d) Before December 1, 2001, each agency must have one Building Analyst on staff or on contract that is licensed as a lead inspector and risk assessor from IDEM.

e) Before March 1, 2002, Building Analysts must have completed a HUD-approved training course on lead-safe work practices.*

2) Building Technician Crew Leaders:

a) Within one month after this policy is final, Crew Leaders must be trained on this policy and related protocols.

b) If Crew Leaders work on a residence that is **covered by the HUD Lead Poisoning Regulation** (see Section II. above), the Crew Leader must successfully complete a HUD-approved lead-safe work practices course or obtain a lead supervisor license from IDEM.

c) Before December 1, 2001, Crew Leaders must complete a HUD-approved training course on lead-safe work practices.*

3) Building Technicians:

a) If Building Technician work on a home that is covered by the HUD Lead Poisoning Regulation, the Building Technician must complete a HUD-approved training course on lead-safe work practices or have a Crew Leader that is licensed by IDEM as a Lead Supervisor.

b) Before April 1, 2002, all Building Technicians will have successfully completed a HUD-approved training course on lead-safe work practices. *

* The course must be at least four hours long. INCAA and the Environmental Management Institute in Indianapolis offers these courses. Be sure to obtain a certificate of participation from the training organization stating that the course is approved by HUD.

V. Deferral of Weatherization Services

The Community Action Agency may defer weatherization work in whole or in part as follows: Items 1) and 2) are only provided to give the Community Action Agency the opportunity to ramp up its services and train its personnel and contractors within the timelines noted in Section IV. above.

1) If the residence was built before 1978 and the agency does not have a Building Analyst who:
    a) Is licensed by the Indiana Department of Environmental Management as a risk assessor or lead inspector; and
    b) Has been trained to use the NITON XRF.
2) If the agency does not have employees or contractors who meet the training requirements described above.
3) Lead-based paint is present or presumed to be present, and it is so seriously deteriorated that a workman's presence just walking around the residence is enough to stir up lead-based paint laden dust residues. The XRF may be used to determine the amount of lead in the dust using a dust wipe sample. If this situation occurs, the agency must:
    a) Strongly recommend that children in the home get a blood lead test;
    b) Contact local health department for guidance; and
    c) Note the decision in writing to the FSSA weatherization program consultant.
4) If, after going through the 5 Step process described above, a weatherization service cannot practically be done without disturbing less than two square feet of interior lead-based paint or less than 10% of an interior component in carpeted rooms with many pieces of furniture that cannot be easily moved or cleaned. If this situation occurs, the agency must:
    a) Explain to the resident the weatherization service that is not being provided due to lead-based paint; and
    b) Note the decision in the agencies report to the FSSA weatherization program consultant.

VI. Liability Insurance

Community Action Agencies must acquire liability insurance that covers work in a home with lead-based paint. This liability insurance does not and should not cover lead abatement projects. Abatement projects are extensive projects designed to permanently eliminate the lead-based paint hazard. Only work that HUD refers to as “interim controls” must be covered. It is important to use this policy to demonstrate to the insurer the limited nature of the paint disturbance and the precautions being taken to avoid liability.

VII. Funding Considerations

Department of Energy (DOE) Weatherization Funds may not be used to pay for routine lab tests of paint and dust wipe samples. Because each CAP agency has access to an XRF that can analyze paint and dust wipe samples, routine lab tests are unnecessary. The regulations currently only require that a dust wipe sample be sent to a lab for analysis for projects on federally assisted property covered by the HUD rule where more than two square feet or 10% of a component of interior paint surface is being disturbed. In these situations, DOE will pay for the lab costs. When the NITON XRF is approved to analyze dust wipe samples on HUD project, lab tests will not be necessary on any weatherization work.

DOE will also not pay for contractor to conduct a licensed risk assessment or inspection for the Community Action Agency. If a Community Action Agency chooses to have a contractor provide these services until a Building Analyst is trained, licensed, ready, and available to conduct the risk assessment or inspection, the agency may use SWEEP funds for the service.

