



Arizona
Department
of Housing

**WEATHERIZATION ASSISTANCE PROGRAM
FY2019
ANNUAL STATE PLAN
FINAL**

ISSUED: JUNE 24, 2019

CONTACT INFORMATION:

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ANNUAL FILE

IV.1 Sub-grantees

Arizona Department of Housing (ADOH) uses ten Sub-grantees to perform Weatherization service throughout the state, excluding the Indian reservations, which are funded independently. The Sub-grantees are as follows:

Community Action Human Resources Agency (CAHRA)

Mary Lou Rosales, Executive Director
109 N Sunshine Blvd., Eloy AZ 85131
Phone: 520-466-1112, Fax: 520-466-0013
E-mail: mlrosales@cahrapinal.org
(Pinal County) CD 1,6,7,8

City of Phoenix, Neighborhood Services Department

Travis Ekenberg, Project Manager
200 W Washington, 4th Floor, Phoenix, AZ 85003
Phone: 602-495-6802, Fax: 602-534-8213
E-mail travis.ekenberg@phoenix.gov
(City of Phoenix) CD 3, 4

Foundation for Senior Living

Katie Martin, Program Director
3051 S. 45th Street, Phoenix, AZ 85040
Tucson Office: 2227 S. Mission, Tucson AZ 85716
Phone: 520-302-7744
E-Mail kmartin@fls.org

Gila County Office of Community Services

Malissa Buzan, Community Services Director, Housing Service Manager
5515 S Apache Ave., Suite 200, Globe, AZ 85501
Phone: 928-402-8693, Fax: 928-425-9468
E-mail: mbuzan@gilacountyaz.gov
(Gila County) CD 1

Maricopa County Human Services Department, Housing & Community Development Division

Rachel Milne, Assistant Director
234 N Central, 3rd Floor
Phoenix, AZ 85004
Phone: 602-372-1528, Fax: 602-372-2292
E-mail: milner@mail.maricopa.gov
Maricopa County, excluding City of Phoenix & City of Mesa) CD 2, 3, 4, 5, 7

A New Leaf Mesa Community Action Network (MesaCAN)

Beth Noble, Grants and Contract Manager
868 E University Dr., Mesa, AZ 85203
Phone: 480-477-4037, Fax 480-969-0039
E-mail: bnoble@turnanewleaf.org
(City of Mesa exclusively) CD 5, 6

Northern Arizona Council of Governments (NACOG)

Bob Baca, Weatherization Director

3111 N. Caden Ct., Ste. 100 Flagstaff, AZ 86001 Phone: 928-774-3759, Fax: 928-774-3758

E-mail: bbaca@nacog.org

(Apache, Coconino, Navajo, Yavapai Counties) CD 1, 2

Pima County Community Development & Neighborhood Conservation

Daniel Tylutki, Community Development Program Manager

2797 E Ajo Way, 3rd Floor, Tucson, AZ 85713

Phone: 520-724-6754, Fax: 520-243-6796

E-mail: Daniel.Tylutki@pima.gov

(Rural Pima County) CD 7, 8

Southeastern Arizona Community Action Program (SEACAP)

Librado M. (J.R.) Ramirez, Executive Director

283 W 5th Street, Safford, AZ 85546

Phone: 928-428-4653, Fax: 928-428-1559

E-mail: sacacti1001@qwestoffice.net

(Graham, Greenlee, Cochise, Santa Cruz Counties) CD 1, 7, 8

Western Arizona Council of Governments (WACOG)

Gina Whittington, Human Services Director

1235 S. Redondo Center Dr., Yuma, AZ 85365

Phone: 928.217.7123, Fax: 928.329.4248

Email: ginaw@wacog.com

(LaPaz, Mohave, Yuma Counties) CD 2, 7

IV.2 Production Schedule

Arizona allocation for PY19 is \$1,831,626. The Sub-grantee allocations are calculated according to the allocation method developed in conjunction with the Sub-grantees and the Weatherization Policy Advisory Committee. An additional \$250,000 estimated carryover has been programmed to Sub-grantees who will meet or exceed 90% expenditure for the 2018 program year. The maximum rolling average investment per unit will be \$7,541.

| Grantee | City | Estimated | |
|------------------------------|-----------|--------------------|------------|
| | | PY19 Funds | Units |
| CAHRA | Eloy | \$119,364 | 15 |
| City of Phoenix | Phoenix | \$219,318 | 27 |
| Foundation for Senior Living | Tucson | \$194,435 | 25 |
| Gila County Community Action | Globe | \$53,465 | 6 |
| Maricopa County Government | Phoenix | \$411,273 | 55 |
| MesaCAN | Mesa | \$96,080 | 12 |
| NACOG | Flagstaff | \$377,721 | 52 |
| Pima County | Tucson | \$52,287 | 6 |
| SEACAP | Safford | \$191,561 | 24 |
| WACOG | Yuma | \$179,616 | 22 |
| TOTALS | | \$1,895,120 | 244 |

Units are based on the average cost per unit Program Operating and Health and Safety expenditures for PY18 through January 23, 2019 (\$6,300) with an adjustment of 3% to account for construction cost increases. This per unit figure of \$6,500 represents a more accurate per unit investment based on actual program reports.

IV.3 Energy Savings

Production and Energy Savings

These are estimates for PY19

| | |
|--|-----|
| Total Units (excluding re-weatherized) | 244 |
| Re-weatherized Units | 0 |

Method used to calculate energy savings: WAP algorithm: other (describe below):

IV.4 DOE-Funded Leveraging Activities

The state does not utilize funds for leveraging activities. However, parallel programs are administered through LIHEAP and public utility funding.

IV.5 Policy Advisory Council

The state's Policy Advisory Council (PAC) is a collaboration of people from various organizations from around the state, each represents the interests of low-income and priority populations through advocacy or assistance programs or both. The PAC are from local utility companies, Nonprofits, and local governments. The following is a current PAC member list and a brief description of the organization including those persons whom they serve:

Arizona Public Service - APS

Chris Baker, Program Manager

Home Performance with Energy Star, Weatherization, Residential HVAC, Codes & Standards

400 N. 5th Street

Phoenix, AZ 85004

E-mail: Chris.C.Baker@aps.com

602-250-3183 Work

APS is the largest and longest serving electric company in Arizona. APS funds programs to assist limited income households with energy savings through their Energy Support Program or the Medical Care Equipment Program. APS' Project SHARE (Service to Help Arizonans with Relief on Energy) specifically targets persons 60 years of age and older, persons under 60 experiencing special hardships and persons with disabilities. The SHARE program assists these targeted persons with payment of their electric bill.

City of Phoenix, Neighborhood Services Department

Travis Ekenberg, Project Manager

200 W Washington, 4th Floor, Phoenix, AZ 85003

E-mail travis.ekenberg@phoenix.gov

Phone: 602-495-6802, Fax: 602-534-8213

The City of Phoenix, Neighborhood Services Department preserves and revitalizes neighborhoods and helps residents to access city services. Foreclosure prevention, CDBG, housing rehabilitation and

emergency repair, lead hazard control, and landlord/tenant counseling are some of the programs for low-income persons offered through this division of the City of Phoenix government.

Maricopa County Human Services Department (MCHSD), Housing & Community Development Division

Rachel Milne, Assistant Director

234 N Central, 3rd Floor

Phoenix, AZ 85004

Phone: 602-372-1528, Fax: 602-372-1526

E-mail: Milner@mail.maricopa.gov

Maricopa County, excluding City of Phoenix & City of Mesa) CD 2, 3, 4, 5, 7

The MCHSD mission is to provide and coordinate essential support and social services to vulnerable population to enhance economic, educational and social opportunities and strengthen communities.

Foundation for Senior Living (FSL)

Carrie Smith, Chief Operating Officer

1201 E Thomas Rd.

Phoenix, AZ 85014

E-mail: csmith@fsl.org

602-285-0505 ext. 142 – Work

One of the largest 501(c) 3 organizations in Arizona. Servicing the community since 1974, the organization's mission is to provide home and community based services and develop energy-efficient affordable housing, to promote health, independence and dignity for all.

Gila County

Malissa Buzan, Community Action & Housing Services Manager

5515 S Apache, Suite 200

Globe, AZ 85501

E-mail: mbuzan@co.gila.az.us

928-402-8693 - Work

The Community Action Program (CAP) in Gila County has been in existence since 1980. CAP receives funding from the Arizona Department of Economic Security, Pinal Gila Council for Senior Citizens, Arizona Department of Housing, and many other funding sources. The funding is geared towards helping residents become more self-sufficient through case management and emergency assistance. Programs offered through Gila County include Utility Payment/Deposit Assistance, Eviction Prevention Rent Assistance, Utility Discount Programs - APS, SW Gas, Lifeline, Weatherization, Housing Rehabilitation and Emergency Repairs. Applicants for assistance must meet federal Poverty Income guidelines and have a documented need.

Northern Arizona Council of Governments (NACOG)

Bob Baca, Operations Director

119 E Aspen

Flagstaff, AZ 86001

E-mail: bbaca@nacog.org

928-774-3759 - Work

NACOG is a nonprofit membership corporation representing local governments to provide a wide variety of services within the four Arizona counties of Apache, Coconino, Navajo, and Yavapai. NACOG is the Area Agency on Aging, Head Start and Workforce Development agency for the region. Additionally, NACOG provides weatherization, housing rehabilitation and emergency repairs for low-income households, targeting the elderly and families with children.

Salt River Project (SRP)

Bonnie Temme, Community Relations Program Manager

P.O. 52025

Phoenix AZ 85072-2025

E-mail: Bonnie.temme@srpnet.com

602-236-9915 - Work

SRP is the oldest multipurpose federal reclamation project in the United States. SRP been serving central Arizona since 1903, providing electricity to approximately 1 million retail customers in a service area that spans three (3) Arizona counties. SRP offers a variety of programs to help customers save energy and money. These programs target appliance-recycling, rebates for duct test and repair, financing for larger energy-efficiency projects, rebates for purchase of new energy-efficient heat pumps, rebates for energy efficient pool pumps and discounted prices for CFL bulbs.

Southwest Gas (SWG) Corporation

Celine Apo, Energy Efficiency Administrator

5241 Spring Mountain Road

Las Vegas, NV 89193-8510

P.O. Box 98510, Mail code: LVB-105

Las Vegas, NV 89193-8510

E-mail: celine.apo@swgas.com

702-876-7149 - Work

SWG has been providing natural gas service for eighty plus years and currently serves more than 1.9 million customers throughout Arizona, Nevada and California. SWG has customer assistance programs for low-income households such as no cost to the customer weatherization repairs and utility bill assistance payments in addition to rebates for appliance connections to natural gas.

UNS Energy Services/Tucson Electric Power (TEP)

Nikole White, Contract Administrator

PO Box 711 (Hqw505) Tucson, AZ 85702

E-mail: nwhite@uesaz.com

520-884-3613 - Work

TEP and its sister company, Unisource Energy Services offers comprehensive energy services through reliable, traditional resources and a growing renewable power portfolio. TEP/UNS also offer many ways to help customers use energy more efficiently. Additionally, TEP/UNS assists limited income (based on federal poverty levels) customers through discounts, weatherization, and emergency bill payment programs.

Wildfire (f.k.a. Arizona Community Action Association)

Cynthia Zwick, Executive Director

340 E. Palm Lane, Suite #315

Phoenix, AZ 85004

E-mail: czwick@wildfireaz.org

602-604-0640 Work

Wildfire is a 501 (c)(3) non-profit agency created in 1967 to address poverty across Arizona. Through a collaboration of nearly 300 organizations and individuals, WildfireAZ develops and implements strategies to address and ultimately eliminate poverty.

IV.6 Hearing and Transcripts

Public Hearing

The Arizona Department of Housing (ADOH) held three (3) public meetings for input and comment on the Plan. The first was a meeting held at the annual Housing Forum on August 23, 2018. The second was an official public hearing held April 4, 2019 at 10a.m. at 1110 W. Washington, Suite 250, Phoenix AZ 85007. Finally, the third was an additional public hearing held May 24, 2019 at 10a.m. at 1110 W. Washington, Suite 250, Phoenix AZ 85007. The date, time, and location of the Public Hearings were provided to Sub-grantees, Policy Advisory Council (PAC) members and other interested parties through email, and posting on the Arizona Department of Housing website at www.housing.az.gov at least 10 calendar days prior to the date of the 2 public hearings. Additionally, the April 4, 2019 hearing was advertised in the five (5) major newspapers in the state including the Arizona Daily Sun (Flagstaff), Arizona Daily Star (Tucson), Arizona Republic (metropolitan Phoenix), Kingman Daily Miner (Kingman) and the Yuma Sun (Yuma). Documented evidence of postings, publications, transcripts and hearing attendance is included as an attachment to the SF424 Application.

ACSI

Finally, in an effort to address the American Customer Satisfaction Index comments regarding communication and involvement in development of the State Plan, ADOH sent out three (3) successive revisions of the draft plan on three (3) different occasions to the PAC, weatherization Sub-grantee network and the WAP Technical Committee, each with the opportunity to comment or recommend changes to the plan.

IV.7 Miscellaneous

Business Officer: Kathy Blodgett, PCED, CDR Programs Administrator,
kathy.blodgett@azhousing.gov, 602-771-1021.

Principle Investigator: Michael Frary, Energy Specialist, michael.frary@azhousing.gov , 602-771-1042

Use of Weatherization Funds for Renewable Energy Systems

Not Applicable

Carry over Rule

*****This rule only applies if DOE allows the Grantee to carry over any remaining funds from the previous program year.**

ADOH concurs with DOE that Sub-grantees should be making every effort to expend funds allocated for a specific program year in that year. ADOH has adopted the policy that any Sub-grantee that does not expend at least 90% of their allocated funds for a given program year will not be eligible to carry over funds to the following program year. All agencies that spend out 90% or better of their allocated funds will be allowed to carry over any remaining unexpended funds.

The remaining unexpended funds from Sub-grantees that did not meet the 90% carry over test will be pooled together and reallocated. The funds will be split equally among the agencies that did meet the 90% expenditure threshold.

Performance Based Funding Re-allocation

Quarterly performance goals and standards are made a part of the contractual agreement between the Grantee and Sub-grantees. The Grantee may, based on a review of the progress of Sub-grantee completed units and expenditures, move funds from a non or under-performing Sub-grantee to a Sub-grantee meeting or exceeding their performance goals. The Grantee will review the performance of all Sub-grantees on a monthly basis. The first re-allocation of funds would occur at 6 months with additional re-allocations if needed at the 8 month and 10-month time periods. It is the goal of the Grantee to use this method to ensure annual program funds are expended thereby reducing or eliminating carry-over and improving overall program performance.

MASTER FILE

V.1 Eligibility

Every dwelling weatherized must meet both client and building eligibility requirements. Eligible dwelling units per 10 CFR 440.22 are as follows:

“(a) A [dwelling unit](#) shall be eligible for weatherization assistance under this part if it is occupied by a family unit:

- (1) Whose income is at or below 200 percent of the poverty level determined in accordance with criteria established by the Director of the Office of Management and Budget; or
- (2) Which contains a member who has received cash assistance payments under Title IV or XVI of the Social Security [Act](#) or applicable [State](#) or local law at any time during the 12-month period preceding the determination of eligibility for weatherization assistance; or
- (3) If the [State](#) elects, is eligible for assistance under the Low-Income Home Energy Assistance [Act](#) of 1981, provided that such basis is at least 200 percent of the poverty level determined in accordance with criteria established by the Director of the Office of Management and Budget.”

Arizona definition of low-income:

Household Income is at or below 200% of the federal poverty level determined in accordance with criteria established by the Office of the Secretary, U.S. Department of Health and Human Services.

V1.1 Approach to determine client eligibility

The Sub-grantees are to follow the intake procedures of the state income qualifying guidelines found in the Low-Income Home Energy Assistance Program (LIHEAP) Policy Manual (REV. June 2018) available from the Arizona Department of Economic Security (DES) website at: <https://des.az.gov/services/aging-and-adult/community-services/energy-assistance>. The LIHEAP State Plan for Arizona has been approved to mirror the income eligibility allowed by DOE at 200% or below of the Federal Poverty Limit (FPL). Sub-grantees should also reference WPN 19-3 for Poverty Income Guidelines and Definition of Income.

