



Department of Energy

*Draft* State Plan and  
Application

Submittal: May 3, 2019

DOE Approval: Pending



## APPLICATION FOR FEDERAL ASSISTANCE SF-424

Version 02

**9. Type of Applicant:**

A State Government

**10. Name of Federal Agency:**

U. S. Department of Energy

**11. Catalog of Federal Domestic Assistance Number:**

81.042

CFDA Title:

Weatherization Assistance Program

**12. Funding Opportunity Number:**

DE-WAP-0002019

Title:

2019 Weatherization Assistance Program

**13. Competition Identification Number:**

Title:

**14. Areas Affected by Project (Cities, Counties, States, etc.):**

Statewide

**15. Descriptive Title of Applicant's Project:**

Nevada's Low Income Weatherization Assistance Program - Formula Grant

## APPLICATION FOR FEDERAL ASSISTANCE SF-424

Version 02

## 16. Congressional District Of:

a. Applicant: Nevada Congressional District 02

b. Program/Project: NV-Statewide

Attach an additional list of Program/Project Congressional Districts if needed:

## 17. Proposed Project:

a. Start Date: 07/01/2017

b. End Date: 06/30/2020

## 18. Estimated Funding (\$):

a. Federal	1,199,608.00
b. Applicant	0.00
c. State	0.00
d. Local	0.00
e. Other	0.00
f. Program Income	0.00
g. TOTAL	1,199,608.00

## 19. Is Application subject to Review By State Under Executive Order 12372 Process?:

- a. This application was made available to the State under the Executive Order 12372 Process for review
- b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- c. Program is not covered by E.O. 12372

## 20. Is the applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation)

No

21. By signing this application, I certify (1) to the statements contained in the list of certifications\*\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\*\* and agree to

 I AGREE

\*\* The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency

## Authorized Representative:

Prefix: Mr First Name: Steve

Middle Name:

Last Name: Aichroth

Suffix:

Title: Administrator

Telephone Number: 7756872246

Fax Number: 7756874040

Email: saichroth@housing.nv.gov

Signature of Authorized Representative:

Date Signed:

Authorized for Local Reproduction

Standard Form 424 (Revised 10/2005)  
Prescribed by OMB Circular A-102

**BUDGET INFORMATION - Non-Construction Programs**

1. Program/Project Identification No. EE0007934		2. Program/Project Title Weatherization Assistance Program	
3. Name and Address State of Nevada 1830 College Parkway, Suite 200 Carson City, NV 897060000		4. Program/Project Start Date 07/01/2017	5. Completion Date 06/30/2020

**SECTION A - BUDGET SUMMARY**

Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Federal	81.042	\$ 0.00		\$ 1,199,608.00		\$ 1,199,608.00
2.						
3.						
4.						
5. TOTAL		\$ 0.00	\$ 0.00	\$ 1,199,608.00	\$ 0.00	\$ 1,199,608.00

**SECTION B - BUDGET CATEGORIES**

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) GRANTEE ADMINISTRA TION	(2) GRANTEE T&TA	(3) SUBGRANTE E ADMINISTRA	(4) SUBGRANTE E T&TA	
a. Personnel	\$ 15,224.00	\$ 6,650.00	\$ 0.00	\$ 0.00	\$ 21,874.00
b. Fringe Benefits	\$ 6,139.00	\$ 2,681.11	\$ 0.00	\$ 0.00	\$ 8,820.11
c. Travel	\$ 0.00	\$ 21,784.00	\$ 0.00	\$ 0.00	\$ 21,784.00
d. Equipment	\$ 650.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 650.00
e. Supplies	\$ 4,725.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 4,725.00
f. Contract	\$ 8,200.00	\$ 52,884.89	\$ 105,562.00	\$ 146,000.00	\$ 1,116,712.89
g. Construction	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
h. Other Direct Costs	\$ 25,042.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 25,042.00
i. Total Direct Charges	\$ 59,980.00	\$ 84,000.00	\$ 105,562.00	\$ 146,000.00	\$ 1,199,608.00
j. Indirect Costs	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
k. Totals	\$ 59,980.00	\$ 84,000.00	\$ 105,562.00	\$ 146,000.00	\$ 1,199,608.00
7. Program Income	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

**BUDGET INFORMATION - Non-Construction Programs**

1. Program/Project Identification No. EE0007934		2. Program/Project Title Weatherization Assistance Program	
3. Name and Address State of Nevada 1830 College Parkway, Suite 200 Carson City, NV 897060000		4. Program/Project Start Date 07/01/2017	5. Completion Date 06/30/2020

SECTION A - BUDGET SUMMARY						
Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.						
2.						
3.						
4.						
5. TOTAL		\$ 0.00	\$ 0.00	\$ 1,199,608.00	\$ 0.00	\$ 1,199,608.00

SECTION B - BUDGET CATEGORIES					
6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) PROGRAM OPERATIONS	(2) HEALTH AND SAFETY	(3) LIABILITY INSURANCE	(4)	
a. Personnel	\$ 0.00	\$ 0.00	\$ 0.00		\$ 21,874.00
b. Fringe Benefits	\$ 0.00	\$ 0.00	\$ 0.00		\$ 8,820.11
c. Travel	\$ 0.00	\$ 0.00	\$ 0.00		\$ 21,784.00
d. Equipment	\$ 0.00	\$ 0.00	\$ 0.00		\$ 650.00
e. Supplies	\$ 0.00	\$ 0.00	\$ 0.00		\$ 4,725.00
f. Contract	\$ 663,510.00	\$ 123,000.00	\$ 17,556.00		\$ 1,116,712.89
g. Construction	\$ 0.00	\$ 0.00	\$ 0.00		\$ 0.00
h. Other Direct Costs	\$ 0.00	\$ 0.00	\$ 0.00		\$ 25,042.00
i. Total Direct Charges	\$ 663,510.00	\$ 123,000.00	\$ 17,556.00		\$ 1,199,608.00
j. Indirect Costs	\$ 0.00	\$ 0.00	\$ 0.00		\$ 0.00
k. Totals	\$ 663,510.00	\$ 123,000.00	\$ 17,556.00		\$ 1,199,608.00
7. Program Income	\$ 0.00	\$ 0.00	\$ 0.00		\$ 0.00

**U.S. Department of Energy**  
**BUDGET INFORMATION REMARKS**

**(Grant Number: EE0007934)**

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**Remarks**

**Possible Future Adjustments of Funding**

Allocations of funding to agencies or application budget items may be modified on the basis of public comments received during the Public Hearing if deemed appropriate by the NHD Administrator. Agencies and service areas selected for funding were based on an independent application scoring process which considered agency's experience and performance of weatherization or housing renovation activities, experience in assisting low-income persons in the area to be served, and the capacity to undertake a timely and effective weatherization program. Preference was given to agencies which are currently administering an effective program in their existing service areas. The NHD Administrator, or his designee, has final say on all funding decisions.

In accordance with NHD's contracts, which are anticipated to be executed by July 1, 2019, Sub-grantees may have funding allocations reduced or taken away for poor performance during the program year and awarded to another agency if it is determined to be in the best interest of the State of Nevada Weatherization Assistance Program. Since program year 2019 is the last of a three-year grant budget period, which does **not** allow funds to be carried forward into the next funding cycle, it is a priority of NHD to expend the funds on eligible projects anywhere within the State rather than to lose these funds.

**Budget for Financial Audits**

There is no cost category for financial audits because other funds are used to pay this cost for both the Grantee and Sub-grantees. Typically, the cost for financial audits occur after the close of the program year and do not work well when charged to the actual grant that is being evaluated.

## U.S. DEPARTMENT OF ENERGY



## BUDGET JUSTIFICATION FOR FORMULA GRANTS

Applicant: State of Nevada  
Award number: EE0007934

Budget period: 07/01/2017 - 06/30/2020

1. **PERSONNEL** - Prime Applicant only (all other participant costs are listed in 6 below and form SF-242A, Section B. Line 6.f. Contracts and Sub-Grants).

Positions to be supported under the proposed award and brief description of the duties of professionals:

<u>Position</u>	<u>Description of Duties of Professionals</u>
Program Supervisor	This position is responsible for the overall management of the state's program including; developing program policy and procedures, developing budgets, awarding Sub-grantee funds, negotiating independent contracts, ensures compliance with state/federal rules and regulations, supervising other NHD Weatherization staff, review Sub-grantee performance and financial oversight. All Salaries and fringe for DOE are based on 12% of the total budget. The other 88% for staff and fringe are paid by the FEAC Program (76%), the HEROS Program (7%) and the LIHEAP Program (5%).
Compliance Auditor/Training and Technical Assistance Coordinator	This position is responsible for providing field and classroom training to all of the program's sub-grantees and their contractors. The position is also responsible for updating the training manuals. Also performs on-site field monitoring and works with sub-grantee staff on methods to improve quality and effectiveness in the field. All Salaries and fringe for DOE are based on 12% of the total budget. The other 88% for staff and fringe are paid by the FEAC Program (76%), the HEROS Program (7%) and the LIHEAP Program (5%).
Grants and Projects Analyst II	GPA II is responsible for database entry, sub-grantee file and office review and day to day correspondence with clients and sub-grantees. Also responsible for Sub-grantee Administrative Manual and administrative form updates. All Salaries and fringe for DOE are based on 12% of the total budget. The other 88% for staff and fringe are paid by the FEAC Program (76%), the HEROS Program (7%) and the LIHEAP Program (5%).

Direct Personnel Compensation:

<u>Position</u>	<u>Salary/Rate</u>	<u>Time</u>	<u>Direct Pay</u>
Program Supervisor	\$69,068.11	11.9987 % FT	\$8,287.28
Compliance Auditor/Training and Technical Assistance Coordinator	\$55,414.55	11.9984 % FT	\$6,648.86
Grants and Projects Analyst II	\$57,822.98	11.9985 % FT	\$6,937.89
		Direct Pay Total	\$21,874.03

2. **FRINGE BENEFITS**

- a. Are the fringe cost rates approved by a Federal Agency? If so, identify the agency and date of latest rate agreement or audit below, and attach a copy of the rate agreement to the application.
- b. If a. above does not apply, please use this box (or an attachment) to further explain how your total fringe benefits costs were calculated. Your calculations should identify all rates used, along with the base they were applied to (and how the base was derived), and a total for each (along with grand total). If there is an established computation methodology approved for state-wide use, please provide a copy. Also, please fill out the table below with the Fringe Benefits Calculations.



The cost basis is determined by the state Administrative Personnel Department and may differ for each State employee. The fringe benefit package for the State of Nevada is based on position, grade, employer/employee or employer paid specific rates benefits package. Benefits packages can range from approximately 37 - 42%. This is done through various retirement choices, health insurance plans and when and employee has started working for the State.

Benefit	Percentage
Group Insurance	0.18139
Medicare	0.01516
Payroll Assessment	0.00162
Personnel Assessment	0.00493
Retirement	0.15588
Retirement Group Insurance	0.02526
Unemployment Insurance	0.00120
Worker's Comp	0.01775

For more detail, please see attached Fringe Rate Breakdown Analysis.

All Salaries and fringe for DOE are based on 12% of the total budget as DOE is approximately 12% of NHD's funds. The other 88% for staff and fringe are paid by the FEAC Program (76%), the HEROS Program (7%), and the LIHEA Program (5%).

#### Fringe Benefits Calculations

Position	Direct Pay	Rate	Benefits
Program Supervisor	\$8,287.28	40.3219 %	\$3,341.59
Compliance Auditor/Training and Technical Assistance Coordinator	\$6,648.86	40.3226 %	\$2,680.99
Grants and Projects Analyst II	\$6,937.89	40.3225 %	\$2,797.53
		Fringe Benefits Total	\$8,820.11

### 3. TRAVEL

- a. Please provide the purpose of travel, such as professional conference(s), DOE sponsored meeting(s), project management meeting, etc. If there is any foreign travel, please identify.

Purpose of Trip	Number of Trips	Cost Per Trip	Total
Annual Sub-grantee Meeting in Ely. Gathering of all Nevada Weatherization Grantee and Sub-grantee staff to discuss accomplishments from the prior year and policy changes for the upcoming years. Three persons from NHD are expected to attend at \$500 per person for a total of \$1,500. Plus pool car \$300.	1	\$1,800.00	\$1,800.00
QCI Training and Testing for Energy Auditor, 5 days, 1 person, NHD - Staff	1	\$1,500.00	\$1,500.00
Various Day trips for monitoring and meeting locally in Las Vegas, Reno and Carson City. This includes visits for technical support, office review, local monitoring for both field staff, financial and office/administrative assistance. Approximately 1 trip per month at \$60	8	\$60.00	\$480.00
Radon Training in State, 2 person estimate \$250 per person for a total of \$500.	1	\$500.00	\$500.00
BPI Energy Auditor Training and Testing, 5 days, 1 person, NHD - Staff	1	\$1,500.00	\$1,500.00
Home Performance Coalition Annual Conference, 5 days, 1 person	1	\$3,492.00	\$3,492.00
Onsite field inspections, Reno and Carson City - 1 Person, 4 days travel by air from LV to Reno	3	\$1,400.00	\$4,200.00
Sub-grantee Office and File Review (monitoring) travel to Las Vegas, Airline, hotel and food cost (two separate trips)	2	\$1,756.00	\$3,512.00

Onsite Inspections Las Vegas to Ely, Elko and surrounding rural areas - Driving 1 person, 8 days at various times	1	\$2,000.00	\$2,000.00
BPI Building Professional Analysis Training and Testing, 5 days, 1 person, NHD - Staff	1	\$1,500.00	\$1,500.00
Sub-grantee Office and Financial Review (monitoring) Ely - 1 person 4 Days. Hotel and travel by car to eastern Nevada	1	\$1,300.00	\$1,300.00
		Travel Total	\$21,784.00

- b. Please provide the basis for estimating the costs, such as past trips, current quotations, Federal Travel Regulations, etc. All listed travel must be necessary for the performance of the award objectives.