VIII. Glossary

DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
FSSA	Indiana Family and Social Services Administration. FSSA manages Indiana's Weatherization Programs.
HUD	U.S. Housing and Urban Development
IDEM	Indiana Department of Environmental Management. IDEM licenses risk assessors, inspectors, supervisors, workers and abatement contractors and set standards for the work that they perform.
NITON	Manufacturer of x-ray fluorescent devices provided to Community Action Agencies by FSSA.
OSHA	U.S. Occupational Safety and Health Administration
XRF	X-ray fluorescence device capable of detecting lead in a sample using gamma and x-ray's emitted from a radioactive source.
De Minimis	Amount of lead-based paint that may be disturbed without using full set of lead-safe work practices: Interior: 2 square feet in one room or 10% of a single interior component Exterior: 20 square feet
GFCI	Ground Fault Circuit Interrupter
Inspector	An individual licensed by IDEM to conduct a surface-by-surface investigation to determine the presence of lead-based paint.
Risk Assessor	An individual licensed by IDEM to conduct an on-site investigation to determine the existence, nature, severity, and location of lead-based paint hazards.

APPENDIX A: SAMPLE HAZARD REDUCTION COMPLETION FORM

Summary Notice of Completion of Lead-Based Paint Hazard Reduction Activity

Address/location of property or structure that this summary notice applies to:

_____

Summary of the Hazard Reduction Activity:

1. **Start Date: _____ Completion Date: _____**
2. **Activity Location and Types**: *List at least the housing unit numbers and common areas (for multi-family housing), bare soil location, dust-lead locations, and/or building components (including type of room or space, and the materials underneath the paint), and types of hazard reduction activities performed at the locations listed:*
3. **Date of Clearance Testing and/or Soil Analyses: _____**
4. **Location of Building Components** with lead-based paint remaining in the rooms, spaces, or areas where activities were conducted:
5. **Summary of Results of Clearance Testing and Soil Analyses:**
   - **a.** ____ No clearance testing was performed
   - **b.** ____ Clearance testing showed clearance was achieved
   - **c.** ____ Clearance testing showed clearance was not achieved
6. **Contact Person for More Information**:

Printed Name: _____
Organization: _____
Street and City: _____
State, Zip: _____
Phone Number: _____

7. **Person Who Prepared this Summary Notice:**

Printed Name: _____
Signature: _____
Date: _____
Organization: _____
Street and City: _____
State, Zip: _____
Phone Number: _____

LEAD-SAFE WORK PRACTICES POLICY FOR INDIANA WEATHERIZATION PROGRAMS

For procedures on how to perform lead safe work, please refer to Lead Paint Safety - A Field Guide for Painting, Home Maintenance, and Renovation Work. Written by HUD, it details step-by-step procedures for setting up the worksite, performing lead safe work, and how to finish up the job and prepare the worksite for inspection.

The HUD Lead Paint Safety Field Guide is divided into five sections:

- The basics.
- Before you start the work.
- Doing the work.
- At the end of the job.
- Resources.

The third section, “Doing the Work”, will detail procedures for working with surfaces and identify several problems associated with Weatherization work and detail solutions.

STANDARD - INSTALLATION OF SMOKE DETECTORS

For client safety, all Weatherized homes shall be equipped with fully operational smoke detectors.

Procedure - Inspection of Existing Smoke Detectors and Installation of Smoke Detectors in Weatherized Homes

- If smoke detectors are present:
    - Inspect for proper location and operation and replace if necessary.
    - Replace battery if necessary.
    - Relocate detector if necessary.
    - Install additional smoke detectors if necessary.
- If smoke detectors are not present:
    - Install smoke detectors per manufacturer's specifications.
    - Install one per floor and locate in common areas.
    - Test smoke detectors for proper performance.
    - Secure client signature on a release of liability and place in case file.

Notes