Each DOE client file must contain an application from the client that contains the required demographics and income for the entire family living in the residence. The file must also contain evidence provided by the Sub-grantee that the client is income eligible to receive WAP services. This evidence may include, but is not limited to, third party verification from the source of income (employer, social security office, unemployment agency, etc.) of the family; source documentation for each income source listed on the application; or evidence of cash assistance payments under Title IV or XVI of the Social Security Act or applicable State or local law at any time during the preceding 12 month period for any household member. These documents must be retained in hard copy for each client.

ADOH WAP has provided a Client File Checklist that Sub-grantees must use and keep in their client file. The form is available from the ADOH website at: <https://housing.az.gov/documents-links/forms/weatherization>

The following information is required (some are required only if applicable such as the Landlord/Tenant Form) to be included in client files:

1. Client File Checklist (required)
2. Eligibility Determination (including the required Annual Income Calculations Form) & Client Information including hard copy evidence provided by the Sub-grantee that the client is income eligible to receive WAP services. This evidence may include, but is not limited to, third party verification from the source of income (employer, unemployment agency, social security office) of the family or source documentation for each income source listed on the application.

3. Certification of Zero Income Form (required if applicable)
4. Proof of Ownership or Signed Rental Agreement
5. Deferral Information (if applicable)
6. State Historic Preservation Documentation (if applicable)
7. Previous Weatherization Checklist. (required form)
8. Clients Rights and Responsibilities Form (required form)
9. Client Complaints and Documented Resolution (if applicable)
10. Progress Form; Includes client sign-off on:
 - a. Receipt of "Client Rights and Responsibilities Form"
 - b. Client Agreement (visits for quality assurance and funder monitoring)
 - c. Receipt of Warrantees
 - d. Statement of Completion
11. Household Action Plan (required form)
12. Client Health and Safety Evaluation Forms (2)
 - a. Client use (if client so chooses)
 - b. Auditor use (required form)
13. Work Agreement/Scope of Work
 - a. Form is supplied by Sub-grantee
 - b. must be signed by Client
 - c. Must include any Low Cost/No Cost measures
14. Priority Checklist or Copy of REM w/Field Waiver Request (if applicable)
15. Residential Diagnostic Evaluation Form (required form)
 - a. Initial Inspection and Diagnostics
 - b. Final Inspection and Diagnostics
 - c. Project Photos Pre-work and Post work (may be inserted into form or saved separately)
 - d. Photos of Appliances/HVAC before and after replacement (may be inserted into form or saved separately)
16. Quality Control Inspection Checklist (required form)
17. Hazard Disclosure Form; Includes client sign-off that information, notifications and release were given to them regarding:
 - a. Lead Paint
 - b. Mold Assessment and Release
 - c. Radon
18. Lead Safe Weatherization (if applicable)
 - a. Testing results showing no lead; or
 - b. Lead Safe Work Practices documentation per EPA requirements, Include Certified Renovator Documentation and photographs demonstrating proper practices were followed.
19. Materials and Labor Costs: including invoices and purchase orders (Contractor and crew based)
20. Bid/Equipment/Calculation/Specification Details
21. Inventory Sheets (if applicable)
22. Low-Cost/No-Cost Documentation

- a. Cannot exceed \$250
 - b. Notations must be made in the AZWAP database indicating what the actual low cost/no cost measure was and break out the amounts by funding source used for the measure.
23. Landlord/Tenant Agreement (required form if applicable)
24. Refusal for Services, Indemnification & Waiver of Claims
25. Health & Safety (HSD) Waiver
- a. required if HSD will exceed \$2,000
 - b. Must be approved and signed by ADOH Energy Specialist
26. Sub-grantee Statement of Completion
27. Utility Release Form

The client is income eligible for weatherization services for twelve (12) months from the date the client was determined to be income eligible, contingent upon residence eligibility. A client must be re-certified when eligibility lapses due to the length of time the client was waiting to receive Weatherization services. Re-certification of income eligibility must occur at least once every twelve (12) months.

Sub-grantees shall give priority to clients based on the list of priorities established in the Arizona State Plan, which includes the following:

1. Elderly
2. Handicapped
3. Families with children aged 5 years and under.

The criteria used for determining applicant priority must be in writing and on file with the Sub-grantee. An actual wait list to determine who is next to receive weatherization services must be developed with consideration given to the priority populations listed above.

For HUD-DOE Multi-Family eligibility, see the Multi-family section of plan.

Qualified Aliens Receiving Weatherization Benefits

Grantees are directed and encouraged to review guidance provided by Health and Human Services (HHS) under LIHEAP. This guidance can be found by going to <http://www.aspe.hhs.gov/hsp/immigration/restrictions-sum.shtml#sec1>.

HHS Information Memorandum LIHEAP-IM-25 dated August 28, 1997, states that all qualified aliens, regardless of when they entered the United States, continue to be eligible to receive assistance and services under the Low-Income Home Energy Assistance Program (LIHEAP) if they meet other program requirements.

To eliminate any possible contradiction of eligibility for Weatherization services at the state and local level for qualified aliens, the definition adopted by HHS will also apply to the DOE WAP.

HHS issued Information Memorandum LIHEAP-IM-98-25 dated August 6, 1998, outlining procedures for LIHEAP and Weatherization grantees serving non-qualified aliens to implement new status verification requirements.

To ensure continuity between LIHEAP and WAP for the many Sub-grantees operating both programs, the DOE WAP will follow the interpretation as adopted by HHS.

V1.2 Approach to determine building eligibility

Sub-grantees must document the eligibility of the residence to receive weatherization assistance through the following process:

1. Verify that the home's occupants are income qualified for WAP
2. Verify that the home has not been previously weatherized by a thorough examination of the following:
 - a. The state database (azwap.org)
 - b. Previous weatherization client files
 - c. The Sub-grantees weatherization program internal tracking system (i.e. database or spreadsheets)
 - d. database or Visual inspection of unit for evidence of previous retrofit weatherization measures. (Observation of weatherization improvements will not necessarily preclude the unit from the WAP program. Database and Client File check as well as audit diagnostics may indicate unit is eligible.
3. Perform a site inspection of the unit to make sure the condition of the home is safe to perform weatherization work

The Sub-grantee must then complete the ADOH Previous Weatherization Checklist form and retain it in the Client File. The Previous Weatherization Checklist Form is available for download from the ADOH weatherization web page at: <https://housing.az.gov/documents-links/forms/weatherization>

The Grantee will monitor for the eligibility of the residence through the following process:

1. Perform a random sampling desktop review of the State's database for fifty percent (50%) of the DOE jobs. This helps to verify income levels as well as the eligibility of measures and their SIR prior to any reimbursement of expenditures to the Sub-grantees.
2. During field inspections, the Grantee Weatherization Program Specialist will monitor a random sampling of ten percent (10%) of client files on completed jobs for proper documentation of income eligibility. If Grantee determines that the Sub-grantee is not following policies and procedures currently and consistently, the Grantee will increase the percentage of Sub-grantee client files sampled.
3. Verify that the State's Previous Weatherization Checklist form has been completed, signed and included in the Client File.

Re-weatherization

The Recovery Act amended the DOE Weatherization dates and now allows grantees and Sub-grantees to re-weatherize homes previously weatherized prior to September 30, 1994. This provision gives grantees the flexibility to re-visit those homes that may not have received the full complement of weatherization services, including the use of an advanced energy audit or addressing health and safety concerns. DOE reminds grantees and Sub-grantees that, in selecting previously weatherized homes to re-visit, there remains more than 34 million federally eligible households that have received no weatherization services.

Under the Energy Crisis and Disaster Relief section of the Arizona State Plan, Disaster Planning and Relief is addressed and references DOE-issued Weatherization Program Notice (WPN) 12-7, which allows additional work to be done on homes due to natural disasters. Grantee and Sub-grantees will refer to these sections and follow appropriate procedures if the Sub-grantee wishes to serve homes located in disaster areas.

If the occupancy of the dwelling unit changes to another low-income family, the dwelling unit does not become eligible for additional weatherization. A dwelling is not eligible for weatherization, even if occupied by an eligible household, if a federal, state or local program has designated the dwelling for acquisition or clearance within 12 months from the scheduled date weatherization would be completed.

Use of WAP Funds for Add-on/Call-back Work

Grantees and Sub-grantees may not charge DOE for additional work on homes that have already been reported to DOE as completed, weatherized units. WPN 11-03 provides specific guidance on this type of activity.

Note: Under no circumstances can any of these activities be covered under the re-weatherization provisions of 10 CFR §440.18(e) (2) (iii).

Eligible Structures

Once a client has been deemed income qualified then residence eligibility can be determined. Eligible residences must be safe for the occupants; Sub-grantees; crews; and/or contractors to work in without concern for their health and safety.

The primary housing types served by the Arizona WAP program are single family (both block and stick built construction), manufactured housing (mobile units must have a title and NOT a Motor Vehicle Registration) and multi-family housing. Sub-grantees should exercise caution in dealing with non-traditional type residential units such as shelters, and apartments over businesses, etc., to ensure they meet program regulations for eligibility. Consideration on weatherizing these types of units should be coordinated with the Grantee.

The weatherization of non-stationary campers, trailers and RV's that have an eligible applicant/s is not allowed.

Rental Requirements

All Sub-grantees are required to weatherize single family, manufactured (mobile home) and multi-family rental housing.

The State of Arizona has established a policy to ensure that Sub-grantees weatherizing rental units determine financial eligibility and obtain written permission of the owner or owner's agent. In multiple unit buildings the state ensures sixty-six (66) percent (50 percent for duplexes or four unit buildings) of the building to be eligible units. The State's policy also ensures that the benefits of weatherization accrue primarily to the tenant, including units where the tenants pay for their energy through their rent. ADOH WAP recognizes that it may weatherize shelters under conditions set forth in CFR 440.22.

State policy regarding rental units specifies that for a reasonable period of time (not less than twelve months) the tenant will not be subjected to rent increases unless those increases can be demonstrated to be related matter and conditions other than the weatherization measures performed. Sub-grantees must obtain the Landlord and Tenant's signature on the Landlord/Tenant Agreement form. State policy also provides an avenue for complaint in such matters. Tenants and landlords are informed in writing that no undue or excessive enhancement shall be provided to the rental unit or building by weatherization assistance, this is to include the installation of heating and air conditioning units, and appliances, as this is required to be provided by the landlord pursuant to A.R.S 33-1324:

<https://www.azleg.gov/FormatDocument.asp?inDoc=/ars/33/01324.htm>

All documentation shall remain the property of Grantee and in the event of program closure, by either Grantee or the Sub-grantee; such files shall revert to Grantee. Copies of these documents need to be placed in each client file of the complex.

If a multi-unit building is under an assisted or public housing program identified by the U.S. Department of Housing and Urban Development (HUD), the property owner, manager or authorized agent will follow the Property Certification Procedure outlined below:

Property Certification

The property owner or authorized agent of the property must sign a Self-Certification form attesting that:

1. The property owner or authorized agent maintains certified income records for households residing at the property.
2. The property owner or authorized agent has reviewed its current certified income records.
3. The property owner or authorized agent has determined that at least 66 percent of the units in each building (or at least 50 percent of the units for 2- and 4-unit buildings) have certified incomes that are at or below 200 percent of the current federal poverty level based on household size.
4. The property owner or authorized agent certifies that all the information provided with the certification request is true and accurate.

Property Occupancy Report

The property owner or authorized agent must also complete and submit an Occupancy Report for the property.

Required property information includes:

1. property name
2. HUD contract number
3. contract expiration date
4. other property identification number (if applicable)
5. Property address and number of buildings and units that are at the property that meet DOE's income requirements.

Required building-unit information includes:

1. A listing of all units and information for each units including:
 - a. building identification
 - b. building address
 - c. certified annual income
 - d. household size, and
 - e. Whether the household income was certified in the last year.

Upon completion of the Property Certification and the Multifamily Occupancy Report, the property owner (or property owner's representative) will submit both files to HUD at energyaction@hud.gov and to DOE at Derek.Schroeder@ee.doe.gov. The submitted documentation will then be reviewed by HUD following the process outlined below:

1. HUD will review the certification and accompanying documentation for completeness. If the documentation submitted by the property owner is insufficient for HUD to complete its review, HUD will notify the property owner via e-mail that the request cannot be approved based on the information submitted.
2. HUD will review the household and property information provided under the self- certification process with records maintained by HUD, and may request additional occupancy information subject to Federal requirements.
3. If the documentation is complete and one or more of the buildings at the property meet DOE's income eligibility requirements, HUD will designate the property or list of qualified buildings as income-qualified properties/buildings, and will notify Dereck Schroeder at DOE and the building owner.
4. HUD will at the same time provide DOE with a list of the income-certified buildings pursuant to the above procedures; DOE will post these lists on its web site as required by 10 CFR 440.22 (b)(1), 440.22 (b)(2), and 440.22(b)(4).
5. Buildings determined by HUD to be eligible for WAP assistance will be posted on one of two lists:

- a. List 1 – Public housing buildings or privately-owned buildings with three or more years remaining on their affordability contracts with HUD are included on this list. As outlined in the January 2010 Final Rule, inclusion on List 1 demonstrates compliance with the following three WAP multifamily program requirements:
 1. DOE's income requirements:
 - a) Protection against rent increases; and
 - b) Protection against undue enhancement of the weatherized building.
- b. List 2 – Buildings on this list have less than three years remaining on their Housing Assistance Payments (HAP) contract with HUD. As outlined in the January 2010 Final Rule, inclusion on List 2 demonstrates compliance with only the following two multifamily program requirements:
 1. DOE's income requirements; and
 2. Protection against undue enhancement of the weatherized building. Buildings on this list must separately comply with the WAP program requirement for protection against rent increases.

For further clarification and guidance, refer to WPN 17-4 HUD Multifamily Housing Procedure for Certifying Income-Eligible HUD Assisted Buildings

Leased Dwelling Units

Note: Grantees and Sub-grantees are reminded that the supporting documentation for applicants applying for weatherization that may be on a wait list or for other reasons must have their income eligibility documentation updated every 6 months from the date of the initial intake date.

Certain buildings containing rental units may comply with the income eligibility requirements when fifty percent (50%) of those dwelling units are eligible dwelling units rather than the established sixty-six percent (66%) identified in the regulation. (10 CFR 440.22(b) (2)). The buildings that are subject to the fifty percent (50%) threshold are duplexes, four-unit buildings, and certain eligible types of large multi-family buildings. In the final rule published on December 8, 2000, DOE provided guidance on what types of large multi-family buildings may be subject to the 50 percent (50%) threshold. (65 Fed. Reg. 77210, Dec. 8, 2000.)

DOE indicated that “certain eligible types of large multi-family buildings” are those buildings for which an investment of DOE funds would result in a significant energy-efficiency improvement because of the upgrades to equipment, energy systems, common space, or the building shell. (Id. at 77215) By providing this flexibility, Sub-grantees are better able to select the most cost-effective investments and enhance their partnership efforts in attracting leveraged funds and/or landlord contributions. This flexibility does not apply to any other type of multifamily unit. Questions on whether a building meets the criteria should be directed to the DOE Project Officer.

The definition of “significant energy improvement” is based on specific criteria for the building in question. This must be assessed using existing conditions to determine the threshold to achieve significant energy improvements. Grantees should consult with their DOE Project Officer if there are questions related to this threshold. Additional guidance is being considered by DOE to provide Grantees criteria for what constitutes “significant energy improvement.”

As a reminder, when addressing multi-family units with DOE funds, multiply the total number of income-eligible units in the multi-family building by the current allowable per dwelling unit average cost to determine the amount of DOE funding available for weatherizing the building. While the amount of funding available for weatherizing a building is limited by the number of eligible units, the weatherization work can result in improvements to all units in the building, even those that are not eligible units. All units should be reported to DOE.

Note: Grantee and Sub-grantee agencies should exercise caution when utilizing flexibility in this area. The key is the investment of DOE funds coupled with leveraged resources that result in significant energy savings. Absent this investment, lowering the eligibility to fifty percent (50%) may lead to disallowed costs. Sub-grantees who are uncertain on a given multi-family project should seek approval by the DOE Project Officer through their Grantee Weatherization Program Manager.