Costs are based on approved GSA and state travel reimbursement rates, motorpool, airline, parking, ground transportation, meals and registration and tutorials. All are based GSA rates and prior costs for travel, these are only estimates. Trips may need to be adjusted or reimbursed by other discretionary or utility funding sources if budgets are exceeded. Certain costs such as PAC Meetings, Public Hearings and any other DOE required meetings can only be charged to DOE. At this time it is unknown if there will be any other DOE required meetings for the Program Supervisor or if there will be a DOE Conference, therefore funds have not been budgeted for these activities.

**4. EQUIPMENT** - Equipment is generally defined as an item with an acquisition cost greater than \$5,000 and a useful life expectancy of more than one year.

- a. List all proposed equipment below and briefly justify its need as it applies to the objectives of the award.

<u>Equipment</u>	<u>Unit Cost</u>	<u>Number</u>	<u>Total Cost</u>	<u>Justification of Need</u>
Laptop Computer with Docking Station and Software	\$650.00	1	\$650.00	Replacement of Compliance Auditor/Inspector's computer due to age and software no longer supported by vendor. Per the State's replacement schedule, it is due to be replace in January of 2020.
		Equipment Total	\$650.00	

- b. Please provide a basis of cost such as vendor quotes, catalog prices, prior invoices, etc. and justify need. If the Equipment is being proposed as Cost Share and was previously acquired, please provide the source and value of its contribution to the project and logical support for the estimated value shown. If it is new equipment which will retain a useful life upon completion of the project, provide logical support for the estimated value shown. Also, please indicate whether the Equipment is being used for other projects or is 100% dedicated to the DOE project.

Replacement cost is based on vendor's quote of approximately \$1,300. Fifty percent (50%) of the cost will be charged to the State's FEAC Weatherization Assistance Program.

**5. SUPPLIES** - Supplies are generally defined as an item with an acquisition cost of \$5,000 or less and a useful life expectancy of less than one year. Supplies are generally consumed during the project performance.

- a. List all proposed supplies below, the estimated cost, and briefly justify the need for the supplies as they apply to the objectives of the award. Note that all direct costs, including Supply items, may not be duplicative of supply costs included in the indirect pool that is the basis of the indirect rate applied for this project.

<u>General Category</u>	<u>Cost</u>	<u>Justification of Need</u>
Subgrantee Awards	\$225.00	This cost is for producing 5 awards (plaques), each estimate to cost approximately \$45, that are given out at the Grantee's Annual Sub-grantee Meeting for high performance of duties of Sub-grantee Staff and/or Agencies.
Miscellaneous Supplies and Services	\$4,500.00	(See below)
Materials and Supplies Total	\$4,725.00	

- b. Please provide a basis of cost for each item listed above and justify need. Examples include vendor quotes, prior purchases of similar or like items, published price list, etc.

Each year supplies such as toner cartridges, office supplies, folders, paper, envelopes, binders, etc. need to be purchased that are typically expended over the course of the year. These items are purchased as needed but it is estimated that the monthly cost to the DOE funded program is approximately \$375. The amount of Sub-grantee Awards are estimated from a prior purchase.

**6. CONTRACTS AND SUBGRANTS** - Provide the following information for New proposed subrecipients and subcontractors. For ongoing subcontractors and subrecipients, this information does not have to be restated here, if it is provided elsewhere in the application; under Name of Proposed Sub, indicate purpose of work and where additional information can be found (i.e weatherization subgrants, Annual File section IV.1).

<u>Name of Proposed Sub</u>	<u>Total Cost</u>	<u>Basis of Cost*</u>
Sub-grantees	\$1,055,628.00	HELP of Southern Nevada (HELP) \$346,701, Community Services Agency (CSA), \$163,623, Rural Nevada Development Corporation (RNDC) \$244,450, and Nevada Rural Housing Authority (NHRA) \$300,854. Overall State funding cost basis was based on population in each service area with information provided by State of Nevada Demographer's website based on 2010 census data and adjusted to recent estimates. Due to the costs of delivery in the rural areas of Nevada and the large driving distances and the costs to provide service in these areas an additional 2% is being provided to the two rural service providers. There are adjustments to provide DOE funding in the rural areas because of DOE funding being an eligible funding source in areas where FEAC funding is not available because it is harder to spend State funds in the rural areas due to the need to pay into the Universal Energy Charge. Also, it is necessary for HELP of Southern Nevada to receive less than \$350,000 to maximum administrative funding to this agency.
IT Contracts, Database Development and Maintenance	\$20,000.00	In calendar year 2015, the NHD put out a competitive bid through the RFP process to receive proposals for a new database. Six vendors applied and the winning bid was the low bidder and is the State of North Dakota's Energy and Environmental Resource Center (EERC). The above cost will be for IT contract with the EERC who is the approved vendor to provide NHD with a new database and energy audit tool (WxPro). Total cost for the annual service is \$30,000 approximate, \$20,000 is expected to be charged to DOE. The contract was executed on January 5, 2016 and presently expires on December 31, 2020. The expected lifespan of the new WxPro System is 10 to 15 years.
BPI-QCI Consultant Inspections	\$15,000.00	Cost is for Home Energy Connection (HEC) to provide necessary BPI-QCI services. In addition, HEC is anticipate to assist with the preparation of technical documents and review of the existing field guides.

Equipment Maintenance Contracts	\$5,200.00	Equipment maintenance contracts for printers and copiers. It includes a maintenance contract on a color copiers/printers weatherization staff utilizes plus a few other contracts the weatherization program maintains. This cost is under grant administration.
Financial Management Training	\$1,500.00	Fiscal training during or separate from a weatherization conference addressing 2 CFR 200 for either the Program Supervisor or Grants and Projects Analyst II. Cost is estimated based on the current cost of attending conferences.
DOE Technical and Health and Safety Trainings	\$13,384.89	The cost above is for trainings associated with DOE inspection requirements such as QCI, BPI, LRRP, Lead and Mold, Infrared, and Radon. This cost is an estimate for contracting with certified trainers and conducting in-house courses for our sub-grantees such as infrared, WxPro, Lead and Mold, and Radon trainings. It also includes cost for courses necessary for the state's inspector such QCI, BPI and LRRP certifications.
Legal and Other	\$3,000.00	This is the cost of legal counsel to participate in state plan and PAC meetings, review contracts, request for proposals, request for quotations, awards. It is based on historical and annual costs. This is a cost under grantee administration.
Vehicle Maintenance for State Inspector's Truck	\$3,000.00	This cost is based on current year anticipated expenses for regular vehicle maintenance and necessary repair work on the existing 2005 weatherization truck use for transportation in and around the Las Vegas area to conduct inspection and onsite training activities.
Contracts and Subgrants Total	\$1,116,712.89	

\*For example, Competitive, Historical, Quote, Catalog

**7. OTHER DIRECT COSTS** - Other direct costs are direct cost items required for the project which do not fit clearly into other categories. These direct costs may not be duplicative of costs included in the indirect pool that is the basis of the indirect rate applied for this project. Examples are: conference fees, subscription costs, printing costs, etc.

a. Please provide a General Description, Cost and Justification of Need.

General Description	Cost	Justification of Need
Direct Program and Office Cost	\$25,042.00	Costs are for other direct costs not budgeted elsewhere and necessary for the operations of a state weatherization assistance program office. These costs include appropriate shares of IT support, phone and voice mail, utilities, insurance, rent, conference call line, internal assessments, technical books and publications. All costs proposed are being used in support of the WAP program. All costs included in Other Direct Costs are properly segregated from indirect costs to ensure there are not duplicate charges.
Other Direct Costs Total	\$25,042.00	

b. Please provide a basis of cost for each item listed above. Examples include vendor quotes, prior purchases of similar or like items, published price list, etc.

These costs are based on prior year actual expenditures as included in our administrative budget for the DOE Weatherization Assistance Program. Also included are printing charges for outreach for quality control postcards.

Costs are based on prior purchases of similar or like items.

All costs included in Other Direct Costs are properly segregated from indirect costs to ensure there are not duplicate charges.

All costs proposed are being used in support of the WAP program.

**8. INDIRECT COSTS**

- a. Are the indirect cost rates approved by a Federal agency? If so, identify the agency and date of latest rate agreement or audit and provide a copy of the rate agreement.
  
- b. If the above does not apply, indicate the basis for computation of rates, including the types of benefits to be provided, the rate(s) used, and the cost base for each rate. You may provide the information below or provide the calculations separately.

Indirect costs are not being requested on this application for federal assistance.

The name and phone number of the individual responsible for negotiating the State's indirect cost rates.

Name:

Phone Number:

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**WEATHERIZATION ANNUAL FILE WORKSHEET**

**(Grant Number: EE0007934, State: NV, Program Year: 2019)**

**IV.1 Subgrantees**

<b>Subgrantee (City)</b>	<b>Planned Funds/Units</b>
Community Services Agency (Reno)	\$163,623.00 14
HELP OF SOUTHERN NEVADA (LAS VEGAS )	\$346,701.00 28
Nevada Rural Housing Authority (Carson City)	\$300,854.00 25
Rural Nevada Development Corp. (Ely)	\$244,450.00 21
<b>Total:</b>	<b>\$1,055,628.00</b> <b>88</b>

**IV.2 WAP Production Schedule**

<b>Weatherization Plans</b>	<b>Units</b>
Total Units (excluding reweatherized)	88
Reweatherized Units	0

Note: Planned units by quarter or category are no longer required, no information required for persons.

<b>Average Unit Costs, Units subject to DOE Project Rules</b>		
<b>VEHICLE &amp; EQUIPMENT AVERAGE COST PER DWELLING UNIT (DOE RULES)</b>		
A	Total Vehicles & Equipment (\$5,000 or more) Budget	\$0.00
B	Total Units Weatherized	88
C	Total Units Reweatherized	00
D	Total Dwelling Units to be Weatherized and Reweatherized (B + C)	88
E	Average Vehicles & Equipment Acquisition Cost per Unit (A divided by D)	\$0.00
<b>AVERAGE COST PER DWELLING UNIT (DOE RULES)</b>		
F	Total Funds for Program Operations	\$663,510.00
G	Total Dwelling Units to be Weatherized and Reweatherized (from line D)	88
H	Average Program Operations Costs per Unit (F divided by G)	\$7,539.89
I	Average Vehicles & Equipment Acquisition Cost per Unit (from line E)	\$0.00
J	Total Average Cost per Dwelling (H plus I)	\$7,539.89

**IV.3 Energy Savings**

Method used to calculate savings: <input checked="" type="checkbox"/> WAP algorithm <input type="checkbox"/> Other (describe below)			
	Units	Savings Calculator (MBtus)	Energy Savings
This Year Estimate	88	29.3	2578
Prior Year Estimate	80	29.3	2344
Prior Year Actual	10	29.3	293
<b>Method used to calculate savings description:</b>			

**IV.4 DOE-Funded Leveraging Activities**

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**WEATHERIZATION ANNUAL FILE WORKSHEET**

**(Grant Number: EE0007934, State: NV, Program Year: 2019)**

DOE funds have not been specifically budgeted for the leveraging of non-federal sources of funds.

**IV.5 Policy Advisory Council Members**

Check if an existing state council or commission serves in this category and add name below

Betsy Ransdell, Energy Assistance Program Specialist	Type of organization: Unit of State Government Contact Name: Betsy Ransdell Phone: 7756840552 Email: <a href="mailto:bransdell@dwss.nv.gov">bransdell@dwss.nv.gov</a>
Jennifer Rose	Type of organization: Utility Contact Name: Jennifer Rose Phone: 7758344235 Email: <a href="mailto:jrose@nvenergy.com">jrose@nvenergy.com</a>
Laura Wickham	Type of organization: Unit of State Government Contact Name: Laura Wickham Phone: 77568718507308 Email: <a href="mailto:lwickham@energy.nv.gov">lwickham@energy.nv.gov</a>
Leslie Colbrese	Type of organization: Local agency Contact Name: Leslie Colbrese Phone: 7757866023 Email: <a href="mailto:lcolbrese@csareno.org">lcolbrese@csareno.org</a>
Robert Cooper	Type of organization: Other Contact Name: Robert Cooper Phone: 7758490703 Email: <a href="mailto:fmoherty@sbcglobal.net">fmoherty@sbcglobal.net</a>
Tamera Saida	Type of organization: Non-profit (not a financial institution) Contact Name: Tamera Saida Phone: 7023694357 Email: <a href="mailto:tsada@HELPSONV.ORG">tsada@HELPSONV.ORG</a>
Tim Whitright	Type of organization: Unit of State Government Contact Name: Tim Whitright Phone: 7024867259 Email: <a href="mailto:twhitright@housing.nv.gov">twhitright@housing.nv.gov</a>

**IV.6 State Plan Hearings (Note: attach notes and transcripts to the SF-424)**

Date Held	Newspapers that publicized the hearings and the dates the notice ran
04/24/2019	A copy of the public posting is attached to the SF-424. The Public Hearing Posting Notice complies with NRS 232.2175 and NRS 241.015 and is detailed below. The process for posting public notices within the State of Nevada and according to Business and Industry directives is as follows: The Nevada Housing Division does not publish advertisements in any publications and this has been the process for several years and has been very effective. By posting to the Nevada's Public Notice Website and also the Nevada Housing Division Website Hearing adequate public notice is given to interested parties and is common practice of public notices throughout the state agencies of Nevada. The Public Hearing was publicized by posting a notice on two websites and a total of five physical locations and by emailing to all current sub-grantees and other interested parties. The Public Hearing notice was posted on Monday, April 8, 2019 and was noticed in the following places; Nevada Housing Division Website, Nevada's Public Notice Website, Nevada Housing Division's Offices in Carson City and Las Vegas, Nevada State Library and Archives in Carson City, Nevada Attorney General's Office in Carson City, and Great Basin College in Elko. The Public Hearing Notes and Public Hearing Recording are attached to the SF424 document.