Deferrals

The decision to defer work in a dwelling is difficult, but necessary, in some cases. This does not mean that assistance will never be available, but that work must be postponed until the problems can be resolved and/or alternative sources of assistance are identified. Note that Sub-grantees, including crews and contractors, are expected to pursue reasonable options on behalf of the client, including referrals, and to use good judgment in dealing with difficult situations.

Deferral conditions may include, but are not limited to:

1. Sub-grantee is unable to fully verify client income.
2. The client has known health conditions that prohibit the installation of insulation and other weatherization materials.
3. The building structure or its mechanical systems, including electrical and plumbing, are in such a state of disrepair that failure is imminent and the conditions cannot be resolved cost-effectively.
4. The house has sewage or other sanitary problems that would further endanger the client and weatherization installers if weatherization work were performed.
5. The house has been condemned or electrical, heating, plumbing, or other equipment has been "red tagged" by local or state building officials or utilities.
6. Moisture problems are so severe they cannot be resolved under existing health and safety measures and with minor repairs.
7. Dangerous conditions exist due to high carbon monoxide levels in combustion appliances, and cannot be resolved under existing health and safety measures.
8. The client, other household occupants or third party representatives are uncooperative, abusive, or threatening to the crew, subcontractors, auditors, inspectors, or others who must work on or visit the house.
9. The extent and condition of lead-based paint in the house would create further health and safety hazards.
10. If determined by the energy auditor, any condition exists which may endanger the health and/or safety of the work crew or subcontractor, the work should not proceed until the condition is corrected.

When Sub-grantees have determined a home will be deferred the Sub-grantee must:

1. Inform the client in writing as to why the dwelling cannot be weatherized. If there are conditions that the client must correct before service is provided, those conditions must also be stated in writing.
2. Refer the client to any alternate program such as home rehab, if one is available in the area.
3. Clearly indicate in the client file why the dwelling was given "deferral" status.
4. Document all referrals to other programs or services in the client file.
5. Provide the client any information prescribed in the Client Health and Safety Form (Auditor Use).

Upon denial of weatherization program services, the applicant shall be given a copy of the Sub-grantee's grievance procedure as established in the Sub-grantee's adopted WPGs or program Policies and Procedures.

Each Sub-grantee is to have a grievance process in place if any client is denied services; rent is increased due to the improvements on a weatherized rental property within the first 12 months after completion of the weatherization or other concerns or issues about WAP. The process must be given to the client in writing, at the time of intake. This process will be verified during fiscal monitoring of the Sub-grantees.

V1.3 Definition of Children

Any person living in the home (below age): 18.

V1.4 Approach with Tribal Organizations

Assistance to low-income tribe members is equal to the assistance provided to other low-income persons.

Members of a sovereign Tribal nation with residences located within the borders of the State of Arizona that are income and residence qualified, may receive services through the ADOH Sub-grantee WAP provider serving their area. Tribal members served by the ADOH Sub-grantee network will be required to obtain permission from their Tribal Councils for weatherization work performed on their property by outside parties including local governments or non-profits and their contractors. Permission must be obtained before work can begin.

V.2 Selection of Areas to be served

Arizona utilizes 10 local Weatherization agencies to fully implement the State Plan and provide service to the eligible population of Arizona. Project service areas are historical in nature, originating many years ago at the time of community action agency establishment in Arizona. Service area boundaries are typically drawn along county Lines and include all tribal lands within those counties.

Individual Sub-grantees must meet the requirements of 10 CFR 440.15 and are selected on the basis of their:

1. Experience and performance in Weatherization or housing renovation activities;
2. Experience in assisting low-income persons in the area to be served; and
3. Capacity to undertake a timely and effective Weatherization Program.
4. Preference is given to any Community Action Agency or other public or non-profit entity, which has, or is currently administering an effective program under 10 CFR 440.15 or under Title II of the Economic Opportunity Act of 1964, with program effectiveness evaluated by consideration of factors including, but not limited to the following:
 - a. The extent to which the past or current program achieved or is achieving Weatherization goals in a timely fashion;
 - b. The quality of the work performed by the Sub-grantee;
 - c. The number, qualifications and experience of staff members of the Sub-grantee
5. Any new or additional Sub-grantee shall be selected at a public hearing and must meet the above criteria
6. Grantee staff onsite inspection of performance of the Sub-grantee
7. Transcripts of the public hearing which affirm that there are no public objections to any of the Sub-grantees selected.

In addition, eligible Sub-grantees must meet the following requirements:

1. For units assisted with DOE funding the Sub-grantee must have an in-house Building Performance Institute (BPI) Building Analyst (BA) or an agreement with a third party BPI BA to perform initial and/or final audits. The BPI BA inspector must not install any measures required by the scope of work generated from the initial audit.
2. For units assisted with DOE funding the Sub-grantee must have an in-house Quality Control Inspector (QCI) or an agreement with a third party QCI contractor that has had no previous history (audit or work completed) with the unit inspected.
3. Sub-grantees must be in compliance with all ADOH contracts for all programs and funding sources.

4. Sub-grantees must submit a comprehensive WAP Program Management Plan within 90 days of being selected to receive WAP funds. The submission of the Management Plan must include copies of liability insurance; equipment calibrations; evidence of Lead Firm Certification; project implementation schedule; and an organizational chart that outlines the job responsibilities of each person working in the WAP program and their respective certifications.
5. Sub-grantees must have developed WAP Program Guidelines (WPGs) or Weatherization Policies and Procedures that have been approved by ADOSH and adopted by their governing body.

The ten (10) Sub-grantees chosen to perform weatherization work are located in the Annual File under Sub-grantees.

Climatic Conditions

The climate conditions for Arizona range from low dry arid desert to mountain/alpine cold. The summer months of the desert from June through September will bring a dry heat ranging from 90–120 °Fahrenheit (32–49 °Celsius), with occasional high temperatures exceeding 125 °Fahrenheit (52 °Celsius). The winter months of the plateau and High Mountain/alpine range of the state experience extremely cold temperatures from cold air systems from the northern states and Canada pushing into the state bringing temperatures below 0 °Fahrenheit (–18 °Celsius) to this area of the state. Data on the heating and cooling degree-days was obtained through the BizEE Degree Days Weather Data for Energy Professionals website at: <http://www.degreedays.net>.

Climate zones were chosen based on analysis of elevation, average temperatures and the heating and cooling degree-days of each city and zone. The balance point chosen for the heating and cooling degree-day data is 65°Fahrenheit. As of November 23, 2016, Arizona WAP was approved by DOE to use three heating/cooling degree-day climate zones. A map of the approved climate zones has been included as an attachment to the SF-424. The three zones are as follows:

1. **Zone 1 - Plateau Province:** Zone 1 has the coolest average temperatures, highest elevations and mainly heating degree-days. This zone encompasses the Northern portion of Arizona and consists of forests and mountains. The range of heating degree-days for the area is 4,000 to 6,400. Zone 1 includes some communities along the northern border of the state that are on the plateau, have higher elevations but that drop below the heating degree-days range as stated. However, these communities do have a number of cold days.
2. **Zone 2 – Central Transition:** Zone 2 is the transition zone between the higher and lower elevations. This zone encompasses the center of Arizona and consists of mountainous and highland regions. Zone 2 has middling elevations and moderate heating and cooling degree-days. The range for Cooling Degree day is 1200 to 2200 and the Heating Degree Days is 2200 to 3800.
3. **Zone 3 - Basin Province:** Zone 3 is the zone with the highest average temperatures, lowest elevations and the most cooling degree-days. This zone encompasses the Southern portion of Arizona and consists of hot desert and basin regions with cooling degree-days more prevalent than heating degree-days. The range for cooling degree-days is 2,500 to 5,200 for this area of the state.

V.3 Priorities

Sub-grantees shall give priority to clients based on the list of priorities established in the Arizona State Plan which includes the following:

1. Elderly
2. Handicapped
3. Families with children under the age of 5

The criteria used for determining applicant priority must be in writing and on file with the Sub-grantee. An actual wait list to determine who is next to receive weatherization services must be developed with consideration given to the priority populations listed above.

V.4 Type of weatherization work to be done

V4.1 Technical Guides and Materials

Grantee, in consultation with the South West Building Science Training Center (SWBSTC) has developed Arizona Success with Weatherization (Field Guide) to be in compliance with WPN15-4. The Field Guide was distributed to all Sub-grantees who received a hard copy, digital copy and a web address where the guide can be accessed on-line. Upon receiving the Field Guide, the Sub-grantee signed a document acknowledging their receipt. This document must be put in the Sub-grantees program file and updated annually. Sub-grantees are held accountable to make sure all weatherization work meets or exceeds the standards set forth in the Field Guide.

Grantee will ensure that Sub-grantees are providing their contractors with the required information on their expectation of work quality, and program guidance by including the following language in their contract:

1. Sub-grantee must certify it has informed contractors that work must meet the standards as outlined in the Arizona Weatherization Field Guide and the Standard Work Specifications. This certification must be done annually and must be signed off by the Sub-grantee and an authorized employee of the contractor company.
2. All energy audits performed by the Sub-grantee or it's contractor will meet or exceed the requirements set forth in WPN 16-8

During fiscal monitoring, Grantee will ensure that the language and required signatures for the field guide are in the Sub-grantee contractor files.

Consistent with the approved energy audit or priority list, all materials used for weatherization must meet 10 CFR 440, Appendix A to Part 440—Standards for Weatherization Materials. This can be found at: <http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=23fe3d3cfcc461955f6c730af864c7c7;rgn=div5;view=text;node=10%3A3.0.1.4.24;idno=10;cc=ecfr#10:3.0.1.4.24.0.85.22.50>

V4.2 Energy Audit Procedure

Audit Procedures and Dates Most Recently Approved by DOE

1. Single-Family: REM 15-7.3 as of 7/1/19
2. Manufactured Housing: REM 15-7.3 as of 7/1/19
3. Multi-family: Arizona WAP currently does not have an approved multifamily priority list. Multifamily with five (5) or more units per building will have to go through DOE for approval. See multifamily section for further details.

The WAP Energy Audit Procedure must be used by all Sub-grantees to gather record and analyze data on structures. This data must be used to deliver weatherization materials/measures in a fashion that protects the health and safety of the client, increases the durability of the structure, reduces client energy costs and increases client comfort in a cost effective manner.

The following audit activities must be completed on all homes utilizing DOE WAP funds.

1. A site audit that meets WPN 16-8 requirements, and records all relevant data on the structure needed to perform cost effectiveness tests.

2. The Cost Effectiveness Procedure must be followed to determine cost effectiveness of potential weatherization materials/measures
3. The Pressure Diagnostic Procedure must be completed and the findings documented following the Reporting Procedures
4. A health and safety audit of the structure must be completed and the findings documented following the Reporting Procedures
5. A final inspection of the structure must be completed and findings documented following the Final Inspection Procedures

Derating Heating/Cooling Systems

Unlike combustion appliances, air conditioners and heat pumps cannot be accurately measured for efficiency while on-site. When addressing a system that utilizes a compressed refrigerant cycle to provide heating or cooling, Sub-grantees may use the following derating formula:

$$\text{Degraded Efficiency} = (\text{Base EFF}) * .99^{\text{age}}$$

Where:

1. Base EFF = Typical efficiency of Pre-Retrofit equipment when new (Seasonal Energy Efficiency Ratio (SEER), Energy Efficiency Ratio (EER), or Heating Seasonal Performance Factor (HSPF))
2. Age = Age of equipment in years.

For Example: An existing HVAC unit that is 20 years old, was originally rated at 10 SEER

$$\text{Degraded SEER} = 10 * .99^{20}$$

$$\text{Degraded SEER} = 10 * .818$$

$$\text{Degraded SEER} = 8.18$$

Any other variation of the derating process or formula is not allowed unless first approved by DOE in writing. Derating of combustion appliances in lieu of testing for combustion efficiency is not allowed. Derating does not apply to evaporative coolers.

A site-specific computer Residential Energy Model (REM) is required if:

A site-specific computer energy model will be required if any of the following exist:

1. The Arizona Weatherization Priority List (priority list) is not approved or has expired
2. There are potential cost-effective energy upgrades to the house that are not on the priority List
3. The home being weatherized does not meet the priority list assumptions square footage + or – fifty percent (50%).
4. There are not sufficient funds to complete all the measures including energy related health and safety measures and other energy related repairs
5. Energy related incidental repairs of more than \$100 are included with the energy upgrades.

When preparing a site-specific energy model, the measures listed for the respective climate zone and building type are modeled with any additional measures. The savings-to-investment report is then created ranking all measures by SIR from greatest return to least. Grantee will request and review by random selection twenty – five percent (25%) of each Sub-grantees' completed projects prior to approving payment for the submitted projects for the detailed month. . Should errors or concerns be found, Sub-grantee will be required to adjust funding appropriately and the amount of required review will increase to a minimum of seventy-five percent (75%) and a REM preauthorization waiver will be necessary for a minimum of six (6) months or until concerns are no longer found.

As the Grantee updates to the newest REM versions, communication will be sent to the Sub-grantee agencies through the Arizona WAP Technical Bulletin process to flow down updated requirements.

Fuel Switching

Per WAP Memorandum 11: WAP does not permit the general practice of non-renewable fuel switching when replacing furnaces/appliances. However, DOE does allow the changing or converting of a furnace/appliance using one fuel source to another on a limited, case-by-case basis. These approvals will only be granted when all related costs demonstrate the effectiveness of the fuel switch over the life of the measure.

To request consideration of a waiver for approval of fuel switching, the sub grantee must follow the requirements outlined in WAP Memorandum 11 and submit a request that includes a site-specific REM demonstrating cost effectiveness, to the ADOH Energy Specialist PRIOR TO any work being done. The waiver request and REM will be reviewed by the ADOH Energy Specialist for approval. Failure to submit a waiver prior to work will result in disallowed cost.

Multifamily Audit procedures

Multifamily: As defined by DOE, multifamily buildings are five (5) or more units in a single building.

As multifamily units represent less than 20 percent of the state's dwelling type weatherized, we are not required to and currently do not have a multifamily audit process approved by DOE. The state will treat multifamily units as any other dwelling seeking weatherization. If the units meet both the client eligibility and building eligibility, weatherization is permitted. The Sub-grantee must follow all applicable state laws when dealing with rental properties and the requirements put forth on the property owners.

Because the state does not have an approved multifamily audit process, all multifamily projects MUST be submitted to DOE through the Grantee's CD& R Program Administrator and approved prior to any work being started. The following information is required in order for the project to be submitted to Grantee and sent to the DOE Project Officer for approval.

1. Site plan of complex
2. Pictures of complex
3. Results of audit completed on the complex
4. ASHRAE 2016 calculations
5. Scope of Work
6. Budget consisting of:
 - a. Measure to be performed using DOE funds and cost
 - b. Measure to be performed using leverage funds and cost

V4.3 Final inspection

A weatherized unit is a dwelling unit on which an approved energy audit or priority list has been applied and weatherization work has been completed. Sub-grantees and their contractors/vendors have an obligation to perform their work to the SWS and the Arizona Weatherization Field Guide. The use of DOE funds on a unit may include, but are not limited to: auditing, testing, measure installation, and inspections. Therefore, a dwelling unit meeting both the definition of a DOE weatherized unit and has DOE funds used directly on it, may be included in the DOE production numbers reported. In order to make sure these requirements are met, two separate inspections must be completed. A final inspection and a Quality Control Inspection must occur and pass for all completed homes in order for them to be considered a completed DOE job and be reimbursed for expenditures.

Note: Weatherization crews, including supervisory persons that also work to install weatherization measures on a unit, should not perform the final inspection of the unit. DOE recommends the final inspection be performed by a person(s) not directly associated with actual work that was performed on the unit. In the event that this provision cannot be met due to staffing levels or budget constraints,

Grantee must be notified annually in writing why this provision cannot be met and the Sub-grantee will be subjected to a higher percentage of site inspections by grantee.

A final inspection by Sub-grantee:

1. Shall be performed after all work is completed and final test out has been performed.
2. Shall be performed on all DOE jobs before it can be counted as a completed job.
3. Must be completed by designated inspector who did not conduct the initial energy audit and was not directly involved with the weatherization measures/work completed on the job. Special consideration will be taken for Sub-grantees with limited staff or long distance travel. Sub-grantees who would like to request a waiver of this requirement must submit a letter in writing to the ADOH Energy Specialist stating the circumstances why this requirement cannot be achieved and how they plan to address conducting the final inspection. This letter must be submitted annually at the time of contract signing. Sub-grantees with an approved waiver will be subject to a higher field audit percentage by the state.
4. Shall verify that all cost effective opportunities were completed.
5. Shall verify all invoices for the job are billed correctly and nothing is billed for services/work not performed.
6. Shall verify that the reported house characteristics are correct.
7. Shall include a review of the diagnostic result, both pressure and combustion safety, to verify that all applicable tests were completed.
8. Shall complete diagnostics on a minimum of ten percent (10%) of completed homes to compare with reported results.
9. Shall include a review of all measures listed on the Work Performed Report to verify installation has been completed in a safe and effective manner following program requirements.
10. Shall also include an analysis of the energy audit to ensure that it was completed properly; all areas of the audit have been addressed; and the scope of work reflects a comprehensive energy audit.

Once a Sub-grantee has completed their final inspections, the job must be turned over to a qualified Quality Control Inspector (QCI) for a Quality Control Inspection. A qualified QCI will be someone who has been certified by the Building Performance Institute (BPI) to perform Quality Control Inspections for weatherization. After the QCI has reviewed and passed the job, it may be reported as a completed home to the Grantee and DOE.

A Quality Control Inspection:

1. Shall be conducted after all work by the Sub-grantee is completed and their final inspection has been completed.
2. Shall be performed on all jobs before it can be counted as a completed job
3. Shall review the computer REM for completeness, accuracy and measure cost effectiveness (SIR 1.0)
4. Shall include an analysis of the energy audit to ensure that it was completed in an efficient manner with all areas of the audit having been addressed and the scope of work reflects a comprehensive energy audit.
5. Shall verify reported diagnostic numbers are correct.
6. Shall verify that all cost effective measures were completed.
7. Shall verify that all invoices for the job are invoiced properly, nothing billed incorrectly, or billed for services/work not performed.
8. Shall include a review of the diagnostic results for pressure and combustion safety to verify that all applicable tests were completed.
9. Shall include a review of all measures listed on the Work Performed Report to verify installation has been completed in a safe and effective manner, following program requirements.
10. Shall verify the work was performed to the SWS provided by the Department of Energy and the Arizona Weatherization Field Guide.
11. Shall fill out and sign the ADOH WAP QCI Checklist, sign it and provide a copy for the file, stating the unit is complete and ready to be reported to ADOH WAP and DOE. The QCI Checklist is

available from the ADOH WAP website at: <https://housing.az.gov/documents-links/forms/weatherization>.

There are two types of QCI:

1. The independent QCI inspector is an inspector that were not involved in the job except for the Quality Control Inspections. The individual did not perform the initial audit or any work on the home. In this scenario, the Grantee principle investigator (aka Energy Specialist) must field monitor a minimum of five percent (5%).
2. The Independent Auditor/QCI is a person that performs the initial audit and develops the scope of work but is not involved with any of the work performed on the home. This same person performs the Quality Control Inspection. If this method is chosen by a Sub-grantee, they will be subjected to more oversight by the Grantee and the Energy Specialist will field monitor fifteen percent (15%) of the jobs.

The State WAP program allows the Sub-grantee to select which type of QCI method they will follow for the program year thereby determining the level of Grantee oversight of the Sub-grantee. Smaller Sub-grantees typically follow method 1 and larger Sub-grantees typically follow method 2 as they have QCI certified inspectors on staff.

Lack of Compliance with QCI

If a Sub-grantee is found to be in violation of the requirements of the Quality Control Inspection process, they will be formally notified in writing by the Grantee. The write-up will:

1. Indicate where the Sub-grantee is failing at following the required process.
2. Indicate where the Sub-grantee can find the state level or other guidance needed to help address the concern.
3. Request the Sub-grantee create a plan of action in writing on how they will fix the concerns, modify their process going forward and submit within 30 days of receipt of the non-compliance letter.
4. Require that the corrective plan is followed and the process is improved.
5. Require Grantee to:
 - a. Reject jobs and hold funding to Sub-grantees if there were jobs that did not receive a Quality Control Inspection by the Sub-grantee.
 - b. Place the Sub-grantee on a 90-day probation period upon discovery of non-compliance.
 - c. Increase the frequency and percentage of field audits of the Sub-grantee until such time that the Grantee feels that the problems/concerns have been addressed to their satisfaction.
 - d. Mandate the Sub-grantee create a plan of action to fix concerns.

If Grantee does not receive the plan of action within the required timeframe or the deficiency is not corrected, the Sub-grantee will no longer be allowed to facilitate the weatherization program for their service area.

However, if the Sub-grantee approaches the Grantee for technical assistance, the Grantee will provide assistance to the Sub-grantee so they may address the Grantee's concerns. This request for assistance must be made by the Sub-grantee in a reasonable timeframe during the allowable follow-up period. (Refer to third bullet point above)

V.5 Weatherization Analysis of Effectiveness

Quality assurance is ongoing through data analysis; monitoring; technical assistance and AZ WAP Network communication.

Grantee has a process to establish measurable expected outcomes through a performance-based contract with the WAP Sub-grantees. Sub-grantees are required to input data into the AZWAP database. Data includes housing types; measures installed; cost of installed measures; and pre and post energy audit diagnostics. Grantee analyzes this data on a monthly basis, which helps to determine both the training and technical assistance needs of the Sub-grantees as well as best practice installation trends across the network.

Monitoring visits help to identify what training a Sub-grantee and their contractors might need to improve the performance of the Sub-grantee and the program overall. Through monitoring activities, Grantee is able to make comparisons between the Sub-grantees for best practices, measure and installation costs, client education and other trends. Each Sub-grantee gets a minimum of one (1) annual monitoring visit with additional visits as necessary based on performance of the Sub-grantee. Monitoring visits are also used as an opportunity to provide one on one technical assistance as needed.

Constant communication with the WAP network is necessary for program effectiveness as it brings consistency and clarification of expectations, guidelines and regulations. Grantee participates in the WAP Network Peer-to-Peer meetings, which are held approximately four (4) times per year. Additionally, the Grantee uses a process for releasing Technical Bulletins to the WAP Sub-grantee network to maintain quality performance and regulatory compliance. When issues common to the network are identified during the Peer-to-Peer meeting, the Grantee is able to determine additional training needs.

Sub-grantees submit a monthly performance report and monthly job completion reports, which the Grantee uses as tools to determine Sub-grantee effectiveness in delivery of the WAP program.

Finally, the Grantee maintains a Policy and Procedures Handbook that indicates the Grantee's expectations for the performance of Sub-grantees including their client education, progress on completed units and expenditures, ability to follow DOE requirements; Field and Fiscal Monitoring reports; if concerns are found, how quickly they are addressed; and their billing practices. Sub-grantees submit quarterly progress reports as a performance review. This performance review is used on a quarterly basis to determine the Sub-grantees effectiveness in WAP.

V.6 Health and Safety

Please see the Arizona Department of Housing Weatherization Health and Safety Plan attached to the SF424 Application.

V.7 Program Management

V7.1 Overview and Organization

The Arizona DOE Weatherization Program is located within the Arizona Department of Housing (ADOH). In addition to DOE funds for weatherization, ADOH manages Weatherization funds awarded by DES LIHEAP Weatherization Program and Public Utility funds.

An Organization Chart showing how the office is structured is attached to the SF-424. The responsibilities of the ADOH staff implementing the WAP program are outlined in the Budget Justification attached to this plan and are as follows:

Assistant Deputy Director/Programs - provides executive leadership to the program; specific programmatic and policy direction; approval of procurement transactions; oversight of Public Hearing process, planning and reporting.

Assistant Deputy Director/Operations - provides budget oversight, including annual budget and monthly budget reviews; oversees Human Resources, Procurement, and legal assistance to program when needed.

Program Administrator - directs day-to-day programmatic activities, supervises program staff, approves WAP contracts, compiles and submits reports, recommends program and policy direction, reviews and approves Sub-grantee reimbursements, participates in audits.

Administrative Assistant - handles clerical issues relating to the WAP contracts, including file set-up, travel arrangements, and other duties as assigned.

Energy Specialist - provides training, technical assistance and on-site monitoring of Sub-grantees.

Weatherization Program Specialist - prepares WAP contracts, organizes Sub-grantee reporting, processes reimbursement documentation, and conducts desk monitoring and site monitoring of Sub-grantees client, programmatic and financial files.

Finance & Accounting Administrator - responsible for financial and accounting functions associated with financial draws against WAP funds, approves all draws, reviews monthly financial reports, reviews budget reports, participates in audits.

Accountant - responsible for the day-to-day accounting draws associated with WAP funds, submits draws for approval, compiles monthly financial/budget reports, and participates in audits.

Mission

The mission statement of the Weatherization Assistance Program is “To reduce energy costs for low-income families, particularly for the elderly, people with disabilities, families with children, and for families with a high energy burden by improving the energy efficiency of their homes while ensuring their health and safety.”

V7.2 Administrative Expenditure Limit

10 CFR 440.18(e) requires that the combined amount for both Grantee and Sub-grantee administration be no more than ten percent (10%) of the total new funds to be awarded. However, the State Energy Efficiency Program Improvement Act of 1990 (SEEPA) Public Law 101-440, October 18, 1990, allowed an exception that supersedes the 10 CFR 440.18(e) rule, allowing up to an additional five percent (5%) of a Sub-grantee’s award be used for administration if the Sub-grantee allocation is less than \$350,000.

Arizona will retain three point nine percent (3.9%) of the allowable 10% for administration and apply the SEEPA allowed exception of up to an additional five percent (5%) of the Sub-grantee award to be used for administration. The maximum administrative funding that any Sub-grantee will receive is ten percent (10%) of their total awarded allocation.

V7.3 Monitoring Activities

The state has a responsibility to perform monitoring and oversight of the work performed by the Sub-grantee. DOE requires the state to perform a comprehensive monitoring of each Sub-grantee annually. DOE requires five percent (5%) field inspection of completed jobs and recommends performing inspection on in-progress homes. The state will field visit a minimum of 5 percent of completed jobs. If the state

discovers significant deficiencies (health and safety violations, poor quality installation of materials, major services missed, etc.), the state will elevate both the number of homes reviewed and the frequency of visitation until the deficiencies are resolved.

The Monitors for the state and certificates held will be:

| Name | Type of Monitor | Funded by |
|-------------------|---|--------------------|
| Michael Frary | Technical / QCI Certified | 50% Administrative |
| Gloria Castro | Financial & Program Monitoring/Administrative | 50% Administrative |
| Daniel Boyle | Financial & Program Monitoring | 5% Administrative |
| Samantha McDaniel | Financial & Program Monitoring | 5% Administrative |
| Kathy Blodgett | Administrative (Business Manager) | 15% Administrative |

We receive funds from DES LIHEAP and one (1) of the state utilities to assist with the travel budget and funds for monitoring the ten-(10) weatherization Sub-grantees.

A. Role

The Sub-grantees will be routinely monitored to:

1. Determine program compliance and accountability
2. Assist agencies in their program operations and compliance with DOE and state regulations
3. Analyze program performance
4. Analyze quality of work
5. Identify problems, deficiencies, and areas that need improvement and advise on how to correct
6. Analyze whether best possible program services are being delivered to low-income population
7. Assess T&TA needs
8. Improve program performance

B. On-Site Monitoring

Program and fiscal monitoring will be used to determine the program and operational effectiveness of Sub-grantees. Customer files, and Sub-grantee financial systems, records and reports will also be routinely monitored to verify the Sub-grantee’s ability to prudently deliver, support, and manage installations of allowable cost effective and energy efficient measures.

On-site monitoring of Sub-grantees is performed by technical and fiscal monitoring program staff to identify methods, deficiencies, and successes in program operations and to assess technical assistance needs to develop appropriate training courses.

Inspection of completed dwelling units is done to monitor prioritization of weatherization measures, accuracy of energy audit, job costs, quality of workmanship and material, and that the work completed is reflected in the job files. Inspection of warehouse if applicable is completed to insure adequate space and security are available at reasonable costs for the material inventory. In addition, material inventory itself and condition of materials are verified.

B.1 On-Site Technical

On-site technical monitoring will be done by a state monitor that has received their Quality Control Inspector certification. The inspection will be of homes that have received a Quality Control Inspection by the sub grantee’s Quality Control inspector, have expended DOE funds and have been reported into the state’s database as completed.

Sub-grantees will be notified of on-site technical monitoring visits at least two weeks prior to the visit. The Grantee responsibilities related to the on-site technical monitoring event include the following:

Grantee will visit weatherization Sub-grantees at least once a year for monitoring, A ten percent (10%) random sampling of Client files will be reviewed to include the following:

1. Client File Checklist (required)
2. Eligibility Determination (including the required Annual Income Calculations Form) & Client Information including hard copy evidence provided by the Sub-grantee that the client is income eligible to receive WAP services. This evidence may include, but is not limited to, third party verification from the source of income (employer, unemployment agency, social security office) of the family or source documentation for each income source listed on the application.
3. Certification of Zero Income Form (required if applicable)
4. Proof of Ownership or Signed Rental Agreement
5. Deferral Information (if applicable)
6. State Historic Preservation Documentation (if applicable)
7. Previous Weatherization Checklist. (required form)
8. Clients Rights and Responsibilities Form (required form)
9. Client Complaints and Documented Resolution (if applicable)
10. Progress Form; Includes client sign-off on:
 - a. Receipt of "Client Rights and Responsibilities Form"
 - b. Client Agreement (visits for quality assurance and funder monitoring)
 - c. Receipt of Warrantees
 - d. Statement of Completion
11. Household Action Plan (required form)
12. Client Health and Safety Evaluation Forms (2)
 - a. Client use (if client so chooses)
 - b. Auditor use (required form)
13. Work Agreement/Scope of Work
 - a. Form is supplied by Sub-grantee
 - b. must be signed by Client
 - c. Must include any Low Cost/No Cost measures
14. Priority Checklist or Copy of REM w/Field Waiver Request (if applicable)
15. Residential Diagnostic Evaluation Form (required form)
 - a. Initial Inspection and Diagnostics
 - b. Final Inspection and Diagnostics
 - c. Project Photos Pre-work and Post work (may be inserted into form or saved separately)
 - d. Photos of Appliances/HVAC before and after replacement (may be inserted into form or saved separately)
16. Quality Control Inspection Checklist (required form)
17. Hazard Disclosure Form; Includes client sign-off that information, notifications and release were given to them regarding:
 - a. Lead Paint
 - b. Mold Assessment and Release
 - c. Radon

18. Lead Safe Weatherization (if applicable)
 - a. Testing results showing no lead; or
 - b. Lead Safe Work Practices documentation per EPA requirements, Include Certified Renovator documentation, photographs demonstrating proper practices were followed, etc.
19. Materials and Labor Costs: including invoices and purchase orders (Contractor and crew based)
20. Bid/Equipment/Calculation/Specification Details
21. Inventory Sheets (if applicable)
22. Low-Cost/No-Cost Documentation
 - a. Cannot exceed \$250
 - b. Notations must be made in the AZWAP database indicating what the actual low cost/no cost measure was and break out the amounts by funding source used for the measure.
23. Landlord/Tenant Agreement (required form if applicable)
24. Refusal for Services, Indemnification & Waiver of Claims
25. Health & Safety (HSD) Waiver
 - a. required if HSD will exceed \$2,000
 - b. Must be approved and signed by ADOH Energy Specialist
26. Sub-Grantee Statement of Completion
27. Utility Release Form

Grantee will perform job site field monitoring audits on a minimum of five percent (5%) of weatherization completions. Grantee will inspect in-progress units as needed. The field monitoring will be an analysis of quality of field practices, including:

1. Audit procedures and compliance with audit protocols and work orders
2. Diagnostics
3. Overall effectiveness
4. Compliance with Arizona Success with Weatherization Field Guide
5. Workmanship
6. Thoroughness
7. Health and safety issues
8. Agency final inspection procedures
9. Training needs

Grantee staff will randomly select the weatherization completions to be inspected by reviewing jobs submitted in the database, unless particular jobs are deemed to require review. The Sub-grantee will be notified of the homes selected for inspection prior to the visit to allow coordination with the homeowners.