**IV.7 Miscellaneous**

**Recipient Business Officer** - Steve Aichroth, Administrator, Nevada Housing Division, [saichroth@housing.nv.gov](mailto:saichroth@housing.nv.gov), phone: (775) 687-2246, 1830 College Parkway, Suite 100, Carson City, NV 89706

**Recipient Principal Investigator** - Patrick Conway, Weatherization Program Supervisor, Grants & Projects Analyst III, Nevada Housing Division, 1830 College Parkway, Suite 100, Carson City, NV 89706, [patrick.conway@housing.nv.gov](mailto:patrick.conway@housing.nv.gov), phone: (775) 687-2242.

**ACSI Action Plan Update** - There were only two respondents to the 2017 survey in Nevada. Therefore, a formal action plan was never developed, but instead, a process to conduct quarterly conference calls with Sub-grantee managers and other program staff for better two-way communication between WAP State staff

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**WEATHERIZATION ANNUAL FILE WORKSHEET**

**(Grant Number: EE0007934, State: NV, Program Year: 2019)**

and Sub-grantee staff. Several of the issues raised in the survey focused on training and are in the process of being addressed. Also, the issue of needing more funds for health and safety measures. This year the state has budgeted 18.6% of its program operations budget for health and safety, which is the highest amount know to date.

The Policy Advisory Council meets several times a year. Once in the Spring to review the DOE State Plan and to attend to any other pending business. At other meetings, it reviews year-to-date production and end of year production from the prior year. This is for the purpose of seeing if sub-grantees met their goals for the previous program year and to see if they are on track for the current program year.

Attached to the SF424 is a copy of the minutes prepared from the most recent PAC Meeting on April 23, 2019. These minutes will be presented for adoption at the next PAC meeting, which is anticipate in September - October of 2019.

PAC members fill the following categories:

Leslie Colbrese - Sub-grantee Representative

Tim Whitright - NHD Representative

Jennifer Rose - Utility Company Representative

Laura Wickham - At Large, Consumer Group (Energy) Representative

Betsy Ransdell - DHHS Representative

Tamera Saida - At Large, Consumer Group (Low Income) Representative

Robert Cooper - At Large Representative.

For information regarding the allocation process and selection of agencies, see Budget Information Remarks.



PAGE, 4/4/2019 5:45:19 pm

DOE F 540.5

U.S. Department of Energy

OMB Control No: 1910-5127

(08/05)

**WEATHERIZATION ASSISTANCE PROGRAM**

Expiration Date: 02/29/2020

**SUBGRANTEE INFORMATION**

State: NV Grant Number: EE0007934 Program Year: 2019

Name:	<b>Community Services Agency</b>	Contact:	Leslie Colbrese
		DUNS:	010975894
Address:	PO Box 10167 Reno, NV 89510-0000	Phone:	(775) 786-6023
		Fax:	(775) 786-5743
		Email:	lesliecolbrese@csareno.org
Counties served:	WASHOE County	Tentative allocation:	\$ 163,623.00
		Planned units:	14
		Type of organization:	Non-profit organization
		Source of labor:	Contractors
		Congressional districts served:	<u>CD</u> NV-02
Name:	<b>HELP OF SOUTHERN NEVADA</b>	Contact:	Fuilala Riley
		DUNS:	165099326
Address:	1640 E FLAMINGO ROAD, Suite 100 LAS VEGAS, NV 89119-5280	Phone:	(702) 369-43571239
		Fax:	(702) 369-4089
		Email:	friley@helpsonv.org
Counties served:	CLARK County	Tentative allocation:	\$ 346,701.00
		Planned units:	28
		Type of organization:	Non-profit organization
		Source of labor:	Contractors
		Congressional districts served:	<u>CD</u> NV-01
Name:	<b>Nevada Rural Housing Authority</b>	Contact:	William Brewer
		DUNS:	787020945
Address:	3695 Desatoya Drive Carson City, NV 89701-0000	Phone:	(775) 887-1795
		Fax:	(775) 283-0110
		Email:	wbrewer@nvrural.org
Counties served:	CARSON CITY DOUGLAS County CHURCHILL County STOREY County CLARK County LYON County	Tentative allocation:	\$ 300,854.00
		Planned units:	25
		Type of organization:	Non-profit organization
		Source of labor:	Contractors
		Congressional districts served:	<u>CD</u> NV-02
Name:	<b>Rural Nevada Development Corp.</b>	Contact:	Mary Kerner
		DUNS:	799925276
Address:	1320 Aultman Street Ely, NV 89301-0000	Phone:	(775) 289-8519
		Fax:	(775) 289-8214
		Email:	mary@rmdcnv.org

PAGE, 4/4/2019 5:45:19 pm

DOE F 540.5

U.S. Department of Energy

OMB Control No: 1910-5127

(08/05)

**WEATHERIZATION ASSISTANCE PROGRAM  
SUBGRANTEE INFORMATION**

Expiration Date: 02/29/2020

State: NV Grant Number: EE0007934 Program Year: 2019

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Counties served: NYE County PERSHING County ESMERALDA County EUREKA County MINERAL County LANDER County LINCOLN County HUMBOLDT County WHITE PINE County ELKO County	Tentative allocation: \$ 244,450.00 Planned units: 21 Type of organization: Non-profit organization	Congressional districts served:	<u>CD</u> NV-02
Source of labor: Contractors			

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**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0007934, State: NV, Program Year: 2019)**

This worksheet should be completed as specified in Section III of the Weatherization Assistance Program Application Package.

## V.1 Eligibility

### V.1.1 Approach to Determining Client Eligibility

Provide a description of the definition of income used to determine eligibility

The State of Nevada (State) Weatherization Assistance Program (WAP) defines an income eligible household for Department of Energy (DOE) funding as a household whose total gross income is at or below 200% of the National Poverty Income Guidelines established by the Office of Management and Budget. For the purposes of the DOE funding this is the definition of low income.

The Nevada Housing Division (NHD) ensures compliance through the use of State's Weatherization Application and Eligibility Determination Worksheet. Each application identifies the applicant's household income and family size necessary for making a determination of income eligibility. Per our Sub-grantee Administrative Manual, an applicant is required to submit copies of appropriate documents allowing the Sub-grantee the ability to calculate an annual income of all applicable household members.

Describe what household eligibility basis will be used in the Program

The State's DOE funded program eligibility is based on income at or below 200% of the poverty level determined in accordance with criteria established by OMB (above). NHD Sub-grantee Administrative Manual outlines allowable client eligibility documentation which might include pay stubs, Social Security benefits letter, and other applicable documentation of income. This manual is reviewed regularly and updated as needed. During the file monitoring, files are reviewed for all required documents. A copy of the Sub-grantee Administrative Manual is attached to this application.

National Poverty Income Guidelines are distributed annually and the Eligibility Determination Worksheet is also updated at that time. Sub-grantees utilize a Eligibility Determination Worksheet which gives preference to elderly, disabled and families with children under six years of age. Also, households with a high energy burden are given preference. Where an applicant receives income for a part of the applicable tax year, their partial income may be annualized to determine eligibility. If there is a waiting list and a client is not served promptly, client eligibility documentation is reverified and updated every 12 months. Health and Human Services guidance is used for providing services to Qualified Aliens. Nevada utilizes the National Poverty Income Guidelines and Definition of Income provided by DOE annually which includes annual revisions that are then distributed to the Sub-grantees to use when qualifying clients for the DOE funded portion of the WAP.

Describe the process for ensuring qualified aliens are eligible for weatherization benefits

The State's WAP utilizes guidance provided by Health and Human Services under the Low-Income Home Energy Assistance Program (LIHEAP). The guidance is as follows:

WAP services are provided only to U.S. citizens or qualified aliens.

"Qualified aliens" are defined in section 431 of Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA), commonly known as the Welfare Reform Law. The Act covers the larger groups of legal immigrants (legal permanent residents, refugees, asylees, individuals paroled into the U.S. for a period of at least 1 year, individuals whose deportation has been withheld, individuals granted conditional entry, and certain individuals who are victims of domestic abuse). Qualified aliens are eligible to receive assistance and services under the LIHEAP program so long as they meet other LIHEAP program requirements.

As states set their eligibility requirements for LIHEAP-funded benefits, they are to ensure that they are in full compliance with Federal provisions related to verification of qualified alien status in providing services. State procedures for verifying U.S. citizenship or immigration status of applicants should be in

**U.S. Department of Energy  
WEATHERIZATION ASSISTANCE PROGRAM (WAP)  
STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0007934, State: NV, Program Year: 2019)**

accordance with the United States Department of Justice's (DOJ) Interim Guidance on Verification of Citizenship, Qualified Alien Status and Eligibility under Title IV of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, published November 17, 1997 (62 FR 61344). In addition, states should refer to LIHEAP-IM-98-25, dated August 6, 1998, which discusses the DOJ Interim Guidance and its applicability under the LIHEAP program.

### V.1.2 Approach to Determining Building Eligibility

Procedures to determine that units weatherized have eligibility documentation

Single family, manufactured housing (mobile homes), and multifamily dwellings are all eligible for weatherization. Proof of ownership is required to be submitted with the application and may be verified through county assessor's records. Applications can be processed from eligible clients for rental properties with owner's authorization. The rental household must meet the income qualification as describe above.

Describe Reweathering compliance

Dwellings weatherized from September 30, 1994, and earlier, per 10 CFR 6865(c)(2), are eligible for re-weatherization. NHD has established a central database with all records from July 1998 (when NHD took over the program from the Welfare Division) through present day. All clients who request services are checked in the central database to see if they were previously weatherized. If they were weatherized with DOE funds on or after October 1, 1994 they are not eligible to be weatherized with DOE funds. When possible these clients can be reweatherized with other non-DOE funds. Preference is given to dwellings that have never received WAP services.

Describe what structures are eligible for weatherization

Single Family, manufactured housing and multi-family dwellings are all eligible for weatherization. Non-traditional dwelling units such as shelters and apartment over business, etc. may be weatherized only if program regulations are met. These types of units must be discussed with the NHD staff and approved by the DOE Project Officer prior to weatherization.

NHD does allow the weatherize of travel trailers or other non-stationary campers that are registered with the Department of Motor Vehicles or are not considered permanent stationary housing. The use of a post office box for a non-stationary camper or trailer does not make it an eligible structure for weatherization.

A copy of the State Historic Preservation Programmatic Agreement signed on by the Nevada Housing Division's Administrator on 10/29/10 and is attached to the SF-424. A Program Comment was issued by the ACHP on March 11, 2013 pursuant to 36 CFR 800.14(e), published in the Federal Register on March 14, 2013, and extends the duration of the existing 44 Programmatic Agreements – and any future agreements that may be executed under the prototype Programmatic Agreement – until December 31, 2020.

Describe how Rental Units/Multifamily Buildings will be addressed

Building eligibility will be determined by following the final rule published on December 8, 2000, where DOE provided guidance on what types of large multifamily building may be subject to the 50% threshold (65 Fed. Reg. 72210, December 8, 2000). Certain buildings containing rental units may comply with the income eligibility requirements when 50 percent of those dwellings units are eligible dwelling units rather than the established 66 percent identified in the regulations (10 CFR §440.22(b)(2)). The buildings that are subject to the 50 percent threshold are duplexes, four-unit buildings and certain eligible types of large multifamily buildings. For all other multi-family units not less than 66% of the dwelling units must be eligible in order to weatherize the entire building. Benefits in rental units will accrue primarily to the low-income tenants residing in the units.

Rental units may be weatherized, however, a 50% landlord contribution is required for replacement of all capital improvement items such as HVAC equipment, windows and water heaters, unless it is a repair item of less than \$2,000. No undue or excessive enhancements are allowed on rental properties. A landlord contribution is not required on single family and mobile homes rentals. 10 CFR 440.22 (b)(2) may be used on 2-4 units and 5+ units.

Renters' rights are protected from eviction by having the landlord sign the Landlord Weatherization Service Agreement that states they will not raise the rent due to WAP repairs that may have increased the value of the property. Also, landlords may not evict for other than normal circumstances but not due to the weatherization of the property garnering more rents on the open market. Rental units are protected in accordance with 440.22(b)(3) and renters rights are

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0007934, State: NV, Program Year: 2019)**

protected as specified in 440.22(b) 3 and (c)-(e) The Weatherization Service Agreement must be signed by the landlord or management company prior to work beginning.

NHD utilizes a Weatherization Service Agreement which landlords or property managers are required to sign prior to work commencing, stating that rents cannot be raised due to work being done from weatherization for a minimum 1 year along with other tenant protections.

**Describe the deferral Process**

Deferrals are required for a variety of reasons such as condition of the structure: building integrity or the ability to effectively weatherize the structure. Also if the dwelling is slated for redevelopment. If there are Health and Safety conditions that might exist but are able to be remedied by the homeowner, 30 days are given for the homeowner to correct. If 30 days pass and the problem has not been corrected the file is closed and the client can requalify and reapply when they have made the corrections to the property. When there are issues that cannot be corrected or there are unsafe conditions for the contractors staff (illegal substance abuse) the dwelling can be permanently deferred. If a property is beyond the scope of weatherization it may also be permanently deferred. If it was necessary to use a licensed contractor to make a determination on the need for a deferral, a fee of up to \$500 may be charged by the contractor.