1. Grantee will use the Arizona Success with Weatherization Field Guide and/ or the Standard Work Specifications to evaluate the weatherization jobs.
2. Grantee may recommend re-works, re-inspections, and T&TA visits in response to findings.
3. Grantee will investigate legitimate customer complaints, which may result in the Sub-grantee being required to return to correct errors or omissions.
4. Grantee will note concerns about Sub-grantee operations on the inspection report.
5. Grantee will disallow costs and/or designate the Sub-grantee as high-risk and place the Sub-grantee on a Watch List in response to recurring major findings or persistent noncompliance with Arizona WAP policy.

The monitoring visit will be documented and a Field Monitoring Summary Report will be prepared and provided to the Sub-grantee within thirty (30) business days following the completion of the monitoring event. The summary report will serve as the written results of the on-site technical visit. The reports will be based on:

1. **Findings**—an issue that may be a violation of rules or standards and needs to be addressed.
2. **Concerns**—an issue that may not be in violation of rules or standards but needs to be addressed.
3. **Recommendations**—notation based on monitor’s experience and expertise on how to improve certain aspects of the program.

When Findings and/or Concerns are identified, Sub-grantees will be required to submit a Corrective Action Plan within thirty (30) days of receipt of the Field Monitoring Summary Report. The submission must include a description of the corrective actions taken as well as a timeline for implementation of those actions. The Sub-grantees will submit their Corrective Action Plan to the ADOH WAP Energy Specialist who will review and approve the plan or require further actions to be taken.

B.2 On-Site Fiscal

In accordance with the State Plan, on-site fiscal monitoring visits are required to evaluate Sub-grantees’ general administration and program management systems at least once a year. ADOH WAP performs an annual review of the Financial Audits for all ten (10) Sub-grantees per the requirements of WPN 16-4.

Grantee will notify Sub-grantees of scheduled on-site fiscal monitoring event at least two (2) weeks prior to the visit. The visit typically requires a minimum of two (2) days to complete and requires frequent interaction with Sub-grantee staff.

Key issues identified during the fiscal monitoring:

1. Procurement
2. Invoicing techniques and fiscal oversight practices
3. Accurate job costing
4. Proper designation of expenses between Administration and Program Operations
5. Property records and inventory control

Following the on-site fiscal monitoring visit, a Summary of Findings Report will be prepared and typically provided to the Sub-grantee within thirty-(30) days following the completion of the monitoring event.

When Deficiencies are identified, Sub-grantees will be required to submit a Corrective Action Plan within thirty-(30) days of receipt of the Summary of Findings Report. The submission must include a description of the corrective actions taken as well as a timeline for implementation of those actions. The Sub-grantees will submit their Corrective Action Plan to the ADOH WAP Contract Specialist who will review and approve the plan or require other actions to be taken.

C. Desktop Monitoring

ADOH reviews Sub-grantees entries into the AZWAP database as well as monthly payment requests to determine if the Sub-grantee is meeting its goals and expenditures in compliance with expenditure schedules.

Every month, each agency will be desktop monitored through the AZWAP.org database on the completed jobs submitted for that month. The AZWAP.org database will be closed to completed jobs on the 15th of each month. Upon receipt of the Sub-grantee’s request for reimbursement of expenses, a random sampling fifty percent (50%) desktop review of diagnostic performance on the completed jobs will occur. However, 100% of the Sub-grantees’ request for reimbursement of expenses for completed jobs will be desk monitored for eligible weatherization costs and expenditures.

The goals of desktop monitoring are:

1. Performance analysis of weatherization work in the home;
2. Review of weatherization expenditures (costs allocated to appropriate funding source);
3. Eligibility and compliance issues; and
4. Identify specific focus areas for an agency visit, including problematic jobs.

If a compliance issue occurs, Sub-grantees will be issued a desktop monitoring report that identifies items needing correction and the request for reimbursement will not be processed. The sub grantee will be given fifteen (15) days to comply with the necessary corrections. If the Sub-grantee fails to comply in the 15-day timeframe, funding may be withheld until compliance occurs. A final desk audit report will be sent to the agency after all issues have been addressed. If any of the identified issues are uncorrectable, the Sub-grantee will not be reimbursed and the unit will not be considered a completed DOE unit.

D. Tracking

The Grantee may, by giving reasonable written notice specifying the effective date, terminate the Sub-grantee contract for funding from this grant in whole or in part for cause, which shall include:

1. Failure, for any reason, of the Sub-grantee to fulfill in a timely and proper manner its obligation under this grant including compliance with the approved work program and attached conditions, and such statutes, executive orders, and DOE and/or Grantee directives as may become generally applicable at any time;
2. Late submission by the Sub-grantee to the Grantee of DOE reports that are incorrect or incomplete;
3. Ineffective or improper use of funds provided under this grant;
4. Suspension or termination by DOE of the grant to the state under which this grant is made, or the portion thereof delegated by this grant. The state may also assign and transfer this grant as required by DOE directives.
5. If the Sub-grantee is unable or unwilling to comply with the terms of this grant or with additional conditions as may be lawfully applied by DOE to the grant, or the state, the Sub-grantee may terminate the grant by giving fifteen (15) days written notice to the state signifying the effective date thereof. Furthermore, the residual assets and property purchased by the Sub-grantee under this grant shall be transferred at the discretion of the state to an organization which is exempt from Federal income tax as an organization described in Section 501 (c)(3) of the Internal Revenue Code (1954) or to the appropriate federal, state or local government for exclusively public purposes. In such event, the state shall require the Sub-grantee to ensure that adequate arrangements have been made for the transfer of all property and finished or unfinished documents, data, studies, and reports purchased by the Grantee under this grant. The Sub-grantee shall be entitled to compensation for any unreimbursed expenses reasonably and necessarily incurred in satisfactory performance of the grant. Notwithstanding the above, the Sub-grantee shall not be relieved of liability to the state for damages sustained by the state by virtue of any reimbursement to the Sub-grantee for the purpose of set-off until such time as the exact amount of damages due the state is determined.
6. If the Sub-grantee is willing to relinquish all or a portion of the counties that they serve, the Sub-grantee must give at least ninety-(90) day's written notice prior to the end of the program year to the state signifying the effective date thereof. In such event, the state will notify the other Sub-grantees (CAAs, and other public and nonprofit entities) for the opportunity to manage the Weatherization Assistance Program in the said counties. Interested Sub-grantees must submit to the state within thirty-(30) days after notice by Grantee, a plan of action and budget to manage the counties up for award. Potential Sub-grantees must show experience and performance in weatherization or housing renovation activities, experience in assisting low-income persons in the area to be served, and capacity to undertake a timely and effective weatherization program. Upon selection, the state will hold a public hearing to identify the Sub-grantee(s) and amend the State Plan. Failure to relinquish prior to the ninety-(90) day deadline will result in the Agency having to maintain the grant for the remainder of current program year and will automatically make them a Sub-grantee of the next program year. Relinquishment can only occur between July 1st - February 28th.

E. Analysis

All Sub-grantees must develop and maintain fiscal and accounting procedures, which conform to both federal and state policy for grants administration. Sub-grantees must also submit monthly Financial Status Reports. In addition, Sub-grantees are governed by 2 CFR 200, which set forth principles for determining allowable costs of programs under grants, contracts, and cooperative agreements with the federal government.

The Grantee has established fiscal controls and fund accounting procedures to assure the proper disbursement of all federal funds received by the state. Additionally, the state has established procedures for monitoring the utilization of such funds by project operators.

The controls and procedures to be implemented are as follows:

The State will follow the established fiscal policies and procedures mandated by state law. To accomplish this, the State will coordinate these policies with various other branches of state government as needed. Financial areas addressed in these procedures consist of fiscal management controls, the accounting system, fund controls, personnel and payroll management, property management, procurement, and the disbursement of funds.

The financial standards set forth by the state establish an adequate accounting system with appropriate internal controls, which will safeguard assets, check the accuracy and reliability of accounting data, promote operating efficiency and encourage compliance with prescribed management policies.

V7.4 Training and Technical Assistance

T&TA activities are intended to maintain or increase the efficiency, quality and effectiveness of the Weatherization Program at all levels. Such activities shall be designed to maximize energy savings, minimize production costs, improve program management, crew and contractor quality of work, and reduce the potential for waste, fraud, abuse and mismanagement. The Grantee assesses the training needs of its Sub-grantees through monitoring visits and state meetings; planned for one field monitoring per Sub-grantee and quarterly meetings (funds permitting). Additionally, Grantee Desk Monitoring of completed job diagnostics and energy savings may also indicate training needs. Finally, additional trainings may be identified as necessary for implementation of the approved Health and Safety Plan.

Methods Used to Provide Training

1. Formal classroom
2. On-site training
3. Hands-on training
4. Certification Training

Description of Activities to be undertaken:

The ARIZONA WAP requires that the Sub-grantee and its contractors participate in weatherization related trainings that build or enhance their knowledge, skills and abilities to provide weatherization services/energy efficiency retrofits in accordance with the 10 CFR, Part 440 and guidelines set out by the U.S. Department of Energy for the Weatherization Assistance Program. Sub-grantee and Contractor Staff must not function unsupervised until certification requirements are met.

All Comprehensive training will be done at an IREC accredited training center. ARIZONA WAP IREC accredited formal training is carried out at the FSL South West Building Science Training Center (SWBSTC), which is operated by FSL Home Improvements, a non-profit organization. The SWBSTC is one of the 15 U.S. Department of Energy "Legacy" weatherization-training facilities in the country. Training curricula will reflect industry-wide initiatives and program requirements and will be updated as new program requirements or industry trends are identified.

The facility provides classroom and onsite laboratory based trainings with a specific emphasis on Weatherization activities and building knowledge, skills and abilities to perform work in the weatherization program. The SWBSTC is the only training facility in Arizona to provide a Weatherization Boot Camp

course. The SWBSTC staff is comprised of industry leaders with decades of technical field experience. They are often recruited to present at regional and national conference training sessions.

Current SWBSTC course offerings include:

1. WAP Boot Camp – This week long course combines Energy 101, Pressure Diagnostic 101, General Thermal Performance, Residential Retrofit Application 101, and Combustion Safety course into a weeklong training course that will provide weatherization professionals with an introduction to energy principles, thermal performance, health and safety standards, LSW, auditing, pressure diagnostics, and field repair. This course also trains Health and Safety concerns as indicated in the Grantee's Health and Safety Plan of Radon, Lead, Mold/Moisture, Electrical, Carbon Monoxide, the causes and effects of these concerns and mitigation. The WAP Boot Camp course provides a combination of classroom and hands-on instructions that will prepare candidates to perform the tasks required of weatherization technicians within the current Weatherization Program Guidelines.
2. Energy 101
3. Pressure Diagnostics 101
4. Combustion Safety
5. General Thermal Performance
6. REM design
7. WAP admin
8. Lead RRP Certification
9. BPI Certification for Building Analyst
10. OSHA 10/30 Certifications
11. Energy Auditor Certification
12. Installer Certification
13. Quality Control Inspector certification/re-certification
14. Success with Weatherization – Critical Details

Though SWBSTC offers these courses, training for OSHA, BPI and other necessary WAP training can be provided by any accredited provider for the required certificates.

For details on SWBCTC and courses visit the SWBSTC website at: www.swbstc.org

Each Sub-grantee will be required to maintain training records for its employees and contractors participating in the weatherization program. The training record will list all their training courses they have attended, certifications they possess and date of expiration of those certifications. This information is expected to be updated on an annual basis and provided to Grantee. Certifications are tracked through 2 forms that are updated annually in July or at the time of monitoring and submitted by the Sub-grantees to the Grantee. These forms can be downloaded from the ADOH website at: <https://housing.az.gov/documents-links/forms/weatherization> and are as follows:

1. Employee Certification and Verification Form
2. Sub-grantee/Contractor Certification Verification Form

Arizona WAP will periodically review training performance of Sub-grantees by way of Sub-grantee self-assessment surveys, on-site monitoring and communication with SWBSTC on specific training deficiencies and needs.

Required Training

Crew Leader

1. Renovation, Repair and Painting Rule (RRP)
2. OSHA 30-hour training
3. Building Performance Institute (BPI) Building Analyst Certification

4. Success with Weatherization (Critical Details)
5. WAP Boot Camp

Auditor and Inspectors

1. Renovation, Repair and Painting Rule (RRP)
2. OSHA 10-hour training
3. Building Performance Institute (BPI) Building Analyst Certification
4. Success with Weatherization (Critical Details)
5. WAP Boot Camp

Quality Control Inspectors

1. Renovation, Repair and Painting Rule (RRP)
2. OSHA 30-hour training
3. Building Performance Institute (BPI) Building Analyst Certification
4. Success with Weatherization (Critical Details)
5. WAP Boot Camp
6. Quality Control Certification

Required- New Field Employees and/or Contractors

Within 6 months of Employment

1. WAP Boot Camp
2. Renovation, Repair and Painting Rule (RRP)
3. OSHA 10 or 30-hour training (Depending on position held)

Within 1 year of employment

1. Combustion Safety
2. Success with Weatherization (Critical Details)

Comprehensive Training (fka Tier 1)

Comprehensive training requires all WAP workers, including contractors, to go through a comprehensive training for their specific occupation of work, i.e. Auditor, Crew Chief, and Installer, which follows a curriculum that is in line with the Job Task Analysis (JTA) for their occupation. This training will be required to be taken at a facility with a DOE approved accredited training program for the JTA being taught.

Comprehensive training will be based on a rotating once every three-year training schedule for each JTA: Auditor, Crew Chief and Installer. The Comprehensive schedule will begin with the Auditor training in Mid Program Year 18. The following year will be Crew Chief training and finally year three will cover Installer training. Year four will rotate back to Auditor training, etc. QCI certification will occur every three years with the next required training in the fall of 2020. .

Specific Training (fka Tier 2)

Specific training does not require an accredited program and is made up of both field and classroom training. Specific Training is not a pre-scheduled training. Rather, the training will be done when concerns arise during a Grantee Field monitoring, Quality Assurance visit, desk audit, internal audit, database or energy audit review, DOE monitoring or IG reports etc. If there are consistent issues, the Sub-grantees must send workers to training that will address the issues.

Arizona WAP provides Sub-grantees with T&TA funding to support attendance and participation at weatherization training events such as the HPC National and Energy Out West weatherization conferences. It is expected that essential program personnel attend these conferences to stay current with new regulations, processes and technologies. Arizona WAP is aware that some Sub-grantees might have travel restrictions due to budget constraints. It should be noted that funds to pay for Sub-grantee

travel are provided as part of the Weatherization grant award and proper usage of these funds will be closely monitored by Arizona WAP.

Attendance at state-sponsored training may be required based on the importance of the topic and information to help correct program deficiencies or to ensure competence in specific areas. In such cases, Sub-grantee and delegate attendance will be required as a matter of program compliance.

Contractor Training

Training of contractors is an allowable cost through T&TA funds, though any costs associated with training contractors shall be preceded with a retention agreement in exchange for the training. Reimbursement of labor, mileage, meals and lodging costs for contractors attending trainings is **not allowable**. Sub-grantees shall consider whether the term of the retention agreement aligns with the cost of training provided. Sub-grantees will be responsible to ensure their contractors are meeting the requirements for Tier 1 and Tier 2 training. On an annual basis, Sub-grantees must provide a completed WAP Sub-grantee/Contractor Certification Verification Form to the Grantee for desk monitoring purposes to assist with determining if DOE training requirements per WPN 15-4 are being met.

Whenever possible, the term of a retention agreement shall coincide with the one-year contract (between the Agency and the Contractor) or one-year renewal period. Otherwise, the retention agreement shall be for the duration of the contract from the time the training is provided, not to exceed one year. Training, but not certification as a Lead or Asbestos Company or maintenance of any certifications, may be provided to subcontractors meeting retention requirements. Note that the retention agreement requirement does not apply to Grantee or contractor orientation sessions or when grantees provide instruction to contractors on improving technique as needed.

Certified Quality Control Inspectors

Arizona Department of Housing (ADOH) Weatherization Policies and Procedures require each Sub-grantee to have a Certified Quality Control Inspector on staff or have a contractual agreement with a third party Certified QCI Inspector. There are currently two (2) third party QCI inspectors being used by the 7 out of 10 of the Sub-grantees serving rural Arizona. Metro Sub-grantees have staff Certified QCI. Arizona has not experienced a reported delay in obtaining a QCI for completed DOE units. However, through a contractual agreement, ADOH has the ability to make the three Certified QCI inspectors from Foundation for Senior Living available to the Sub-grantee network should there become a backlog. This makes up to five (5) third party Certified QCI available to the Sub-grantee network.

Client Education

Client education activities are highly encouraged. Sub-grantees have received technical assistance regarding client education techniques and opportunities. This is reinforced during field monitoring visits as the monitor is trained to speak with clients about various energy saving (and some non-energy savings) steps they can take such as; changing filters once a month, using CFLs or LEDs, responsible management of their thermostats, water heater temperature usage and settings, combustion appliance safety, moisture control, and lead safety. Sub-grantees are required to distribute the lead booklet, "Renovate Right" (when potential for hazard exists), and mold and moisture awareness, pamphlet "A Brief Guide to Mold, Moisture, and Your Home" to clients prior to weatherization. Client education can occur at different times throughout the process and can include distribution of client educational material at the time of application as well as one-on-one during and post weatherization work by the energy auditor and/or field crew staff. Each Sub-grantee must determine the best method of ensuring energy education is performed. Sub-grantees must have the client sign the Hazard Disclosure Form acknowledging receipt of the lead, mold and radon materials. Additionally, Sub-grantees should complete the Household Action Plan Form, have the client sign and provide a copy to the client. The Original signed form should be

retained in the Client's file. The Household Action Plan Form is available from the ADOH WAP website at: <https://housing.az.gov/documents-links/forms/weatherization>.

Additionally, Arizona Utilities (APS, SRP, SWG, TEP and Unisource Energy) all use the same brochure available in English and Spanish called "Home Energy Saving Checklist". This brochure is free and available to any community partner from <https://energyassistaz.com/secure/ContactForm.aspx> and lists no cost and low cost ways to save energy and reduce utility bills.

V.8 Energy crisis & Disaster Plan

The use of weatherization funds to address disaster relief activities are allowed under the following conditions:

1. The dwelling receiving services has an income eligible client/s for weatherization services
2. Dwelling must be in sound and safe condition for the occupant and workers to perform services
3. All work must meet weatherization standards
4. Scope of work must be developed from the energy audit performed on the home.
5. All policies for weatherization must be followed, i.e. client priority, income verification, testing procedures, etc.
6. Health and safety hazard eliminations are allowed only if needed to perform weatherization work
7. Usage of personnel to secure weatherization materials, tools, equipment, weatherization vehicles, or protection of weatherization files during the initial phase of the disaster response

Weatherization vehicles and/or equipment may be used for disaster relief purposes other than weatherization services, as long as WAP is reimbursed according to the 2 CFR 200.

Weatherization funds cannot be used for any activities that will not meet WAP policies and regulations, which would include but are not limited to:

1. Providing WAP personnel to assist with disaster relief recovery activities using WAP funds other than weatherization services
2. Removal of debris from dwellings that will not receive weatherization work

The average cost for disaster relief of the dwelling units cannot exceed \$6,500. Further guidance is available from WAPTAC.org website: reference: Weatherization Program Notice 12-7. Sub-grantees may also contact the Grantee with questions.

Weatherization Grantee Health and Safety Plan

POLICY SUBMITTED WITH PLAN

1.0 – GENERAL INFORMATION

Allowable energy related health and safety (H&S) actions are those actions necessary to maintain the physical well-being of both the occupants and/or weatherization workers where:

- Costs are reasonable as determined by The Department of Energy (DOE) in accordance with this approved Master Plan;
- The actions must be taken to effectively perform weatherization work; or
- The actions are necessary because of completed weatherization work.

If Deferral is necessary, it is required that the sub-grantee inform the client in writing, describing the condition(s) causing the deferral and what must be done prior to weatherization work. If the sub-grantee knows of another program that could help, they must provide that information to the client in the letter. A copy of this letter must be in the client file.

Prior to a measure being considered an allowable H&S measure, it must first be determined that it is not an energy conservation measure (ECM) or incidental repair to an ECM.

Weatherization Bootcamp is a requirement for most of the measures below. This course combines Energy 101, Pressure Diagnostic 101, General Thermal Performance, Residential Retrofit Application 101, and Combustion Safety course into a weeklong training course that will provide weatherization professionals with an introduction to energy principles, thermal performance, health and safety standards, lead safe weatherization (LSW), auditing, pressure diagnostics, and field repair. This course provides a combination of classroom and hands-on instructions that will prepare candidates to perform the tasks required of weatherization technicians within the current Weatherization Program Guidelines.

In Bootcamp attendees are expected to learn to:

- Recognize H&S issues including (but not limited to):
 - Radon
 - Lead
 - Mold/Moisture
 - Electrical
 - Carbon Monoxide (CO)
- Understand causes and effect of the above H&S issues
- Properly identify through testing or sensory inspection
- Mitigate those issues if mitigation is allowed within H&S measures.

2.0 – BUDGETING

H&S costs are a separate category and, thereby, exclude such costs from the average cost per unit cost (ACPU) limitation. This separate category also allows these costs to be isolated from energy efficiency costs in program evaluations.

Select which option is used below.

Separate Health and Safety Budget

Contained in Program Operations

3.0 – HEALTH AND SAFETY EXPENDITURE LIMITS

For DOE, each sub-grantee will have 13% of their program operations set aside for energy related H&S repairs. Each sub-grantee will be responsible for the management of their H&S budget and will be required to bill H&S repairs as a separate budget line item. Sub-grantees will also be required to obtain written approval from The Arizona Department of Housing (ADOH) for all H&S repairs exceeding \$2,000. Any H&S expenses exceeding the 13% cap of the sub-grantee program operations budget will not be reimbursed.

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| <p>uncooperative, abusive, or threatening. Grantees must be specific in their approach and provide the process for clients to be notified in writing of the deferral and what conditions must be met for weatherization to continue. Grantees must also provide a process for the client to appeal the deferral decision to a higher level in the organization.</p> |
| <p>Grantee has developed a comprehensive written deferral/referral policy that covers both H&S, and other deferral reasons?</p> |
| <p style="text-align: center;">Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |
| <p style="text-align: center;">Where can the deferral/referral policy be accessed?</p> |
| <p>The deferral policy can be found in the Master File of the State Plan under section V1.2 -Approach to determine building eligibility.</p> |

| 6.0 – HAZARD IDENTIFICATION AND NOTIFICATION FORM(S) |
|--|
| <p>Forms have been developed that include but is not limited to: the client's name and address, dates of the audit/assessment and when the client was informed of a potential H&S issue, a clear description of the problem, a statement indicating if, or when weatherization could continue, and the client(s) signature(s) indicating that they understand and have been informed of their rights and options. The forms can be found on the ADOH website and are titled:</p> <ul style="list-style-type: none"> • Health & Safety Evaluation Form • Hazard Disclosure Form • Residential Diagnostic Evaluation Form |
| <p style="text-align: center;">Documentation been developed and comply with guidance?</p> |
| <p style="text-align: center;">Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> |

7.0 – HEALTH AND SAFETY CATEGORIES

| 7.1 – Air Conditioning and Heating Systems | | | | |
|---|---|--|----------------------------------|--------------------------------|
| Concurrence, Alternative, or Deferral | | | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> | | |
| Air Conditioning Unallowable Measure <input type="checkbox"/> | | Heating Unallowable Measure <input type="checkbox"/> | | |
| Funding | | | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |
| How do you address unsafe or non-functioning primary heating/cooling systems? | | | | |
| <p>“Red tagged”, unsafe, in-operable (more than 6 months) or non-existent HVAC system replacement, repair, or installation is allowable (only as a health and safety measure), where climate conditions warrant, unless prevented by state law. Clients must also be at-risk. At-risk occupants are defined as children under the age of 4 and under and adults 50 and above. It is an accepted medical fact that infants and children 4 and under are very sensitive to the effects of high temperatures and rely on others to regulate their environment. Research indicates that of all people who die of heat stroke, about 80 percent are age 50 or older. Deaths attributed to lung disease, diabetes and hypertension increase more than 50 percent during heat waves. Also, the following requirements must be followed:</p> <ul style="list-style-type: none"> • An approved waiver is required from ADOH. • WPN 17-7 attachment A knowledge is required. • Evaporative Cooling is a H&S measure and does not require a waiver unless exceeding the \$2000 threshold. • Size of unit must be decided using Manual J. • If a unit is operable but deemed unsafe, it must be repaired, replaced, rendered inoperable or deferral is required. • All mobile home, fuel burning, heat producing appliances except for ranges and ovens must be vented to the outside and draw their combustion air from outside. | | | | |
| How do you address unsafe or non-functioning secondary heating systems, Including unvented secondary space heaters? | | | | |
| <ul style="list-style-type: none"> • Secondary unvented units that conform to the safety standards of ANSI Z21.11.2 may remain as back-up heat sources. • Secondary unvented units that do not meet ANSI Z21.11.2 must be removed and properly disposed of prior to weatherization but may remain until a replacement heating system is in place. • Repair or replacement of secondary unvented units is not allowed. • Secondary unvented units that meet the ANSI Z21.11.2, but are not operating safely, must be removed and properly disposed of. • WPN 17-7 attachment A knowledge is required. | | | | |
| Indicate Documentation Required for At-Risk Occupants | | | | |
| <p>Client files need to document occupants 4 and under and 50 and above. Medical documentation must be provided, defining said health risk that requires a conditioned environment, for at-risk occupants between the ages of 5 and 49.</p> | | | | |
| Testing Protocols | | | | |
| <ul style="list-style-type: none"> • Test the equipment to make sure that it is operable and performing correctly. • Perform static pressure testing to ensure proper installation of unit and duct systems • On combustion equipment, inspect: <ul style="list-style-type: none"> ○ Chimneys and flue for proper installation, restriction and damages ○ Test Combustion Appliance Zones(CAZ) for depressurization • For solid fuel units, inspect: <ul style="list-style-type: none"> ○ Walls, mantels, ceilings and surrounding areas for soot (fire hazard) ○ Chimneys and flues for proper installation, restriction and damages ○ To insure that no creosote staining in near flue pipe • Auditors must insure unit would not meet ECM requirements using a DOE approved method. | | | | |
| Client Education | | | | |

| |
|---|
| <ul style="list-style-type: none"> • Client must be provided paperwork, manuals and warranty information for any installed equipment • If a new thermostat is installed, the client must be given a tutorial on how to use it. • Client must be informed on the appropriate use and maintenance requirements of installed equipment. • If combustible equipment is installed, client must be provided with safety information on how to recognize depressurization. |
| Training |
| <ul style="list-style-type: none"> • WAP Bootcamp (refer to section 1.0 for description of training curriculum) • Building Performance Institute- Building Analyst (BPI BA) • Installers must meet the requirements for the state of Arizona on licensing, certifications, and contracting. • Installers must have training on building science principles including CAZ depressurization testing and inspection. |

7.2 - Asbestos - All

What is the blower door testing policy when suspected Asbestos Containing Material (ACM) is identified?

Depressurization testing will not be allowed on homes that contain ACMs. A Pressurization test can be performed on the home if it’s determined that it will not disturb the ACM, making it airborne in the client’s home. If the auditor determines there is Friable ACM (material can be crumbled, pulverized, or reduced to powder by the pressure of an ordinary human hand), testing will not be allowed and the home must be deferred until the ACM’s have been remediated.

7.2a – Asbestos - in siding, walls, ceilings, etc.

Concurrence, Alternative, or Deferral

Concurrence with Guidance Alternative Guidance Results in Deferral

Funding

DOE LIHEAP State Utility Other

How do you address suspected ACM’s in siding, walls, or ceilings that will be disturbed through the course of weatherization work?

Asbestos found inside of the dwelling that needs addressing, directly or incidentally, is not allowable under H&S. Testing by an Asbestos Laws and Regulations Act (AHERA) professional for Asbestos is an allowable H&S cost. However, abatement of asbestos is not an allowable H&S cost. Policies have been in effect for asbestos presence and related work practices for many years. The approach is not to disturb, cut or drill contaminated material and avoid those measures that might do so. In instances where measures can be completed without disturbing asbestos surfaces or materials, that approach should be used. In instances where a local authority, such as code enforcement, imposes specific guidelines or requirements, program staff are to make themselves aware of those restrictions and comply.

Prior to drilling or cutting an exterior wall, inspect the subsurface asbestos. If it is determined that weatherization work cannot be performed without creating a hazard, the project must be deferred. The client must be informed in writing of the potential hazard and the agency must not return to weatherize until an AHERA certified professional issues a clearance statement. Obtain a copy of this statement/report in the client file.

Testing Protocols

- Visually inspect exterior wall surface and subsurface, floors, walls, and ceilings for suspected ACM prior to drilling or cutting.
- Asbestos Hazard Emergency Response Act of 1986 (AHERA) sample collection and testing must be conducted by a certified tester. This is an allowable H&S cost.

Client Education

- Inform the client in writing that suspected ACMs are present and what precautions will be taken to ensure the occupants’ and workers’ safety during weatherization.
- Notify client in writing of results, if testing was performed. A copy of the letter must be put in the client file.

Training and Certification Requirements

- WAP Bootcamp (refer to section 1.0 for description of training curriculum)
- Licensing/certification for removal and reinstallation of asbestos siding if required by AHJ

| 7.2b – Asbestos - in vermiculite | | | | |
|--|---|--|----------------------------------|--------------------------------|
| Concurrence, Alternative, or Deferral | | | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> | | |
| Funding | | | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |
| How do you address suspected ACM's in vermiculite that will be disturbed through the course of weatherization work? | | | | |
| When vermiculite is present, unless testing determines otherwise, the unit is to be deferred. Where blower door tests are performed, prior to asbestos free vermiculite certification, it is a best practice to perform pressurization instead of depressurization. Encapsulation by an appropriately trained professional is allowed. Removal costs are not reimbursable. | | | | |
| Testing Protocols | | | | |
| <ul style="list-style-type: none"> • AHERA sample collection and testing must be conducted by a certified tester. • Baseline environmental asbestos sampling is an allowable cost. | | | | |
| Client Education | | | | |
| <ul style="list-style-type: none"> • Instruct clients, in writing, not to disturb suspected ACM. • Provide asbestos safety information to the client. • Notify client in writing of results, if testing was performed. A copy of the letter must be put in the client file. | | | | |
| Training and Certification Requirements | | | | |
| <ul style="list-style-type: none"> • AHERA or state certification to conduct testing • AHERA or other appropriate asbestos control professional certification/training for encapsulation | | | | |

| 7.2c – Asbestos - on pipes, furnaces, other small covered surfaces | | | | |
|--|---|--|----------------------------------|--------------------------------|
| Concurrence, Alternative, or Deferral | | | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> | | |
| Funding | | | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |
| How do you address suspected ACM's (e.g., pipes, furnaces, other small surfaces) that will be disturbed through the course of weatherization work? | | | | |
| Assume asbestos is present in the covering materials. Encapsulation is allowed by an AHERA asbestos control professional and should be conducted prior to blower door testing. Removal may be allowed by an AHERA asbestos control professional on a case-by-case basis with prior approval from ADOH. | | | | |
| Testing Protocols | | | | |
| <ul style="list-style-type: none"> • Assess whether suspected ACMs are present. • AHERA sample collection and testing is allowed and must be conducted by a certified tester. | | | | |
| Client Education | | | | |
| <ul style="list-style-type: none"> • Instruct clients, in writing, not to disturb suspected ACM. • Provide asbestos safety information to the client. • Notify client in writing of results, if testing was performed. A copy of the letter must be put in the client file. | | | | |
| Training and Certification Requirements | | | | |
| <ul style="list-style-type: none"> • WAP Bootcamp (refer to section 1.0 for description of training curriculum) • AHERA or other appropriate asbestos control professional certification/training is required to abate the ACM | | | | |

| 7.5 – Biologicals and Unsanitary Conditions (odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc.) | | | | |
|--|---|--|----------------------------------|--------------------------------|
| Concurrence, Alternative, or Deferral | | | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> | | |
| Unallowable Measure <input type="checkbox"/> | | | | |
| Funding | | | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |

| |
|---|
| What guidance do you provide Sub-grantees for dealing with biological and/or unsanitary conditions in homes slated for weatherization? |
| <ul style="list-style-type: none"> Remediation of conditions that may lead to or promote biological concerns and unsanitary conditions is allowable expense up to \$300. Addressing bacteria and viruses is not an allowable cost. See Mold and Moisture section for more information. |
| Testing Protocols |
| <ul style="list-style-type: none"> Sensory inspection. |
| Client Education |
| <ul style="list-style-type: none"> Inform client in writing of observed conditions. Provide information on how to maintain a sanitary home. |
| Training |
| <ul style="list-style-type: none"> WAP Bootcamp (refer to section 1.0 for description of training curriculum) |

7.6 – Building Structure and Roofing
Concurrence, Alternative, or Deferral

Concurrence with Guidance Alternative Guidance Results in Deferral

Funding

DOE LIHEAP State Utility Other

What guidance do you provide Sub-grantees for dealing with structural issues (e.g., roofing, wall, foundation) in homes slated for weatherization?