When possible, the client is notified of other programs and agencies that might be able to address rehabilitation of the property. When properties are deferred the client is given a copy of the deferral form notifying them why the property is either temporarily deferred or permanently deferred. The client is asked to sign and acknowledge receipt of the deferral form. A copy of the State's deferral form can be found in the Health & Safety Policy which is attached to the SF 424.

**V.1.3 Definition of Children**

Definition of children (below age): **6**

**V.1.4 Approach to Tribal Organizations**

Recommend tribal organization(s) be treated as local applicant?

If YES, Recommendation. If NO, Statement that assistance to low-income tribe members and other low-income persons is equal.

Low income tribal members and other low income persons are treated equally. NHD does not recommend nor are there sufficient funds to provide DOE weatherization funding directly to members of Native American tribes. Low income members of Native American tribal organizations will receive benefits equivalent to assistance provided to other eligible persons living within the program's service areas. Approximately 4% of Nevada's population is comprised of individuals of Native American descent.

**V.2 Selection of Areas to Be Served**

The service areas proposed for the program year are based on the following: the estimated number of eligible households located in each county; the availability of funds to provide assistance to the rural counties, and the availability of qualified service providers. The Weatherization Program's service area include service to most all areas and counties within the state and revenue streams have been adjusted to assure sufficient funds are available to provide assistance in the rural areas of the state. There are five service areas:

Clark County contains 68.5% of the state's eligible population and has been divided into two service areas:

- (1) the City of Las Vegas, the City of Henderson and southern rural Clark County 48%; and
- (2) the City of North Las Vegas and northern rural Clark County 20.5%.
- (3) Washoe County comprises 15.5% of the eligible population and is a separate service area.
- (4) The western rural service area which is comprised of Carson, Churchill, Douglas, Lyon and Storey counties and contains approximately 8% of the eligible population.
- (5) The eastern rural service area which is comprised of Esmeralda, Elko, Eureka, Humboldt, Lander, Lincoln, Mineral, Nye, White Pine and Pershing

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0007934, State: NV, Program Year: 2019)**

counties contains 8% of the states eligible households.

The total distribution of Weatherization funding is mostly based on population, except in eastern and western rural service areas. In these areas an additional 2% each was provided to assist with the higher costs of doing business in remote areas of the state.

DOE is one of five funding sources available to the State of Nevada for our Weatherization Assistance Program. The actual awards of DOE funding may not reflect the above percentages because some subgrantees are better suited to expend funds from a particular source. The State's total distribution of funds to the subgrantees in each service area above equals the percentage distribution. However, adjustments may be made to based on the performance of the Subgrantees.

### V.3 Priorities

Priority is given to the elderly, persons with disabilities, families with children under 6, and high energy burden households. Priority assistance is determined by a point evaluation matrix which awards additional points to residential energy users due to the utilization of heating oil or propane as their primary source of heating. A household that qualifies for and receives Energy Assistance payments from the Division of Welfare and Social Services is defined as a having high energy burden.

### V.4 Type of Weatherization Work to Be Done

#### V.4.1 Technical Guides and Materials

The Nevada Housing Division worked with the Southwest Building Science Training Center (SWBSTC) to update our field guides to align specifications, objectives and desired outcomes outlined in the Standard Work Specifications for Home Energy Upgrades (SWS). The new field guide, aligned with the SWS, has been approved by DOE and went into effect on May 29, 2018. There were no Variance Requests submitted as part of the field guide. It can be accessed at: <https://swbstc.org/resources/nv-field-guide>

The State of Nevada Program Assurances will be updated to include language that all Sub-grantee agreements and vendor contracts, must include language which clearly documents the SWS for work quality as outlined in WPN 15-4, Section 2, for DOE funded projects.

The program's Sub-grantees are responsible for the installation of DOE approved measures. All work done is consistent with NHD's DOE approved energy audit and materials used are consistent with 10 CFR 440 Appendix A - Standards for Weatherization Materials.

Typical Measures include:

1. Insulation: ceiling, floor, side wall and duct.
2. Duct leakage sealing (return, plenum and supply systems).
3. Shell infiltration sealing; i.e., replace broken glass, window and exterior door replacement, door weather-stripping, caulking, and evaporative cooler covers.
4. Insulation of water heater and water heater pipes.
5. Low-flow showerheads.
6. Solar screens (Southern Nevada)
7. Heating and cooling system repairs and/or replacements.
8. Compact fluorescent light bulbs.
9. Refrigerator replacement. (Standalone freezers, units with water or ice makers are not allowed.)

Through the approval process of the energy audit tool, NHD has received approval for LED bulbs and General Heat Waste items that are not included in Appendix A.

Blower door diagnostics will be performed on each single family and mobile home unit receiving weatherization assistance to ensure compliance with Indoor Air Quality Standards. A blower door duct test will be done in multifamily buildings when changing out HVAC units. In accordance with our Health and Safety Plan, a combustion appliance safety inspection will be performed on each dwelling unit containing a combustion appliance (furnaces, water heaters, ovens, cook tops and gas dryers) when shell sealing will be performed. A final QCI inspection will be performed by the program's Subgrantees on each home receiving

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0007934, State: NV, Program Year: 2019)**

weatherization assistance with DOE funding.

The State of Nevada Program Assurances will also be updated to include language requiring the Sub-grantees to pass on these standards in their agreements with contractors and vendors to ensure the work quality outline by NHD is achieved with their performance.

Field guide types approval dates

Single-Family: 5/29/2018

Manufactured Housing:

Multi-Family:

#### V.4.2 Energy Audit Procedures

Audit Procedures and Dates Most Recently Approved by DOE

Audit Procedure: Single-Family

Audit Name: WxPRO (North Dakota & Nevada)

Approval Date: 7/10/2018

Audit Procedure: Manufactured Housing

Audit Name: WxPRO (North Dakota & Nevada)

Approval Date: 7/10/2018

Audit Procedure: Multi-Family

Audit Name: Other (specify)

Nevada falls below the 20% threshold. Multifamily projects are funded with FEAC dollars, and if the situation occurred, a DOE multifamily project would be submitted to our PO for review and approval.

Approval Date:

Comments

The State of Nevada DOE funded Weatherization Assistance Program falls below the 20% threshold for multifamily units and does not require a DOE approved energy audit and procedures for multifamily buildings. Last program year no units were from a multifamily project of 5 or more units (0%). NHD has other funding sources available for weatherizing multifamily buildings and typically these other sources would be used instead of DOE funds.

Nevertheless, if NHD does receive a request from a Sub-grantee to weatherize a multifamily building, the Sub-grantee will be required to conduct a REM Design Energy Audit to ensure that the eligible occupants receive appropriate, cost-effective weatherization services. This will be done on a case-by-case basis. At the time a multifamily project is considered, NHD will submit to our DOE Project Officer the necessary energy audits and any other requested documents to approve the multifamily project prior to commencing weatherization of the multifamily building.

#### V.4.3 Final Inspection

All individuals who perform final inspections and monitoring including Sub-grantee and NHD are required to have staff that is QCI certified or to contract for these services. NHD and at least one of our Sub-grantees, uses a third-party agency for QCI services.

NHD provides to all Sub-grantees a copy of relevant policies and procedures that govern the QCI process in accordance with WPN 15-4. Every DOE funded weatherization unit reported as a completed unit receives a final inspection ensuring all work meets the minimum specifications outlined in the SWS in accordance with 10 CFR 440.16(g). Attached is the inspection form and a typical report generated by the NHD's third-party inspector.

If through statewide monitoring, a pattern of fails are evident, the responsible agency will receive disciplinary action and the possibility of the reallocation of current funding and the loss of future funding. The severity of the loss depends on the nature and severity of the failures.

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0007934, State: NV, Program Year: 2019)**

In Sub-grantee agencies where the energy auditor performs the audit, creates the work order and performs the final quality control inspection NHD performs quality assurance reviews on at least 10% of all completed units. In agencies where the QCI has no prior involvement in the work on the home or the energy audit the NHD third party inspector performs at least 5% review of all completed units. However, the Nevada DOE program in some areas is so minimally funded that it does not allow for a separate energy auditor and inspector. Nevada does its best to serve all areas of the state with some areas only receiving a small portion of funding. Regardless, in practice in prior years, at least 10% of all DOE funded projects are inspected by NHD. Final inspections are performed on 100% of the units weatherized at the Sub-grantee level by a certified QCI person.

Specific language regarding QCI inspections on all DOE funded work is contained in the Program Assurances (Sub-grantee agreements) which have been attached to the SF-424. Below is an excerpt from that document.

"The Subgrantee is to conduct an inspection on each household weatherized no later than three (3) weeks following the work being reported as completed by the Contractor(s) or installer. Subgrantee may not reimburse the Contractor for costs related to any work which has not passed final inspection. All units completed and funded in part or entirely with DOE funding shall be inspected by a Quality Control Inspector (QCI) for its final inspection ensuring that all work meets the minimum specifications outlined in the SWS."

Overtime with the update of the new database, the energy audit and the final inspection shall all be web-based and aligned with SWS ensuring that work is completed in accordance with the work quality requirements outlined in WPN 15-4. Both the NHD and Sub-grantees will be using this coordinated process for inspections and monitoring.

#### V.5 Weatherization Analysis of Effectiveness

Effectiveness of Sub-grantee weatherization projects is assessed by adherence to energy audits using a tool approved by the Department of Energy and also by monitoring of completed units done by NHD. NHD sends out monthly quality assurance postcards to clients after weatherization is complete to receive feedback on their experience and interactions with subgrantee staff, contractors and NHD monitors. It provides good insight into program perceptions and expectations and if those expectations were met or how we can improve these interactions.

Productivity and energy savings between Sub-grantees is not compared as housing stock is dissimilar in different areas of Nevada and also varying funding which is based on population. Sub-grantee production is compared to projected or expected outcomes that NHD establishes when grant funding is awarded. Benchmarks are established by NHD and evaluated quarterly. If the Sub-grantee is not meeting expected benchmarks NHD meets individually with that Sub-grantee to see how production can be improved and what are the obstacles to that may need to be overcome.

When a Sub-grantee is not meeting their goals and also during office and field monitoring NHD assesses what Training and Technical Assistance (T&TA) activities are required. Each year Sub-grantees are queried on T&TA needs. Also, during Sub-grantee meetings, time is devoted to T&TA questions Sub-grantees might have and observations of NHD staff found during field and office visits.

Training capability is assessed in the field during monitoring visits. A Summary Field Report is completed after each visit and there is an exit interview with Sub-grantee staff outlining strengths and weaknesses. A plan of corrective action is required within 30 days when findings were noted.

All Sub-grantee field staff must be BPI certified. Training by NHD is ongoing and takes on formal and also informal training. If a contractor's work is found not to be up to standard they are shown the correct way to install. All work completed in the field is done by licensed contractors who are aware of building and code requirements and must work to those standards. All final inspections and field monitoring will be done by a QCI certified staff member. Work in the field will need to be done to meet the Standard Work Specifications (SWS) adopted by NHD and approved by DOE.

Performance reviews are done as stated above with summary reports of finding which must be responded to within 30 days. NHD spot checks any work that did not pass inspection. Work is done at the contractors expense.

NHD is constantly reviewing our management mechanisms and will affect change when necessary or when problems are observed.

Every year a financial review of all subgrantees is undertaken by NHD Audit/Accounting Staff. All subgrantee financial systems and processes are reviewed at that time.

During the annual file review NHD conducts a review of the invoiced costs to ensure that no duplicate billing has occurred and that all costs billed are based on the approved costs. Sub-grantees are required to engage in a competitive bidding process at least every five years, with contractor pricing updated annually. See attached Request for Quotation (RFQ) that Sub-grantees are required to use for this process.

Subgrantees must be successful in administrating cost effective programs designed to assist the program's targeted population. Monitoring reports, financial audits, on-site inspections and client survey reports indicate if subgrantees are administering cost effective programs and are in compliance with state and federal rules and regulations.



**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0007934, State: NV, Program Year: 2019)**

All Sub-grantee agency staff receive basic weatherization training, blower door diagnostics, combustion appliance testing, energy auditing, inspection protocol and Lead Safe Work Practices. All Sub-grantees must have staff members certified through the Building Performance Institute's Building Analyst series. Also, all Sub-grantees must have at least one QCI on staff or under contract to meet the DOE program requirements.

To secure new program contractors, a Sub-grantee must go through a formal procurement process and pricing is one of several factors that are considered in selecting new contractors to perform weatherization work. Furthermore, each year, contractor pricing is reviewed and compared against competitors and contractors with the lowest overall price are rewarded with majority of the work of that Sub-grantee. Lastly, staff reviews contractors costs to see if there are any large increasing in pricing (i.e., over 5% increase) and may question the reason for the price increase.

## V.6 Health and Safety

The Nevada Weatherization Health and Safety (Plan) was updated last year using the DOE template and Table of Issues per WPN 17-7. This year minor modifications and corrections have been made to the Plan such as increasing the allowable deferral fee from \$100 to \$500 that contractors may charge for providing necessary technical assistance when making a determination. Also, the Matrix in the Plan for determining the Health and Safety budget and applicable budget percentage has been updated. Lastly, grammar changes have been made to the Plan.

NHD will continue to provide training to our Sub-grantees on the updated Plan. Radon and Radon testing are an issues that need to addressed in the upcoming program year with our training courses. NHD is currently working to find local trainers to address this need.

The Plan includes:

- Intake procedures (e.g., capturing per-existing occupant health conditions).
- Deferral policies due to Health and Safety reasons (e.g., client notification, list of measures, appeal process, referral of clients to other services).
- An expression of the Health and Safety cost limit as a percent of the average cost per unit.
- Details on training plans for Health and Safety issues including continued training on ASHRAE 62.2-2016.