Building rehabilitation is beyond the scope of the WAP. H&S funds should not be used when the repair is a component of an ECM. In that case, the repair should be cost justified as an incidental repair. Clients must be notified of structurally comprised areas, if applicable.

- Evaluate building structure & roofing visually so that no existing conditions are disturbed.
- See Mold and Moisture, Code Compliance, and Pests sections for more information.

Testing

- Visual inspection.
- Ensure that access to the portions of the home where weatherization will occur are safe for entry and performance of assessments, work, and inspections.

How do you define “minor” or allowable structure and roofing repairs, and at what point are repairs considered beyond the scope of weatherization?

Repairs that cannot be included in the ECM and do not exceed \$300. These repairs are recognized as a H&S issue when it puts the client, sub-grantee, or contractor at risk of harm. This would include (but not limited to):

- Unsafe entry stairs
- Minor roof leaks to prevent mold
- Inoperable/broken entry doors

If priority lists are used, and these repairs are designated as Incidental Repairs, at what point is a site-specific audit required?

N/A

Client Education

- Notify client in writing of structurally compromised areas.

Training

- WAP Bootcamp (refer to section 1.0 for description of training curriculum)

7.7 – Code Compliance

Concurrence, Alternative, or Deferral

Concurrence with Guidance Alternative Guidance Results in Deferral

Funding

DOE LIHEAP State Utility Other

| |
|--|
| What guidance do you provide Sub-grantees for dealing with code compliance issues in homes receiving weatherization measures? |
| <ul style="list-style-type: none"> • Correction of preexisting code compliance issues is not an allowable cost unless triggered by weatherization measures being installed in a specific room or area of the home. • When correction of preexisting code compliance issues is triggered and paid for with WAP funds, cite specific code requirements with reference to the weatherization measure(s) that triggered the code compliance issue in the client file. • Follow State and local or AHJ codes while installing weatherization measures, including H&S measures. • Properties where “red tagged” H&S conditions exist that cannot be corrected under this guidance must be deferred. • If a permit is required for weatherization work to be completed and the local jurisdiction requires additional measures for code compliance due to permit being pulled, those measures are allowable costs. Permits should be billed to program operations, not H&S. • H&S funds should not be used when the repair is a component of an ECM, such as fixing a light fixture in order to install a CFL bulb. These costs should be cost justified as an ECM with the associated incidental repair. |
| Testing |
| <ul style="list-style-type: none"> • Visual inspection. |
| What specific situations commonly trigger code compliance work requirements for your network? How are they addressed? |
| When a permit is pulled to install any measure, it requires the installation of hard-wired smoke detectors, on their own circuit. In this case, smoke detectors would be installed per code. |
| Client Education |
| <ul style="list-style-type: none"> • Inform client in writing of observed code compliance issues. |
| Training |
| <ul style="list-style-type: none"> • As Arizona is a home rule, state code compliance is very complicated. Knowledge of codes in each area is essential in performing weatherization work. Each sub-grantee should reach out the AHJ’s for their area for proper code compliance details. |

| | | | | |
|---|---|--|----------------------------------|--------------------------------|
| 7.8 – Combustion Gases | | | | |
| Concurrence, Alternative, or Deferral | | | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> | | |
| Funding | | | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |
| Testing Protocols and Requirements | | | | |
| Inspections by the auditor as listed above must include: | | | | |
| <ul style="list-style-type: none"> • Combustion safety testing is required when combustion appliances are present. • Proper venting to the outside for combustion appliances, including gas dryers, furnaces, vented space heaters and water heaters is required. <ul style="list-style-type: none"> ○ Correct venting when testing indicates a problem. ○ Inspect venting of combustion appliances and confirm adequate clearances. • Inspection of cooking burners for operability and flame quality. <ul style="list-style-type: none"> ○ Repair of cooking burners is an allowable H&S cost if CO readings are high and/or another H&S concern is found. Replacement of cook stoves is not an allowable cost. • Testing by approved WAP procedures of ambient air in combustion appliance zones & undiluted flue on applicable appliances are above the allowable limits. • If unsafe conditions whose remediation is necessary to perform weatherization cannot be remedied by repair or tuning, replacement is an allowable H&S measure unless prevented by other guidance herein. • Maintain documentation justifying the replacement with a cost comparison between replacement and repair in the client file. • Replacement units must meet safety guidelines as determined in the State Plan or Technical Field Guide. • Test naturally drafting appliances for spillage and CO during CAZ depressurization testing pre- and post-weatherization and before leaving the home on any day when work has been done that could affect draft (e.g., tightening the home, adding exhaust). | | | | |

How are crews instructed to handle problems discovered during testing, and what are the specific protocols for addressing hazards that require an immediate response?

Crews should address any issue(s) that they are qualified to repair and are an allowable expense(s). If unable to repair, they must have a qualified individual complete the work. Follow BPI standards on combustion safety and protocols. When CO issues arise, crews should follow BPI standards on action levels and protocols.

| Ambient Combustion Safety Test Action Levels <i>*CO testing is started at time of entry to the home</i> | |
|---|--|
| CO Test Results* | Retrofit Action |
| 9-35 ppm | Open windows and doors, determine source, service unit |
| 36-69 ppm | Open windows and doors, disable responsible appliance, service unit |
| >69 ppm | Terminate inspection. Evacuate building, call emergency services from outside the home |

| CO Thresholds for Fossil-Fuel Fired Combustion Appliances <i>*CO testing is started steady state</i> | | |
|--|-------------------------|---|
| Appliance | Threshold Limit* | Retrofit Action |
| Central Furnace (all categories) | 400 ppm air free | UNACCEPTABLE CO LEVEL: Sub-grantee/contractor must service or replace the appliance. If issue cannot be addressed under the weatherization program, advise the homeowner/occupant that the appliance should be serviced or replaced. Work may not commence until the issue is resolved. Note: If ambient CO levels do not exceed 70 ppm, testing of other appliances and other audit procedures may continue at the discretion of the auditor. ACCEPTABLE CO LEVEL: No action required. |
| Boiler | 400 ppm air free | |
| Floor Furnace | 400 ppm air free | |
| Gravity Furnace | 400 ppm air free | |
| Wall Furnace (BIV) | 200 ppm air free | |
| Wall Furnace (Direct Vent) | 400 ppm air free | |
| Vented Room Heater | 200 ppm air free | |
| Unvented Room Heater | 200 ppm air free | |
| Water Heater | 200 ppm air free | |
| Oven/Broiler | 225 ppm air free | |
| Clothes Dryer | 200 ppm air free | |
| Refrigerator | 400 ppm air free | |
| Gas Log (gas fireplace) | 25 ppm air free | |
| Gas Log (installed in wood burning fireplace) | 400 ppm air free | |

Follow BPI standards on CAZ:

| Action Levels for Spillage in Combustion Appliances <i>If CAZ zone is lower (more negative) than -3 pa corrective action must be performed to alleviate the condition</i> | |
|---|---|
| Test Result | Action Required |
| If greatest CAZ depressurization occurs with the air handler on* | Conduct further analysis of the distribution system to determine if leaky ducts or other HVAC-induced imbalances are the cause of the spillage. If so, recommend distribution system repairs that will reduce or eliminate the CAZ depressurization |
| If greatest CAZ depressurization occurs with the door to CAZ closed, but is alleviated when door to CAZ is open* | Recommend measures to improve air transfer between the CAZ and the core of the house |
| If the Cause of spillage has been traced to excessive exhaust** independent of CAZ door position, air handler, or a problem with the flue*** | Verify that sufficient combustion air is available per ANSI Z223.1/NFPA 54 for gas-fired appliances and NFPA 31 for oil-fired appliances or recommend verification by a qualified professional And/or Recommend further evaluation/service by a qualified professional to address the venting/combustion air issues |
| <p><i>*In the case where both spillage and excessive CO are present, in addition to the specific recommendations above, recommend that the appliance be shut down until it can be serviced by a qualified professional.</i></p> <p><i>**Refers to exhaust caused by mechanical ventilation and/or other means of exfiltration.</i></p> <p><i>***When a recommendation to replace atmospherically-vented combustion equipment inside the pressure boundary is made, and when cost-effective, recommend replacement with direct-vented, or power-vented equipment (or non-combustion equipment, such as a heat pump).</i></p> | |

| Client Education | | |
|--|--|--|
| <ul style="list-style-type: none"> • Provide client with combustion safety and hazards information. • Clients must be provided with information and an explanation of combustion safety and hazards information, including the importance of using exhaust ventilation when cooking and the importance of keeping burners clean to limit the production of CO. | | |
| Training | | |
| <ul style="list-style-type: none"> • WAP Bootcamp (refer to section 1.0 for description of training curriculum) • BPI BA | | |

| 7.9 – Electrical | | | | |
|---|---|--|----------------------------------|--------------------------------|
| Concurrence, Alternative, or Deferral | | | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> | | |
| Funding | | | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |
| What guidance do you provide Sub-grantees for dealing with electrical hazards, including knob & tube wiring, in homes slated for weatherization? | | | | |
| <ul style="list-style-type: none"> • When the H&S of the occupant/worker(s) is at risk, minor repairs are allowed when necessary for weatherization measures or the health and safety of the occupant(s), such as <ul style="list-style-type: none"> ○ Installation of a GFCI in wet locations ○ Replacement of wall outlets that are broken ○ Replacement of bad breakers ○ Relocating an electrical outlet to allow a dryer to be relocated to ensure proper ventilation. • When addressing homes with knob and tube wiring: <ul style="list-style-type: none"> ○ Evaluate and if necessary provide sufficient over-current protection ○ Voltage drop and voltage detection testing are allowable costs when determining conditions of wiring. ○ Damming is required prior to insulating building components containing knob and tube wiring, if not already included in the ECM. <p>Inspections include</p> <ul style="list-style-type: none"> • Visual inspection for presence and condition of knob-and-tube wiring. • Check for alterations that may create an electrical hazard. • Voltage drop and voltage detection testing. | | | | |
| How do you define “minor” or allowable electrical repairs, and at what point are repairs considered beyond the scope of weatherization? | | | | |
| Repairs that cannot be included in the ECM and do not exceed \$300. | | | | |
| If priority lists are used, and these repairs are designated as Incidental Repairs, at what point is a site-specific audit required? | | | | |
| N/A | | | | |
| Client Education | | | | |
| <ul style="list-style-type: none"> • Sub-grantees are required to discuss and provide information to the client on the hazards of overloading circuits, basic electrical safety/risks and over current protection. | | | | |
| Training | | | | |
| <ul style="list-style-type: none"> • WAP Bootcamp (refer to section 1.0 for description of training curriculum) • BPI BA | | | | |

| 7.10 – Formaldehyde, Volatile Organic Compounds (VOCs), Flammable Liquids, and other Air Pollutants | | | | |
|--|---|--|----------------------------------|--------------------------------|
| Concurrence, Alternative, or Deferral | | | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> | | |
| Funding | | | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |
| What guidance do you provide Sub-grantees for dealing with formaldehyde, VOCs, flammable liquids, and other air pollutants identified in homes slated for weatherization? | | | | |

| |
|---|
| <p>Formaldehyde and Volatile Organic Compounds (VOCs) – Formaldehyde, tobacco smoke, thinners, solvents, cleaners, and any other substances capable of negatively impacting indoor air quality must be identified during the initial audit. Basic strategies such as proper storage and ventilation are used to eliminate problems. Air sealing thresholds are maintained so that the presence of these pollutants are not concentrated and allowed to reach toxic levels. However, this is primarily the responsibility of the client. In some cases, deferral may be necessary.</p> <p>Allowable actions:</p> <ul style="list-style-type: none"> • Removal of pollutants is allowed and is required if they pose a risk to workers. • Removal of pollutants that are not necessary to perform weatherization (e.g. cleaning old paint cans and oil out of the garages) is not allowed. • If pollutants pose a risk to workers and removal cannot be performed or is not allowed by the client, the unit must be deferred. • Refer to Hazardous Materials Disposal section for more information. |
| Testing Protocols |
| <ul style="list-style-type: none"> • Sensory inspection. |
| Client Education |
| <ul style="list-style-type: none"> • Inform client in writing of observed hazardous condition and associated risks. • If necessary, provide client written materials on safety issues and proper disposal of household pollutants. |
| Training |
| <ul style="list-style-type: none"> • WAP Bootcamp (refer to section 1.0 for description of training curriculum) |

| | | | | |
|--|---|--|----------------------------------|--------------------------------|
| 7.11 – Fuel Leaks | | | | |
| <i>(please indicate specific fuel type if policy differs by type)</i> | | | | |
| Concurrence, Alternative, or Deferral | | | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> | | |
| Funding | | | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |
| Remediation Protocols | | | | |
| <ul style="list-style-type: none"> • When a minor gas leak is found on the utility side of service, the utility service must be contacted before work may proceed. Work can commence when the utility considers it safe. • Fuel leaks that are the responsibility of the client must be repaired before weatherizing a unit. • When leaks are discovered during the course of weatherization, that are the responsibility of the utility, temporarily halt work and notify the utility. Work can commence when the utility considers it safe. | | | | |
| Testing | | | | |
| <ul style="list-style-type: none"> • Test exposed gas lines for fuel leaks from utility coupling into, and throughout, the home using BPI standards. • Conduct sensory inspection on bulk fuels to determine if leaks exist. • If any gas leak is detected, it must be repaired by the responsible party. If it is the client’s responsibility, it can be repaired as an incidental repair or H&S. | | | | |
| How do you define allowable fuel leak repairs, and at what point are repairs considered beyond the scope of weatherization? | | | | |
| Repairs that cannot be included in the ECM and do not exceed \$300. | | | | |
| Client Education | | | | |
| <ul style="list-style-type: none"> • Inform clients in writing if fuel leaks are detected. | | | | |
| Training | | | | |
| <ul style="list-style-type: none"> • WAP Bootcamp (refer to section 1.0 for description of training curriculum) • BPI BA | | | | |

| | | | | |
|---|---|--|----------------------------------|--------------------------------|
| 7.12 – Gas Ovens / Stovetops / Ranges | | | | |
| Concurrence, Alternative, or Deferral | | | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> | | |
| Funding | | | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |

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| What guidance do you provide Sub-grantees for addressing unsafe gas ovens/stoves/ranges in homes slated for weatherization? |
| <ul style="list-style-type: none"> • When testing indicates a problem, entities may perform standard maintenance on or repair gas cooktops and ovens. • Replacement is not allowed. |
| Testing Protocols |
| <ul style="list-style-type: none"> • Test gas ovens for CO. • Inspect cooking burners and ovens for operability and flame quality. • Follow BPI standards on combustion safety and protocols. (See section 7.8 above) |
| Client Education |
| <ul style="list-style-type: none"> • Inform clients of the importance of using exhaust ventilation when cooking and the importance of keeping burners clean to limit the production of CO |
| Training |
| <ul style="list-style-type: none"> • WAP Bootcamp (refer to section 1.0 for description of training curriculum) • BPI BA |