## V.7 Program Management

### V.7.1 Overview and Organization

The Weatherization Assistance Program is administered within the Nevada Housing Division (NHD), a division of the state's Department of Business and Industry. NHD utilizes tax-exempt and taxable mortgage revenue bonds to provide a source of mortgage revenue that cannot be supplied by the private sector to low- and moderate-income households. NHD administers the Single and Multi-Family Bond Programs, Loan Servicing Program, HOME Program and the Low Income Housing Trust Fund. A copy of NHD's organizational chart is included as an attachment.

Currently there are three full time positions funded through the state's Weatherization Assistance Program; a Program Supervisor, a Grants and Projects Analyst II and a Weatherization Compliance Inspector. Our Compliance Inspector participate in BPI's Energy Auditor's Pilot Program and is waiting to hear the results of that process. NHD currently uses Home Energy Connection, a third-party agency for QCI services.

DOE funding is a small portion of the State of Nevada's Weatherization Assistance Program. NHD's main funding source for weatherization activities is the Universal Energy Charge, a user fee on customer's utility bills. The program is identified as Fund for Energy Assistance and Conservation (FEAC) and it generates approximately three time the amount of funds annually awarded by DOE. NHD also uses funding provided by the Governor's Office of Energy (GOE) and Housing Trust Funds to augment the state's Program. Although NHD does receive some Low-Income Home Energy Assistance Program (LIHEAP) funds, NHD does not directly administer this program. NHD receives a 5% pass through of LIHEAP funds annually from our Department of Health and Human Services. The majority of these funds go towards the Energy Assistance Program. Whenever possible NHD tries to leverage various funding sources in projects to allow for more measures and added energy savings, choosing the best funding source(s) for each project to maximums benefits.

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0007934, State: NV, Program Year: 2019)**

Every year our Sub-grantees are required to respond to NHD's Request for Application for Service Providers (RFA). This process has been used by NHD for many years. The requirements and timeline for submittal are described in the attached RFA. The process commenced on February 1, 2019, with the release of the RFA. Responses were due by back to NHD by March 1, 2019. Sub-grantees that continue to perform well in their existing Service Areas are anticipated to be awarded those same Service Areas.

NHD has a Subgrantee Administrative Manual that is reviewed and updated as necessary. The manual includes overall program management which addresses inventory control, the application process, database operation, management, procurement and other necessary program information.

#### V.7.2 Administrative Expenditure Limits

NHD intends to award an additional 5% administrative funds to Sub-grantees receiving \$350,000 or less of DOE weatherization funds. This decision is based on the high costs associated with the program's administrative, financial management, and operating costs. In recent years, administrative costs have continued to rise. Sub-grantees accept the 10% administrative limit but feel it is becoming more and more difficult to make this program pencil.

NHD utilizes five percent (5%) administration for DOE WAP and currently has only three (3) employees. DOE funding provides a small portion of the State's staff salaries, which is approximately twelve percent (12%) and related fringe benefits. NHD is fortunate to have other funding sources for weatherization to cover the remaining portion of salaries and fringe benefits since Nevada's DOE allocation is relatively small.

#### V.7.3 Monitoring Activities

Each Sub-grantee is responsible for administering their program in accordance with the rules and regulations established in 10 CFR, Part 440 and 2 CFR, Part 200, applicable OMB circulars, Weatherization Program Notices and other procedures DOE may require. Monitoring of Sub-grantees encompasses monitoring policy and procedures outlined in WPN 16-4 and are included in our Sub-grantee Administrative Manual, Field Manuals and other related documents.

As identified below, NHD monitoring staff are paid from both the Administrative budget and the Training and Technical Assistance budget. Based on the current year DOE allocation of \$1,199,608, it is anticipated that eighteen percent (18%) of the Grantee Administrative budget (\$11,035) and fifty percent (50%) of the Grantee Training and Technical Assistance budget (\$41,822) will be allotted for monitoring activities for Program Year 2019. The Training and Technical Assistance budget contains a cost of \$15,000 for a contract for Quality Control Inspector (QCI) services.

Presently the NHD staff primarily involved in the monitoring process include the Grants and Projects Analyst II, the Compliance Inspector and the Accountant III. For the current program year, NHD is also using a third-party agency, Home Energy Connection, for Quality Control Inspector (QCI) services. Individual duties are further explained in the subsequent details of the monitoring process below.

All Sub-grantees receiving WAP funding are monitored annually and the monitoring encompasses the following:

- Financial/Administrative/Procurement
- Equipment/Inventory/Materials
- Eligibility
- Quality Assurance
- Records Retention
- Qualifications and Training
- Feedback and Reporting
- Onsite Inspections
- Assessments, Energy Audits and
- Health & Safety

##### **Office and Financial Review:**

The Nevada Housing Division (NHD) conducts a comprehensive Office and Financial Review of each Sub-grantee at least once annually utilizing NHD's monitoring document. The visit consists of the following: file reviews of client files, insurance and maintenance records, financial desk review and annual review of financial statements, inspection of tools and equipment, and procurement practices. Any required subsequent visit will include a review of corrective action

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0007934, State: NV, Program Year: 2019)**

taken on prior findings. The Grants and Projects Analyst II performs the file review and an Accountant III perform the financial review. (The Accountant III is not under direction of the Weatherization Program Supervisor but instead under is under the direction of NHD's Chief Accountant.)

Files are reviewed with regard to income verification/eligibility, completion of all required forms, adherence to priority measures, prioritization of clients (elderly, disabled, children, etc.) and documentation of contractor invoices. Upon completion of the review, an exit interview is conducted with the Sub-grantee's executive director/president or representative and a written report is submitted within thirty (30) days following the review. The written report identifies any findings, required corrective action and deliverables within a specified time frame. NHD works with the Sub-grantee in developing any training or technical assistance designed to correct the identified problems. Failure to comply with the report's recommendations or other corrective actions may result in the withholding of requested funds until resolution has been achieved. A comment card questionnaire is sent to most clients receiving weatherization assistance requesting their opinion on the assistance provided. These questionnaires are reviewed every couple of months by NHD staff and if necessary, forwarded to the respective agency for follow-up. Work detailed above is the responsibility of the Grants and Projects Analyst II.

Each Sub-grantee is required to have an agency-wide audit conducted at the close of their fiscal year, however, depending on funding allocation amounts, the DOE program is not always reviewed. Any audit findings regarding the Federally Funded WAP program and corresponding resolutions will be reviewed by the Accountant III and forwarded to the Sub-grantee's president/executive director. The Weatherization Program Supervisor is responsible for overseeing all aspects of the Sub-grantee monitoring process and its successful conclusion.

**Description Of Onsite Monitoring:** A minimum ten percent (10%) field review is conducted that includes; measures installed by the Sub-grantees that are inspected by the Weatherization Compliance Inspector and the third-party QCI consultant to ensure compliance with the specifications outlined in Appendix A of 10 CFR, Part 440 (Standards for Weatherization Materials) and energy audits conducted on a DOE approved energy audit tool. During the course of the monitoring visits, the prices being paid for materials are discussed and comparisons are made with respect to the contracted costs approved by the Sub-grantee at the onset of the program year. The prices paid for a specific item will vary from one Sub-grantee to the other depending on the availability of materials and the distance from the supplier. Pre, during and post-work inspections are made by NHD staff over the course of the monitoring visit. These inspections are necessary to ensure the measures recommended by the energy audit, incidental repairs, and applicable Health and Safety standards are in fact being followed. Onsite post inspections compare the measures generate from the energy audit to the completed measures. The energy audit tool determines which measures are most cost effective and ranks them in ascending order. The energy audit tool takes into consideration factors such as type of housing stock, heating/cooling degree days, cost of energy, and installed costs.

For onsite monitoring by NHD and in cases where the Sub-grantee's energy auditor performs the audit, creates the work order, and performs the final QCI, NHD will perform quality assurance reviews on at least ten percent (10%) of all completed units. In the cases where the audit and final inspection are done by the same person NHD's QCI will ensure that the individual performing these tasks is able to consistently perform both tasks. The NHD QCI will evaluate that these processes are performed consistently and correctly or if additional training is required. In the larger Sub-grantee agencies where the duties of energy auditor and final inspector are segregated, NHD may perform a minimum of five percent (5%) inspections but will usually inspect ten percent (10%) of the completed projects. In cases where significant deficiencies are found during the monitoring visit, NHD will increase the number and frequency of these inspections. Field monitoring in the prior and current year have not revealed any significant deficiencies in either quality of work or final inspection processes.

If a Sub-grantee's QCI fails to adequately inspect to the guidelines in the field guide additional training will be provided and a follow up visit will be performed. If the follow up visit still reveals inconsistencies, NHD will require that an independent QCI be hired by the Sub-grantee to do this task or DOE funds will be re-allocated to another Sub-grantee.

NHD monitoring will be performed by the State Compliance Auditor/Inspector who must be QCI certified prior to undertaking any DOE inspections. In the event that he is not QCI certified, NHD will contract with a QCI certified third party. NHD has a full time permanent Compliance Auditor/Inspector position but he is not QCI certified. The position is paid for out of Training and Technical Assistance budget (please see the attached budget for percentage of salary and fringe benefits). NHD utilizes a Weatherization Inspection Form for all final inspections (attached). Presently, the Compliance/Auditor Inspector conducts an exit interview with the third party inspector (QCI) who provides a formal written summary of field findings. Corrective action on all fails is required with 100% reinspection required by Sub-grantee field staff. From time to time NHD includes re-inspections of these fails when out in the course of their regular monitoring. Electronic photo or video evidence may be submitted to verify correction have been made when appropriate.

For the current program year, field monitoring has been ongoing and includes units in progress and also units completed within the past 60-90 days. As stated above, this year the Weatherization Compliance Inspector is being assisted by a QCI certified third-party agency. Based on our current funding application, 80 units are estimated to be completed this program year. Therefore, a minimum of 10% or 8 units need to be inspected by NHD.

To date (March 4, 2019), a total of four inspections have been completed by our QCI third-party. On December 20, 2018, one project for Las Vegas Urban League was inspected in Las Vegas. This project required corrections to be made by the contractor. On January 25, 2019, three inspections for Rural Nevada Development Corporation were conducted in Pahrump. All three projects passed the NHD final inspection. Two HELP of Southern Nevada projects have been scheduled for inspection in March of 2019. Inspections for Community Service Agency and Nevada Rural Housing Authority are anticipated to be conducted between May and June. We anticipate that NHD will exceed the 8 QCI units needed to meet the 10% minimum, with all inspections completed by June 30, 2019.

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0007934, State: NV, Program Year: 2019)**

Through the course of the grant period, each Sub-grantee's financial status reports are continually reviewed to determine the actual program support, material and health & safety costs of the homes being weatherized. These reviews are necessary to ensure compliance with the average cost per unit is not exceeded. Sub-grantee monthly expenditures are reported by budget category and reviewed by the Grants and Projects Analyst II and NHD accounting staff prior to reimbursement. The method of dealing with various problems which may arise between NHD and its Sub-grantees is dependent upon the severity of the problem. Normally, NHD staff will contact the Subgrantee's program manager and discuss the nature of the problem, determine how and by whom the problem will be resolved and in what timeframe. If it is determined the problem could be corrected through more in-depth training or technical assistance, NHD will recommend this course of action and ensure that funds are appropriated to do so. Should the problem remain unresolved, the Weatherization Program Supervisor will contact the Sub-grantee explaining that failure to correct the problem could jeopardize future funding.

As of March 4, 2019, Office and File onsite monitoring visits have been completed for Las Vegas Urban League, conducted for Community Services Agency (monitoring report pending), and scheduled for HELP of Southern Nevada, Nevada Rural Housing Authority, and Rural Nevada Development Corporation.

All onsite monitoring visits and related reports are expected to be complete by June 30 2019. In the current program year, onsite monitoring has reveal a problem with Las Vegas Urban League not paying their contractors in a timely fashion. This matter is being addressed with Las Vegas Urban League, placing the agency on a corrective action plan for the remainder of the program year, which includes requesting documentation of payments of invoices for all completed projects.

As of March 4, 2019, a Financial Review for Community Services Agency has been completed with no findings or concerns. A Financial Review for Las Vegas Urban League was conducted in December of 2018. It resulted in questions regarding funding of positions from various grants and the applicable percentages, which as still in the process of being addressed. Financial Reviews for HELP of Southern Nevada, Nevada Rural Housing Authority and Rural Nevada Development Corporation will be scheduled and conducted before for June 30, 2019.

#### **V.7.4 Training and Technical Assistance Approach and Activities**

Comprehensive Trainings (previously Tier I Trainings) (QCI and BPI) will be performed on a regular basis, every three years, by any IREC accredited Weatherization Training Center that is aligned with the NREL Job Task Analysis (JTA) for the position in which the worker is employed. Each Energy Auditor and Inspector is required to obtain their BPI Building Analyst Certification within six (6) months after being hired by NHD or the agency may use another Sub-grantee and receive regular training afterwards. After the initial certificate has been obtain, it shall continued to be renewed prior to its expiration date. Energy Auditors and Inspectors shall test for their QCI when they meet the requirements of testing and continue to renew the certification prior to its expiration date, which is currently three years. Program Weatherization Contractors utilized by Sub-grantees shall maintain qualified employees as determined by each Sub-grantees contract requirements in order for the required tasks to be completed necessary to comply with DOE regulations.

Specific Trainings (previously called Tier 2 Trainings) including ASHRAE 62.2-2016, LRRP, OSHA (Asbestos), Health and Safety Plan Updates, Field Guide Updates, Infrared Cameras, Lead and Mold, Radon, Measuring R-Values, Right Sizing HVAC Systems, and WxPro (Energy Audits) will occur as necessary when identified by the Weatherization Compliance Inspector through monitoring and when new procedures are to be implemented. At minimum, Sub-grantee field staff shall receive Specific Training in each of these area every three years. Sub-grantees are responsible to ensure that their contractors are properly trained in each of these areas and the frequency in which these trainings should occur. Program contractors and their employees are encouraged to participate in any Specific Trainings when offered by NHD to our Sub-grantees.

NHD and its Sub-grantees do not have an agreement with any specific training center but the following training centers and Energy Professional Consultants are anticipated to be used:

- Southwest Building Science Training Center, Arizona
  - Opportunity Council, Washington State
  - American Institute of Building Science, Genoa, Nevada
  - Home Energy Connection, Las Vegas Nevada
- (Other training centers and programs may also be used based on need.)

In Program Year 2019, Training and Technical Training (T&TA) activities/funding will be used to support the Weatherization Compliance Inspector position at NHD and all Sub-grantees with both Comprehensive and Specific Training needs. Sub-grantees may use T&T/A funding to train contractor's employees for both Comprehensive and Specific Trainings. It funds are to be used for this purpose there should be in place an agreement to maintain the employee's services for a minimum of one year after the training has been completed pursuant to WPN 10-1.

In Program Year 2019, the Weatherization Compliance Inspector may use T&TA funds to obtain and/or renew his BPI certification(s). His Building Analyst Professional certification will expire on April 27, 2020. Depending on the BPI testing process, he will either renew his Building Analyst Professional certification or try to obtain his Energy Auditor certification as he was a participant in the BPI Pilot Program. He may also test for his QCI certification or micro-certification as may be applicable. (In the meantime, NHD is using the services of a third-party consultant for QCI compliance.)

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0007934, State: NV, Program Year: 2019)**

NHD will allocated funds to send one NHD staff member to Home Performance Coalition Annual Conference. One or two NHD staff members may also attend other technical trainings such as use of infrared technology. The remaining T&TA funds will be used for other training and travel costs as may be needed.

NHD will assess any ongoing T&TA needs of Sub-grantees based upon the findings related to federal and state program reviews, monitoring reports, monthly status reports, client satisfaction questionnaires, and financial and compliance audits. NHD monitoring is designed to maximize energy savings through the correct implementation and usage of the DOE approved energy audit tool for signal family dwellings and manufactured housing. T&TA funds will be provided to correct noted deficiencies and to improve the overall effectiveness of the Sub-grantees performance. As indicated earlier, T&TA activities will be limited by the amount of available funds. All Sub-grantees provide 100% final inspection on all weatherized dwelling units. All Sub-grantees provide 100% reinspection on any failed units. Training needs are access from these inspections as well.

**Quality Control Inspections:**

NHD requires at least one field staff member of each Sub-grantee maintain BPI and QCI certifications. As stated elsewhere in this plan all DOE project completions must be inspected by a QCI certified inspector. Nevada currently has five Sub-grantees and one Weatherization Compliance Inspector. NHD requires a minimum of one QCI certified employee per Sub-grantee and one for the State which is adequate coverage to complete all inspections. In the event that a Sub-grantee does not have a QCI certified inspector, coverage will be provided by one of the other Sub-grantee QCI certified staff. Three out of five Sub-grantees have at least one certified QCI staff member. Rural Nevada Development Corporation is in the process of having their contract inspector QCI certified but will continue to use the QCI inspector from another Sub-grantee until he passes his QCI tests. Also, Nevada Rural Housing Authority no longer has available a QCI staff person. Their new inspector is in the process of obtaining his QCI certification but they may use QCI services from another Sub-grantee with QCI certified staff. Currently, NHD is using a third-party agency for QCI services and will continue to do so until the Weatherization Compliance Inspector obtains his QCI certificate.

**Needed CEU for Certifications:**

When Sub-grantee staff's BPI certifications are coming up for renewal CEU's are obtained from ongoing training opportunities. This year CEU's are available at the Home Energy Performance Conference in April of 2019, which has been budgeted in the current budget cycle. Many of our Subgrantee's are intending to sent staff members to both these conferences. Weatherization conference sessions are consider Specific Training per WPN 15-4 and WAP Memorandum 034.

NHD's Grants and Projects Analyst II maintains a training log and is aware when certifications are up for renewal. NHD requires mandatory BPI and Health and Safety trainings for all Energy Auditors and Inspectors which enables the Weatherization Compliance Inspector to assess competency in the following disciplines: QCI, Blower Door, Combustion Appliance Safety, ASHRAE 62.2-2016, Lead Safe Weatherization, Mold Awareness and other Health and Safety program requirements. BPI and Health and Safety trainings are mandatory for new Sub-grantee and contractor staff within 6 months of hire. Prior to receiving training the new hire is unable to work on a job without working with a senior staff person who has taken the required classes. NHD verifies that all required trainings have been completed and certifications are up to date during our annual Office Review. NHD request to see copies of all licensing and certifications.

The EPA Lead Renovator training is contracted out and certification is required for all subgrantee staff. Contractors are required to have Firm Status prior to working on any pre 1978 housing stock. Additionally, contractor staff must receive renovator certification within 90 days of hire and cannot work on pre'78 housing stock until certification is received. All five (5) Sub-grantees and their contractors have received the Lead Renovator training and have certifications. All Contractors working on the program have Firm Status as required by the EPA. During the office reviews all required certifications and licensing are reviewed and are current.

The quality of field work is evaluated during each monitoring visit to ensure compliance with the SWS, Field Manual and all Policy and Procedures. NHD also reviews feedback from DOE monitoring, internal state reviews, QA visits and incorporates any feedback received.

NHD also has available a weatherization field guide and administrative manual for Sub-grantees and their contractors. The Sub-grantees are notified of these documents under the program assurances of the State contract issued each year. Each time the administrative manual is updated, the updated sections are sent directly to the Sub-grantees. The weatherization field guide was prepared by Southwest Building Science Training Center and is available at the following link: <http://swbstc.org/resources/nv-field-guide>

**Client Education:**

Sub-grantees distribute the following printed materials to clients consistent with the Health and Safety Plan and NHD directives:

- A Brief Guide to Mold, Moisture and Your Home – EPA
- A Citizen's Guide to Radon - EPA
- Asbestos in the Home, A Homeowner's Guide
- Renovate Right - (Lead Safe Work Practices)

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0007934, State: NV, Program Year: 2019)**

Upon the completion of every weatherization project a walk through is performed by the Sub-grantee inspector with the client prior to signing off the work completed in the home. This provides an opportunity to explain the proper operation and maintenance of the measures installed, warranty information and additional ways the client can save energy. All clients are provided with a copy of "Your Home Energy Savers Booklet". The inspector is also responsible for ensuring any building and/or mechanical permits have passed final inspection by the agency of jurisdiction. A project is not considered complete unless it has passed all inspections both required by the weatherization program and outside agencies governing construction work.

Programmatic and Administrative training takes place annually by the Grants and Projects Analyst II and in most cases is done at the offices of the Sub-grantee in conjunction with the annual monitoring. All Sub-grantees have staff members that have been involved in the program for several years but still received update trainings.

Financial reviews are conducted annually and also the Financial Status Reports submitted monthly are reviewed by NHD accounting staff. Sub-grantees must conform to the Uniform Administration Requirements (2 CFR Part 200) and General Accepted Accounting Principles. Subgrantee Financial Audits are reviewed annually by the Accountant III. Sub-grantee fiscal staff are encourage to obtain training on the Uniform Administrative Requirements at weatherization confereres and through other training providers.

Percent of overall trainings are Tier 1 trainings:

Percent of overall trainings are Tier 2 trainings:

**Breakdown of funds spent**

Percent of budget spent on auditor/QCI trainings:

Percent of budget spent on crew/installer trainings:

Percent of budget spent on management/financial trainings:

**V.8 Energy Crisis and Disaster Plan**

The State of Nevada does not intend to use DOE funds for Energy Crisis Relief.

# Nevada Housing Division

## Weatherization Health and Safety Plan

### POLICY SUBMITTED WITH PLAN

#### 1.0 – GENERAL INFORMATION

*Grantees are encouraged to enter additional information here that does not fit neatly in one of the other sections of this document.*

This Weatherization Health and Safety Plan replaces all prior plans. Throughout this Plan the use of the term “Energy Auditor” means all of the Sub-grantee’s field staff including inspectors, auditors, assessors and field supervisors.

If Health and Safety issues exceed the capacity of the Weatherization Assistance Program, referrals should be made to appropriate local, state and federal agencies whenever possible.

Health and Safety items not listed in this Plan may be approved on a case-by-case basis by the Nevada Housing Division (NHD) if there necessity is justified in accordance with the total package of energy conservation measures.

#### 2.0 – BUDGETING

*Grantees are encouraged to budget Health & Safety (H&S) costs as 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. Grantees are reminded that, if H&S costs are budgeted and reported under the program operations category rather than the H&S category, the related H&S costs must be included in the calculation of the ACPU and cost-justified through the approved energy audit.*

Select which option is used below.

Separate Health and Safety Budget

Contained in Program Operations

#### 3.0 – HEALTH AND SAFETY EXPENDITURE LIMITS

*Pursuant to [10 CFR 440.16\(h\)](#), Grantees must set H&S expenditure limits for their Program, providing justification by explaining the basis for setting these limits and providing related historical experience.*

*Low percentages should include a statement of what other funding is being used to support H&S costs, while larger percentages will require greater justification and relevant historical support. It is possible that these limits may vary depending upon conditions found in different geographical areas. These limits must be expressed as a percentage of the ACPU. For example, if the ACPU is \$5,000, then an average expenditure of \$750 per dwelling would equal 15 percent expenditures for H&S.*

*15 percent is not a limit on H&S expenditures but exceeding this amount will require ample justification. These funds are to be expended by the Program in direct weatherization activities. While required as a percentage of the ACPU, if budgeted separately, the H&S costs are not calculated into the per-house limitation. DOE strongly encourages using the table below in developing justification for the requested H&S budget amount. Each H&S measure the Grantee anticipates addressing with H&S funds should be listed along with an associated cost for each measure, and by using historical data the estimated frequency that each measure is installed over the total production for the year.*

*It is also recommend reviewing recent budget requests, versus expenditures to see if previous budget estimates have been accurate. The resulting “Total Average H&S Cost per Unit” multiplied by the Grantee’s production estimate in the Annual File should correlate to the H&S budget amount listed in the Grantee’s state plan.*

*Should a Grantee request to have more than 15 percent of Program Operations used for health and safety purposes, DOE will conduct a secondary level of review. DOE strongly encourages use of this H&S template and matrix to help expedite this process*





## 4.0 – INCIDENTAL REPAIR MEASURES

*If Grantees choose to identify any H&S measures as incidental repair measures (IRMs), they must be implemented as such under the Grantee's weatherization program in all cases – meaning, they can never be applied to the H&S budget category. In order to be considered IRMs, the measure must fit the following definition and be cost justified along with the associated efficiency measure;*

*Incidental Repairs means those repairs necessary for the effective performance or preservation of weatherization materials. Such repairs include, but are not limited to, framing or repairing windows and doors which could not otherwise be caulked or weather-stripped and providing protective materials, such as paint, used to seal materials installed under this program. ([10 CFR 440 "Definitions"](#))*

Incidental Repair measures are those repairs that are necessary for the effective performance or preservation of energy saving measures/materials. All estimated incidental repair costs, including labor and materials must be included on the SIR report generated for the project work order. Cumulative repair costs must not cause the overall job to fall below an SIR of 1.0.

Incidental Repairs must be justified in the client's file with an explanation for the need and relationship to a specific energy conservation measure or group of energy conservation measures.

The following repairs measures shall be charged as Incidental Repairs and are to be included in the total SIR of the project; they are not to be charged to the Health and Safety budget. All work should be done in accordance with the applicable Sections of this Health and Safety Plan.

### Section 7.4 - Building Structure and Roofing

- Minor structural repairs that are necessary to allow for effective weatherization such as:
  - Adding structural support to sub-flooring, ceiling, walls or the foundation to areas where energy conservation measure will be installed;
  - Minor roof repairs to preserve new attic insulation;
  - Spray polyurethane foam used as a roof coating of mobile homes;
  - Providing protective materials, such as paint, used to seal materials installed; and
  - Framing or repairing windows and doors which could not otherwise be caulked or weather-stripped are eligible.

### Section 7.7 - Electrical

- Minor electrical repairs are eligible when the installation of an energy conservation measure requires the repair of an existing hazardous, undersize circuit or installation of a necessary new circuit.
- Electrical testing is an eligible Health and Safety expenditure and should NOT be charged as an Incidental Repair measure.

### Section 7.12 - Injury Prevention of Occupants and Weatherization Workers

- When necessary to effectively weatherize a dwelling unit, minor repairs and installations may be made to stairs, grab-bars, handrails, porch deck boards or other weak structures.
- Hazards items that protrude out in away where the item may be or become dangerous may be removed to create a safe work environment.

### Section 7.14 - Mold and Moisture

- To ensure long-term stability and durability of energy conservation measures, the following may be considered:
  - Repairs to gutter and downspouts to direct water away from the building and/or

- foundation where evidence of moisture problems or damage;
  - Installation of splash blocks or extensions to direct gutter and/or downspout drains away from the building and/or foundation where evidence of moisture problems or damage;
  - Installation of flashings to direct water away from the building and/or foundation where evidence of moisture problems or damage;
  - Installation of sump pumps and associated plumbing and electrical to prevent bulk moisture build-up in basements or crawl spaces;
  - Minor drainage or landscape modifications necessary to divert roof or natural water runoff from infiltrating into the foundation that does not require motorized earth moving equipment;
  - Installation of a moisture/vapor barrier installed in dwelling units with dirt floors in the basement or crawlspace whenever feasible; and
  - Other minor repairs that may be necessary to control moisture infiltration into the dwelling unit.
- Mold testing or general mold cleanup is neither an allowable cost as an Incidental Repair measure nor as a Health and Safety measure.