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| 7.13 – Hazardous Materials Disposal [Lead, Refrigerant, Asbestos, Mercury (including CFLs/fluorescents), etc.] | | | | |
| Concurrence, Alternative, or Deferral | | | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> | | |
| Funding | | | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |
| Client Education | | | | |
| <ul style="list-style-type: none"> • Inform client in writing of hazards associated with hazardous waste materials being generated/handled in the home. | | | | |
| Training | | | | |
| <ul style="list-style-type: none"> • WAP Bootcamp (refer to section 1.0 for description of training curriculum) <ul style="list-style-type: none"> ○ Appropriate Personal Protective Equipment (PPE) for working with hazardous waste materials. ○ Disposal requirements and locations. ○ Health and environmental risks related to hazardous materials. • Workers are required to have Safety Data Sheet (SDS) Training. • LEAD Renovation, Repair and Paint (RRP) | | | | |
| Disposal Procedures and Documentation Requirements | | | | |
| <ul style="list-style-type: none"> • Hazardous Waste Materials generated in the course of weatherization work shall be disposed of according to all local laws, regulations and/or Federal guidelines, as applicable. • Document proper disposal requirements in contract language with responsible party. | | | | |

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| 7.14 – Injury Prevention of Occupants and Weatherization Workers (Measures such as repairing stairs and replacing handrails) | | | | |
| Concurrence, Alternative, or Deferral | | | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> | | |
| Funding | | | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |
| What guidance do you provide Sub-grantees regarding allowable injury-related repairs (e.g., stairs, handrails, porch deck board)? | | | | |

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| <ul style="list-style-type: none"> When necessary to effectively weatherize the home, workers may make minor repairs and installations, such as, but not limited to: <ul style="list-style-type: none"> Unsafe entry stairs Loose or broken hand rails Trip/fall hazards Inspect for dangers that would prevent weatherization. If conditions will not be repaired, inform client in writing of observed hazards and associated risks. |
| How do you define “minor” or allowable injury prevention measures, and at what point are repairs considered beyond the scope of weatherization? Quantify “minor” or allowable injury prevention measures. |
| Repairs that cannot be included in the ECM and do not exceed \$300. |
| Training |
| <ul style="list-style-type: none"> WAP Bootcamp (refer to section 1.0 for description of training curriculum) OSHA 10 |

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| 7.15 – Lead Based Paint | | | | |
| Concurrence, Alternative, or Deferral | | | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> | | |
| Funding | | | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |
| Safe Work Protocols | | | | |
| <ul style="list-style-type: none"> Crews must follow EPA's Lead; Renovation, Repair and Painting Program (RRP) when working in pre-1978 housing unless testing confirms the work area to be lead free. Deferral is required when the extent and condition of lead-based paint in the house would potentially create further H&S hazards. Only those costs directly associated with the testing and lead safe practices for surfaces directly disturbed during weatherization activities are allowable. Whole house remediation is not an allowable cost. Documentation in the client file must include <ul style="list-style-type: none"> Certified Renovator certification any training provided on-site description of specific actions taken lead testing and assessment documentation photos of site and containment set up (include the location of photos referenced if not in file) All crews and contractors are required to: <ul style="list-style-type: none"> Carry a High-Efficiency Particulate Air (HEPA) vacuum. Wear a tight fitting respirator and disposable coveralls. Seal work areas within a home using tape and plastic. Cover furniture, carpet, and other surfaces with plastic drop cloths or tarps. Spray water on disturbed areas to minimize dust. Clean-up work area each day. Sweep carefully and wet mop, as needed. Use a HEPA vacuum cleaner to collect dust and paint chips. Keep children away from work area at all times. | | | | |
| Testing Protocols | | | | |
| <ul style="list-style-type: none"> Testing to determine the presence of lead in paint that will be disturbed by WAP measure installation is allowed with EPA-approved testing methods. Testing methods must be economically feasible and justified i.e. test swabs. Job site set up and cleaning verification by a Certified Renovator is required. Grantees must verify that crews are using lead safe work practices during monitoring. | | | | |
| Client Education | | | | |
| <ul style="list-style-type: none"> Follow pre-renovation education provisions for RRP. Provide a copy of "Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools" to an adult occupant prior to work commencing on the home, within the EPA guidelines. Written acknowledgement must be received. | | | | |
| Training and Certification Requirements | | | | |

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| <ul style="list-style-type: none"> • All employees and contractors working on pre-1978 homes must receive training to install measures in a lead-safe manner in accordance with the SWS and EPA protocols, and installation must be overseen by an EPA Certified Renovator. • Grantee Monitors and Inspectors must be Certified Renovators. • Any agency/contractor that works in a pre-1978 home, must be a Lead Certified Firm. • WAP Bootcamp, including Lead Safe Weatherization (refer to section 1.0 for description of training curriculum) • Lead RRP Certification |
| Documentation Requirements |
| <ul style="list-style-type: none"> • Sub-grantees will be required to show that all lead based paint protocols are up to date and in compliance to all regulations, including: <ul style="list-style-type: none"> ○ Client communication ○ Lead safe work practices ○ Proper equipment including (but not limited to): <ul style="list-style-type: none"> ▪ Tyvek Suit ▪ Booties ▪ Respirators ▪ Hoods ▪ Goggles ▪ Tack pad |

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| 7.16 – Mold and Moisture | | | | |
| (Including but not limited to: drainage, gutters, down spouts, extensions, flashing, sump pumps, dehumidifiers, landscape, vapor retarders, moisture barriers, etc.) | | | | |
| Concurrence, Alternative, or Deferral | | | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> | | |
| Funding | | | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |
| What guidance do you provide Sub-grantees for dealing with moisture related issues (e.g., drainage, gutters, down spouts, moisture barriers, dehumidifiers, vapor barrier on bare earth floors) in homes slated for weatherization? | | | | |
| <ul style="list-style-type: none"> • Limited water damage repairs that can be addressed by weatherization workers are allowed when necessary in order to weatherize the home and to ensure the long-term stability and durability of the measures. • Source control (i.e. correction of moisture and mold creating conditions) is allowed when necessary in order to weatherize the home and to ensure the long-term stability and durability of the measures. Source control is independent of latent damage and related repairs. • Where severe Mold and Moisture issues cannot be addressed, deferral is required. • Mold clean-up is not an allowable H&S cost. • Surface preparation where weatherization measures are being installed (e.g., cleaning mold off window trim in order to apply caulk) must be charged as part of the ECM, not to the H&S budget category. • Mold testing is not an allowable cost. <p>Inspecting includes, (not limited to):</p> <ul style="list-style-type: none"> • Visual assessment including exterior drainage. • The use of diagnostic tools, such as moisture meters, are recommended at pre-weatherization and at the final inspection. | | | | |
| How do you define “minor” or allowable moisture-related measures, and at what point is work considered beyond the scope of weatherization? | | | | |
| Repairs that cannot be included in the ECM and do not exceed \$300. | | | | |
| Client Education | | | | |
| <ul style="list-style-type: none"> • Provide client written notification and disclaimer on mold and moisture awareness. • Provide information, when necessary, on the following (not limited to): <ul style="list-style-type: none"> ○ The importance of cleaning and maintaining drainage systems. ○ Proper landscape design and how this impacts site drainage and moisture control. ○ Proper bathroom ventilation to release humidity and moisture. | | | | |

| Training | | |
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| <ul style="list-style-type: none"> WAP Bootcamp (refer to section 1.0 for description of training curriculum) | | |

| 7.17 – Pests | | |
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| Concurrence, Alternative, or Deferral | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> |
| Funding | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> |
| | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |
| What guidance do you provide Sub-grantees for dealing with pests and pest intrusion prevention in homes slated for weatherization? | | |
| <p>Pest removal is allowed only where infestation would prevent weatherization.</p> <ul style="list-style-type: none"> Infestation of pests may be cause for deferral where it cannot be reasonably removed or poses H&S concern for workers. Screening of windows and points of access, and incorporating pest exclusion into air sealing practices to prevent intrusion is allowed. | | |
| Define Pest Infestation Thresholds, Beyond Which Weatherization Is Deferred | | |
| The cost of pest control cannot exceeded \$300 | | |
| Testing Protocols | | |
| <ul style="list-style-type: none"> Assessment of presence and degree of infestation and risk to worker | | |
| Client Education | | |
| <ul style="list-style-type: none"> Inform client in writing of observed condition and associated risks. | | |
| Training | | |
| <ul style="list-style-type: none"> How to assess presence and degree of infestation, associated risks, and deferral policy | | |

| 7.18 – Radon | | |
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| Concurrence, Alternative, or Deferral | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> |
| Funding | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> |
| | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |
| What guidance do you provide Sub-grantees around radon? | | |
| <ul style="list-style-type: none"> Radon mitigation is not an allowable H&S cost. Clients must sign an informed consent form prior to receiving weatherization services. This form must be kept in the client file. In homes where radon may be present, work scope should include precautionary measures based on EPA Healthy Indoor Environment Protocols for Home Energy Upgrades, to reduce the possibility of making radon issues worse. Whenever site conditions permit, cover exposed dirt floors within the pressure/thermal boundary with 6 mil (or greater) polyethylene sheeting, lapped at least 12” and sealed with appropriate sealant at all seams, walls and penetrations. Other precautions may include, (but are not limited to): <ul style="list-style-type: none"> Sealing any observed floor and/or foundation penetrations, including open sump pits Isolating the basement from the conditioned space Ensuring crawl space venting is installed. | | |
| Testing Protocols | | |
| In the State of Arizona, radon testing and/or remediation is not an allowable H&S measure. | | |
| Client Education | | |

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| <ul style="list-style-type: none"> • Provide all clients with EPA’s A Citizen’s Guide to Radon and inform them of radon related risks. Confirmation that EPA’s A Citizen’s Guide to Radon was received must be in the client file. • If other funds are used for testing, informed consent form must include: <ul style="list-style-type: none"> ○ Information from the results of the IAQ Study that there is a small risk of increasing radon levels when building tightness is improved; ○ A list of precautionary measures WAP will install based on EPA Healthy Indoor Environment Protocols; ○ Some of the benefits of Weatherization including energy savings, energy cost savings, improved home comfort, and increased safety; and |
| Training and Certification Requirements |
| <ul style="list-style-type: none"> • WAP Bootcamp (refer to section 1.0 for description of training curriculum) • A zonal map can be located at http://www.epa.gov/radon/pdfs/zonemapcolor.pdf • EPA Healthy Indoor Environment Protocols |
| Documentation Requirements |
| <ul style="list-style-type: none"> • Confirmation that EPA’s A Citizen’s Guide to Radon was received must be in the client file. |

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| 7.19 – Safety Devices: Smoke and Carbon Monoxide Alarms, Fire Extinguishers | | | | |
| Concurrence, Alternative, or Deferral | | | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> | | |
| Funding | | | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |
| What is your policy for installation or replacement of the following: | | | | |
| <ul style="list-style-type: none"> • Smoke Alarms: must be installed where alarms are not present or are inoperable. • Carbon Monoxide Alarms: must be installed where alarms are not present or are inoperable. • Fire Extinguishers: Where solid fuel burning equipment is present, fire extinguishers may be provided as an allowable H&S measure. | | | | |
| Testing Protocols | | | | |
| Testing | | | | |
| <ul style="list-style-type: none"> • Check existing alarms for operation. If they fail to operate properly, they must be replaced. • Verify operation of installed alarms. | | | | |
| Client Education | | | | |
| <ul style="list-style-type: none"> • Provide client with verbal and written information on use of devices installed. | | | | |
| Training | | | | |
| <ul style="list-style-type: none"> • WAP Bootcamp (refer to section 1.0 for description of training curriculum) • Each sub-grantee should reach out the AHJ’s for their area for proper code compliance details. | | | | |

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| 7.20 – Occupant Health and Safety Concerns and Conditions | | | | |
| Concurrence, Alternative, or Deferral | | | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> | | |
| Funding | | | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> | Utility <input type="checkbox"/> | Other <input type="checkbox"/> |
| What guidance do you provide Sub-grantees for soliciting the occupants’ health and safety concerns related to components of their homes? | | | | |
| <ul style="list-style-type: none"> • When a person’s health may be at risk and/or WAP work activities could constitute a H&S hazard, the occupant will be required to take appropriate action based on severity of risk. • Failure or the inability to take appropriate actions must result in deferral. | | | | |
| What guidance do you provide Sub-grantees for determining whether occupants suffer from health conditions that may be negatively affected by the act of weatherizing their home? | | | | |

A Special consideration should be given to at-risk clients. At risk clients include but are not limited to children (4 or younger); elderly (50 or older); person(s) currently under the care of a doctor for asthma or other conditions that could be affected by extreme heat or cold.

The use of Health and Safety Evaluation Form is required to screen occupants to reveal known or suspected health concerns as part of initial assessment/audit.

What guidance do you provide Sub-grantees for dealing with potential health concerns when they are identified?

- If it is determined there is a potential health risk with one or more materials to be used, an alternative material may be substituted if the cost is justified.
- If normal practices of material installation may put the client at-risk, alternative methods may be used. An example is: going through a gable to install insulation instead of going through an interior access point/ attic hatch.

Client Education

- Review Health and Safety Evaluation Form with client and have client sign in acknowledgement. A copy of this signed form should be provided to the client.
- Provide client with Sub-grantee point of contact information in writing so client can inform of any issues.

Documentation Form(s) have been developed and comply with guidance? Yes No

- Health and Safety Evaluation Form, completed by auditor, signed by auditor and homeowner.

7.21 – Ventilation and Indoor Air Quality

Concurrence, Alternative, or Deferral

Concurrence with Guidance Alternative Guidance Results in Deferral

Funding

DOE LIHEAP State Utility Other

Identify the Most Recent Version of ASHRAE 62.2 Implemented

- Install ventilation as required by ASHRAE 62.2 - 2016.
- If the ASHRAE normative Appendix A is employed and an existing fan is being replaced or upgraded to meet whole-house ventilation requirements, take actions to prevent zonal pressure differences greater than 3 pascals across the closed door, if one exists.

Testing and Final Verification Protocols

- ASHRAE 62.2 calculator to determine required ventilation.
- Measure fan flow of existing fans and of installed equipment to verify performance.

Client Education

- Provide client with information on function, use, and maintenance (including location of service switch and cleaning instructions) of ventilation system and components.
- Provide client with equipment manuals for installed equipment.
- Include disclaimer that ASHRAE 62.2 does not account for high polluting sources or guarantee indoor air quality.

Training

- WAP Bootcamp (refer to section 1.0 for description of training curriculum)
- ASHRAE 62.2 training, including proper sizing, evaluation of existing and new systems.

7.22 – Window and Door Replacement, Window Guards

Concurrence, Alternative, or Deferral

Concurrence with Guidance Alternative Guidance Results in Deferral

Funding

DOE LIHEAP State Utility Other

What guidance do you provide to Sub-grantees regarding window and door replacement and window guards?

- Replacement, repair, or installation is not an allowable H&S cost.
- Replacement, repair, or installation is only allowable as an ECM.

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| Testing Protocols | | |
| N/A | | |
| Client Education | | |
| <ul style="list-style-type: none"> If disturbing lead paint, follow lead safe weatherization practices and inform the client on lead risks, as indicated in this H&S plan, when applicable. | | |
| Training | | |
| <ul style="list-style-type: none"> WAP Bootcamp (refer to section 1.0 for description of training curriculum) | | |
| 7.23 – Worker Safety (OSHA, etc.) | | |
| Concurrence, Alternative, or Deferral | | |
| Concurrence with Guidance <input checked="" type="checkbox"/> | Alternative Guidance <input type="checkbox"/> | Results in Deferral <input type="checkbox"/> |
| Funding | | |
| DOE <input checked="" type="checkbox"/> | LIHEAP <input type="checkbox"/> | State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/> |
| How do you verify safe work practices? What is your policy for in-progress monitoring? | | |
| <ul style="list-style-type: none"> Annual submission to ADOH of Employee Certification Verification Form is required (including OSHA certification(s)). ADOH does in-progress monitoring when training and technical assistance is requested. During monitoring ADOH staff will verify compliance with the current OSHA Hazard Communication Standard, including on-site organized Safety Data Sheets (SDS). | | |
| Training and Certification Requirements | | |
| <ul style="list-style-type: none"> WAP Bootcamp (refer to section 1.0 for description of training curriculum) Use and importance of Personal Protection Equipment (PPE) OSHA 10 hour training Ongoing training as required in Hazard Communication Program Workers must follow OSHA standards where required and take precautions to ensure the H&S of themselves and other workers. | | |