#### Section 7.15 - Pests

- Pest remediation is only allowed where infestation will prevent weatherization and/or impact the long-term stability and durability of the energy conservation measure(s).

#### Section 7.16 - Radon

- The following radon precautionary measure are eligible:
  - Installing a vapor barrier of 6 mill or greater;
  - Sealing any observed floor and/or foundation penetrations, including open sump pits;
  - Isolating the basement from the conditioned space;
  - Installing crawlspace venting; and
  - Installing other EPA radon precautionary measures based on the Healthy Indoor Environmental Protocols for Home Energy Updates that may be beneficial to reduce radon exposure.
- Radon testing is an eligible Health and Safety expenditure and should NOT be charged as an Incidental Repair measure.

#### Section 7.20 - Window and Door Replacement, Window Guards

- Any of the following may be allowed as an Incidental Repair measure:
  - Repair or replacement of windows that allow water infiltration into a building structure;
  - Repair or replacement of doors that allows water infiltration into a building structure;
  - Repair of trim and/or flashings around windows or doors to prevent water infiltration;
  - Replacement of skylights that leak water and have visible evidence of moisture damage (beyond water staining) and deterioration of the window assembly or building material around the window.
- Window guards are not eligible as either an Incidental Repair measure or a Health and Safety cost.

## 5.0 – DEFERRAL/REFERRAL POLICY

*Deferral of services may be necessary if H&S issues cannot be adequately addressed according to WPN 17-06 guidance. 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 help are found. If, in the judgment of the auditor, any conditions exist which may endanger the health and/or safety of the workers or occupants, the unit should be deferred until the conditions are corrected. Deferral may also be necessary where occupants are 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.*

Grantee has developed a comprehensive written deferral/referral policy that covers both H&S, and other deferral reasons?

Yes       No

Where can this deferral/referral policy be accessed?

The State of Nevada Deferral Policy is presented below in the next paragraph. A blank copy of the Weatherization Deferral Notice is contained in Section 6.0. A Microsoft Word version of this form is available from the Nevada Housing Division.

Deferral may be necessary if Health and Safety issues cannot be adequately addressed. 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 help are found. In the judgment of the Energy Auditor, any existing conditions that may endanger the health and/or safety of the workers or occupants may cause weatherization to be deferred. Deferral may also be necessary where occupants are uncooperative, abusive, or threatening. Sub-grantee staff and contractors, are expected to pursue reasonable options, including referrals and to use good judgment in dealing with difficult situations.

Sub-grantees should use the Weatherization Deferral Notice form anytime it is necessary to defer a project. The form needs to contain a clear description of the problem, conditions under which weatherization could continue, and the client's signature indicating that they understand and have been informed of their options. Copies of the completed form shall be provided to the client and one shall be maintained in the client's file.

If the client refuses to sign the form or if the situation is such that the Energy Auditor must leave the property immediately such as in the case of threats or potential violence, the Energy Auditor will note that on the form. In these cases, the form may be mailed to the client with a notice closing out the project.

Deferral conditions may include:

1. The client has known health conditions that prohibit the installation of insulation and other weatherization materials.
2. The building structure or its mechanical systems, including electrical and plumbing, are in such a state of disrepair that the conditions cannot be resolved within these guidelines and at reasonable costs (i.e., repairs are beyond incidental).
3. The house has sewage or other sanitary problems including pet/animal excrement that can't be corrected through weatherization and would further endanger the client and weatherization installers if weatherization work was performed.
4. The house has been condemned or electrical, plumbing, or other equipment has been "red tagged" by local or state building officials or utility companies and weatherization funds are not sufficient or corrective measures are not allowable costs.
5. The house has moisture or potential moisture problems that cannot be resolved under existing health and

safety guidelines and with Incidental Repairs measures.

6. Dangerous conditions in the dwelling unit due to high carbon monoxide levels in combustion appliances or the venting which cannot be resolved under existing health and safety guidance. Sub-grantees should take immediate action to ensure the appliance is not used, including instructing the client to contact a combustion appliance repair/replacement specialist.
7. The client is uncooperative, abusive, or threatening to Energy Auditor, other staff or contractors.
8. The extent and condition of lead-based paint or any other identified hazardous condition in the house that could potentially create further health and safety hazards.
9. Pest infestation that cannot be reasonably removed or poses health concerns for workers.
10. In the judgment of the Energy Auditor, any condition exists which may endanger the health and/or safety of the contractor work crew or subcontractor.
11. Dwelling units with conditions that have the potential to create a health concern requiring more than Incidental Repair measures should be deferred.

**Normal Deferral Fee:** In some cases, it may be necessary to use the services of a licensed contractor to make a determination regarding the necessity to issue a deferral. This is an eligible Program Operation expenses. The maximum cost a licensed contractor may be paid for evaluation of a deferral situation is \$500. This amount is what is meant when the phrase “normal deferral fee” is used in this Health and Safety Plan.

**Appeal Process:** Sub-grantees shall allow for the client to appeal the deferral decision of the Energy Auditor to the program manager or other appropriate management position at a higher level in their organization, except in the case when the client was uncooperative, abusive or threatening in anyway.

## 6.0 – HAZARD IDENTIFICATION AND NOTIFICATION FORM(S)

*Documentation forms must be developed that include at a minimum: 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.*

Documentation Form(s) have been developed and comply with guidance?

Yes  No

### WEATHERIZATION DEFERRAL NOTICE

Client: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_

**The following problems prevent the installation of Weatherization conservation measure(s) at this time:**

**Problems with combustion appliances we are unable to correct:**

Furnace/Heater  Water Heater  Range/Oven  Clothes Dryer

Other: \_\_\_\_\_

**Extensive repair of structure or mechanical systems is required that is cost-prohibitive:**

Structure  Plumbing  Electrical  Heating  Other: \_\_\_\_\_

**Sanitation problems are present which could endanger the weatherization crew:**

Sewage  Other: \_\_\_\_\_

**Severe moisture problems are present:**

Structure  Crawl Space  Attic

Other: \_\_\_\_\_

**Harmful pesticide residue /  Hazardous pest/insect infestation is present in:**

Dwelling  Yard  Crawl Space  Attic

Other: \_\_\_\_\_

**Excessive peeling paint on pre-1979 home:**

Interior Work Area  Exterior Work Area

Other: \_\_\_\_\_

**Other problems:** \_\_\_\_\_

If these problems can be satisfactorily corrected within 30 days from the date of this notification, then we will resume work on this property. If the problems are not corrected within this time period, we will assume that you are unable to make the necessary corrections and your file will be closed.

**Please contact our office at the number below to determine if we can assist in referring you to other programs or agencies or to report that all problems have been corrected.**

Agency: \_\_\_\_\_ Phone: \_\_\_\_\_

I/we have read (or had explained) the contents of this form.	
Occupant: _____	Date: _____
Weatherization Agent: _____	Date: _____

## 7.0 – HEALTH AND SAFETY CATEGORIES

For each of the following H&S categories identified by DOE:

- Explain whether you concur with existing guidance from WPN 17-06 and how that guidance will be implemented in your Program, if you are proposing an alternative action/allowability, or if the identified category will not be addressed and will always result in deferral. Alternatives must be comprehensively explained and meet the intent of DOE guidance.
- Where an Action/Allowability or Testing is “required” or “not allowed” through WPN 17-06, Grantees must concur, or choose to defer all units where the specific category is encountered.
- “Allowable” items under WPN 17-06 leave room for Grantees to determine if the category, or testing, will be addressed and in what circumstances.
- Declare whether DOE funds or alternate funding source(s) will be used to address the particular category.
- Describe the explicit methods to remedy the specific category.
- Describe what testing protocols (if any) will be used.
- Define minimum thresholds that determine minor and major repairs
- Identify minimum documentation requirements for at-risk occupants
- Discuss what explicit steps will be taken to educate the client, if any, on the specific category if this is not explained elsewhere in the Plan. Some categories, like mold and moisture, require client education.
- Discuss how training and certification requirements will be provided for the specific category. Some categories, like Lead Based Paint, require training.
- Describe how occupant health and safety concerns and conditions will be solicited and documented

Grantees may include additional H&S categories for their particular Programs. Additional categories must include, at a minimum, all of the same data fields as the DOE-provided categories. Two additional tables have been created to utilize.

## 7.1 – Air Conditioning and Heating Systems

### Concurrence, Alternative, or Deferral

Concurrence with Guidance                       Alternative Guidance                       Results in Deferral

Air Conditioning Unallowable Measure  Heating Unallowable Measure

### Funding

DOE                       LIHEAP                       State                       Utility                       Other

### How do you address unsafe or non-functioning primary heating/cooling systems?

Heating

Due to extreme freezing temperatures in all areas of the State of Nevada “Red tagged,” in operable, or nonexistent primary heating system may be replaced, repaired, or installed in all climate zones throughout Nevada. Primary source unvented combustion (natural gas, propane, or kerosene) space heaters are required to be removed and properly disposed of prior to weatherization. The primary heating source must be replaced with a vented unit. The replacement unit should be sized so it is capable of heating the entire dwelling unit.

Solid fueled space heaters including wood stoves, coal stoves, pellet stoves and fireplaces. Wood, coal and pellet fired furnaces and boiler systems should be treated as vented heating systems. Assess solid fuel-fired appliances to ensure safe installation prior to weatherization activities taking place. Repair or removal is an allowed Health and Safety measure for primary and secondary solid fuel-fired heating appliances. Replacement is allowed for primary solid fuel heating appliances but replacement is not allow for secondary heating appliances. Repair of flues and proper installation (e.g., protection of combustibles), is required for both primary and secondary solid fuel heating appliances. Install replacement primary heaters and/or flues according to applicable codes, standards and manufacturer’s instructions. Provide adequate combustion air. Flue repairs of a primary heating systems is an eligible Health and Safety measure.

Treat vented gas- and liquid fueled space heaters the same as furnaces in terms of combustion safety testing,

repair and replacement. This applies to vented space heaters fueled by natural gas, propane, or oil.

Masonry Chimneys used by vented space heaters should be properly lined in compliance with the International Fuel Gas Code (IFGC). When the Sub-grantee installs new equipment it must meet local code requirements. Masonry chimneys that have been retired (i.e., not being used by existing equipment) should be assessed for energy savings opportunities such as air sealing and capping to reduce thermal bypass.

The Manufactured Home Construction and Safety Standards (<https://portal.hud.gov/hudportal/HUD?src=/hudprograms/mhcss>) requires all fuel-burning, heat-producing appliances in manufactured housing units, except ranges and ovens, to be vented to the outside. All fuel-burning appliances in manufactured housing units, except ranges, ovens, illuminating appliances, clothes dryers, solid fuel-burning fireplaces and solid fuel-burning stoves, must be installed to provide for the complete separation of the combustion system from the interior atmosphere of the manufactured home (i.e., to draw their combustion air from outside).

### Cooling

Primary air conditioning system replacement, repair or installation is allow in dwelling units where current occupants are considered at-risk. Due to extreme heat based on Cooling Degree Days, all occupants of dwelling units in the following counties are considered at-risk in Carson, Clark, Churchill, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Lyon, Mineral, Nye, Pershing, and Storey and no documentation is necessary in any of these counties. All occupants in dwelling units in Douglas and Washoe counties are considered at-risk and no documentation is needed with the exception of the Lake Tahoe Basin portions of these counties. In the counties of Elko and White Pine only the following cities and immediate surrounding areas of Elko, Montell, Lund, and Sunnyside are the occupants of dwelling units considered at-risk and no documentation is necessary. Occupants in the rest of the areas in these two counties are not considered at-risk of extreme heat and in need of air conditioning unless there is a documented health issue.

In areas not identified in the preceding paragraph as being at-risk, the elderly, persons with a disability and/or, a household with a child less than six years of age with a documented health issue may also be considered at-risk if appropriate documentation is provided to the Sub-grantee. This would then include dwelling units located in Elko and White Pine counties, and the Lake Tahoe Basin portion of Douglas and Washoe counties if documentation is provided for the identified category of persons.

Pursuant to Nevada Administrative Code 702.870 (3), a Sub-grantee shall provide weatherization assistance to eligible households based on the availability of money and the priority given to each eligible household using the information provide in the eligibility determination worksheet. The Sub-grantee shall give priority to eligible households in the following order of priority:

- (a) Eligible households requiring emergency assistance because: (1) The primary heating system of the household is inoperable or unsafe during the winter heating season; or (2) The primary cooling system of the household is inoperable or unsafe during the summer cooling season.
- (b) Eligible households that have one or more members who are: (1) Elderly persons; Persons with a disability; or Children less than six years of age.
- (c) All other eligible households.

Sub-grantees shall use proper sizing protocols such as WxPro outputs, Manual J, or other State approved sizing protocols based on post-weatherization housing characteristics including installed mechanical ventilation, when installing or replacing a heating or cooling system.



### How do you address unsafe or non-functioning secondary heating systems, including unvented secondary space heaters?

Unsafe secondary units, including space heaters, must be repaired, removed or rendered inoperable, or a deferral is required. (See Hazard Materials Disposal section for more information.) Replacement or installation of secondary units is not allowed. However, maintenance and repair of secondary source heating units is allowed as a Health and Safety expense.

DOE only allows minor repairs to be done to electric space heaters. This does not preclude the use of other funding sources for replacement of electric space heaters, but it does not encourage it either because of:

- Lower output rating (size);
- Risk of fire; and
- Inadequate electrical systems in older dwelling units, which frequently cannot safely carry the power required operate an electric heater.

Work on such systems may make Sub-grantees liable for inadequate electric wiring and any damages that result.

Secondary unvented units that conform to the safety standards of ANSI Z21.11.2 may remain as back-up heat sources. DOE allows this flexibility primarily to provide low-income clients an emergency back-up source of heat in the event of electrical power outages. When selecting items to leave behind, give preference to code-compliant units that do not require electricity.

Secondary unvented units that do not meet ANSIZ21-11.2 must be removed and properly disposed of prior to weatherization but may remain until a replacement heating system is in place. Repair 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.

An unvented gas- and liquid fueled space heaters that remains in a completed single-family house after weatherization shall:

- Not have an input rating in excess of 40,000 Btu/hour;
- Not be located in, or obtain combustion air from sleeping rooms, bathrooms, toilet rooms, or storage closet, except:
  - One listed wall-mounted space heater in a bathroom if permitted by the authority having jurisdiction which--:
    - Has an input rating that does not exceed 6,000 Btu/hour;
    - Is equipped with an oxygen-deletion sensing safety shut-off system; and
    - The bathroom has adequate combustion air;
  - One listed wall-mounted space heater in a bedroom if permitted by the authority having jurisdiction, which--:
    - Has an input rating that does not exceed 10,000 Btu/hour;
    - Is equipped with an oxygen-deletion sensing safety shut-off system; and
    - The bedroom has adequate combustion air.

### Indicate Documentation Required for At-Risk Occupants

Appropriate documentation for an at-risk elderly person, a person with a disability and/or, a household with a child less than six years of age is a written note from a licensed medical doctor stating that due to a health issue it may be beneficial to install or repair air conditioning in this dwelling unit. Elderly is defined as a person 62 years of age or older.

Documentation is only needed in counties and other areas where all occupants in the dwelling units are not already considered at-risk due to the high number of Cooling Degree Days.

**Testing Protocols**

Energy Auditor shall ensure the primary system is present, operable and performing correctly. Using a DOE approved audit process, the Energy Auditor shall check if the primary heating and/or cooling system can be installed as an energy conservation measure prior to replacement as a Health and Safety measure. If the measure is an approved weatherization expenditure and the audit justifies the cost with a Saving to Investment (SIR) ratio equal to or greater than 1.0, the measure must be performed and costs charged as an energy conservation measure. If the measure is NOT an eligible energy conservation measure, the measure must be charged as a Health and Safety measure. If the measure is to be installed as a Health and Safety measure, the Energy Auditor shall determine and document the at-risk occupant when installing air-conditioning as a Health and Safety measure.

On combustion equipment, the Energy Auditor shall inspect the chimney and flue and test for Combustion Appliance Zone depressurization. During diagnostic testing, if it is determined that a combustion appliance is NOT properly drafting, the cause must be determined and remedied. Costs associated with correcting the drafting issue(s) is an allowable Health and Safety measure if the remedy for the vent/drafting issue is NOT corrected by an energy conservation measure or direct component of the energy conservation measure. If the expected cost for repairing the draft/venting issue(s) is necessary to charge to the Health and Safety budget and causes the cumulative Health and Safety cost for the dwelling unit to become "unreasonable" (as may be determined by the Sub-grantee's available per unit Health and Safety average) the job may need to be deferred until those issues are remedied by the owner unless other funding sources than DOE are available to address the matter.

For solid fuel appliances, maintenance, repair and replacement of primary source indoor heating units are allowed as a Health and Safety measure if health and safety of occupant(s) is a concern. (As previously stated, it should first be determined if the repairs or replacement measure can be charged as an energy conservation measure prior to using Health and Safety funds.) The Energy Auditor shall look for visual evidence of soot on the wall, mantel, and ceiling or creosote staining near the flue pipe. Combustion Appliance Zone depressurization diagnostics should be performed. No blower door depressurization should occur while a fireplace or woodstove is in operation. If the Combustion Appliance Zone depressurization diagnostics are performed, the Energy Auditor must be aware of and alert to the potential for back drafting. Pressurization blower door testing may be performed at the auditor's discretion.

Solid fuel heating sources also may create a separate Combustion Appliance Zone. This Combustion Appliance Zone should also be tested if it is located away from the other combustion appliances.

Assessing solid fuel fired appliances involves inspecting the venting/chimney and the overall installation to ensure it adheres to the applicable code: NRPA 211 or other as determined by authority having jurisdiction. (A properly licensed contractor must be used for this inspection.) Appliances should be inspected pre- and post-weatherization.

Fireplaces present special hazards that are affected by weatherization. If draft is poor, smoke may downdraft into the living space causing poor indoor air quality. It is likely the occupants will ventilate in these situations. Near the end of a wood fire, glowing coals will remain, radiating heat, while the draft lowers and allows the top of the chimney to cool, further reducing draft. The reduced oxygen available to the glowing coals causes production of carbon monoxide without the smoke that encourages space ventilation. This is potentially a dangerous situation as the carbon monoxide enter the living space due to the lowered draft, causes drowsiness of occupants, and sometimes worse. For this reason it is extremely important to make sure there is a carbon monoxide alarm installed in this combustion zone and occupants are educated to the danger signs and what to do.

Conduct pre- and post-weatherization worst case CAZ depressurization testing in spaces having a fireplace. Sub-

grantee should use a depressurization limit of -3 in the Combustion Appliance Zone of any wood-burning combustion appliances, including fireplaces.

To evaluate operation of other combustion appliances, the blower door can be set to run at 300 CFM (set up as for depressurization testing), or other appropriate flow rate, to mimic the airflow dynamics likely when the fireplace is in use.

The Energy Auditor should also performed a full DOE-approved energy audit prior to deciding how to categorize the cost of space heater repair or replacement. Safety inspections related to the space heater should include, but not be limited to, a check for adequate floor protection, and code-compliant clearances to walls and other combustibile materials. Even though many vented space heaters are manufactured with spill switches it is still a requirement that a worst-case depressurization draft test be performed on all vented units.

#### **Client Education**

The Energy Auditor and/or contractor(s) shall discuss with the client how to use and maintain any new equipment installed and provide all instruction manuals and applicable paperwork. When combustion equipment is present, provide safety information including how to recognize depressurization.

**Bulk Fuel Tanks:** When not removed as part of the weatherization work discuss and provide information on proper disposal of bulk fuel tanks.

#### **Training**

Sub-grantee shall ensure that each Energy Auditor and contractor is trained on applicable health and safety activities in this Section. Energy Auditors must be trained inspectors with knowledge of Combustion Appliance Zone depressurization testing. At a minimum, Energy Auditors must have obtained their Building Analyst Professional certificate from the Building Performance Institute. All contractors and subcontractors that replace, repair and/or service HVAC equipment shall be licensed and/or certified by the Nevada State Contractors Board or Manufactured Housing Division as may be applicable.

## 7.2 – Asbestos – All

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

If Asbestos Containing Material (ACM) is identified that is friable during the dwelling unit inspection for the energy audit, a blower door test should not be done until the situation is addressed. “Friable” means the material can be crumbled, pulverized, or reduced to powder by the pressure of an ordinary human hand. Energy Auditor shall consult with a Nevada Certified Asbestos Contractor/Consultant as may be necessary to resolve the matter if possible.

Do not perform a blower door test if it will disturb vermiculite unless testing has determined it does not contain asbestos.

### 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?

The Sub-grantee and contractor shall take all reasonable and necessary precautions to prevent asbestos contamination in the dwelling unit when testing and/or working with siding, walls and ceilings suspected of Asbestos Containing Materials. Only properly trained and licensed contractors may disturb Asbestos Containing Materials during the course of the weatherization work. When evaluating existing insulation in enclosed walls and ceilings, the Energy Auditor shall follow the NHD policy for *Measuring of R-Values in Enclosed Cavities*. All cost associated with asbestos remediation are to be charged to the Health and Safety budget. These costs may include testing, containment and/or disposal of Asbestos Containing Materials.

The existence of asbestos siding that is in good condition does not prevent installing dense-pack insulation from the exterior. Removing and re-installment of asbestos siding is permissible for purposes of installing wall insulation. However, cutting and drilling of siding containing asbestos is not allowed. It is recommended and preferred to perform interior blows when access allows. General abatement of asbestos siding or replacement with new siding is not an allowable Health and Safety cost. All Sub-grantees should have at least one contractor qualified to work with this type of material. Any excess costs incurred as a result of asbestos mitigation shall be charged to the Health and Safety budget.

If Asbestos Containing Materials are identified that are friable during the dwelling unit inspection for the energy audit, a blower door test should not be done until the situation is addressed. “Friable” means the material can be crumbled, pulverized, or reduced to powder by the pressure of an ordinary human hand. The Energy Auditor shall consult with a Nevada Certified Asbestos Contractor/Consultant as may be necessary to resolve the matter, if possible.

When a deferral is necessary due to Asbestos Containing Materials, the occupant must provide the Sub-grantee documentation that a certified professional performed the remediation before weatherization may commence.

#### Testing Protocols

The Energy Auditor shall conduct a visual inspection for possible Asbestos Containing Material in exterior wall

surfaces and subsurface, floors, interior walls and ceilings. Suspected Asbestos Containing Materials identified during the inspection will be brought to the attention of the client. The condition of the Asbestos Containing Material will be assessed to determine if it is friable and occupants will be advised not to disturb the material.

As may be necessary to conduct the weatherization project, asbestos testing and/or containment by a properly trained and licensed contractor is an allowable Health and Safety cost. Per Asbestos Hazard Emergency Response Act of 1986 (AHERA) sample collection and testing must be conducted by a certified tester. The Energy Auditor shall work closely with the trained and licensed contractor in determining how best to address Asbestos Containing Materials.

Regardless of age, any sheetrock that will be either cut or drilled as part of the evaluation or weatherization process shall be assumed to be Asbestos Containing Material and must either be tested or contained by a properly trained and licensed contractor. Energy Auditors shall not drill or cut into sheetrock for purpose of determining the R-value in enclosed cavities. Only a trained and license contractor may perform this task.

An Energy Auditor may defer a weatherization project if he decides that the scope of the project due to Asbestos Containing Materials is not practical to complete and/or is beyond the Sub-grantee's resources to safely mitigate. Any decision to defer a project for this reason(s) will not be challenged by the Nevada Housing Division, Weatherization Assistance Program.

#### **Client Education**

If suspected Asbestos Containing Materials are discover and its condition is friable, occupants will be notified in writing not to disturb the material. Also, the client should receive the EPA pamphlet "Asbestos in the Home, a Homeowners Guide". If testing is performed, the client shall be provided a copy of the written report of the results.

When a deferral is necessary, the Sub-grantee shall provide information in writing describing conditions that must be met in order for weatherization work to commence. A contractor trained and licensed to work with Asbestos Containing Materials may be contacted to detail out in writing what specific steps needs to be done to address the hazard and leave this information with the client. The contractor should be paid the normal deferral fee.

#### **Training and Certification Requirements**

All Energy Auditors must attend an asbestos awareness training to learn how to identify Asbestos Containing Materials and when Asbestos Containing Materials may pose a hazard to occupants or workers. This training and re-training shall be done by Nevada Occupational Safety and Health Administration (OHSA) pursuant to their recommendations for Energy Auditors.

Contractors working with asbestos and asbestos siding must be licensed and certified by Nevada OHSA prior to performing any testing and/or work on Suspected Asbestos Containing Materials.

<b>7.2b – Asbestos - in vermiculite</b>				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input checked="" type="checkbox"/>		
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>How do you address suspected ACM's in vermiculite that will be disturbed through the course of weatherization work?</b>				
<p>When vermiculite insulation is present, STOP THE ENERGY AUDIT and do not perform a blower door test. Personnel should utilize proper respiratory protection if in areas containing vermiculite.</p> <p>Vermiculite must be assumed to contain asbestos and the Energy Auditor shall issue a deferral. A contractor trained and licensed to work with Asbestos Containing Materials should be contacted to detail out in writing what specific steps needs to be done to address the hazard and leave this information with the client. The contractor should be paid the normal deferral fee.</p> <p>Removal of vermiculite is beyond the scope of the weatherization program and Nevada Housing Division has determined there are no safe and practical procedures available to encapsulate vermiculite. If it has entered the duct system, it may be necessary for the entire house to be tested prior to proceeding with any weatherization work.</p> <p>When a deferral is issued due to vermiculite, the client shall provide the Sub-grantee with documentation that a certified professional performed the remediation before work can commence and the dwelling unit must now tests clean.</p>				
<b>Testing Protocols</b>				
<p>The Energy Auditor shall conduct a visual inspection for the presents of vermiculite. Any vermiculite identified during the inspection shall be assumed to contain asbestos and the Energy Auditor shall stop the audit process and issue a deferral as stated above.</p> <p>The Energy Auditor shall not test the vermiculite. It is up to the owner to contract and pay for all tests and necessary mitigation measures to address this hazard.</p>				
<b>Client Education</b>				
<p>If vermiculite insulation is discovered client(s) will be notified in writing not to disturb the material. Also, the client should receive the EPA pamphlet "Asbestos in the Home, a Homeowners Guide".</p> <p>When a deferral is necessary, the Sub-grantee shall provide information in writing describing conditions that must be met in order for weatherization work to commence.</p>				
<b>Training and Certification Requirements</b>				
<p>All Energy Auditors must attend an asbestos awareness training to learn how to identify asbestos containing materials and when asbestos containing materials may pose a hazard to occupants or workers. This training is to include how to recognize vermiculite. It shall be done by Nevada Occupational Safety and Health Administration (OHSA) pursuant to their recommendations for Energy Auditors.</p> <p>Contractors used to issue deferrals and document procedures to address the potential hazard of Asbestos Containing Materials must be licensed and certified by Nevada OHSA.</p>				

### 7.2c – Asbestos - on pipes, furnaces, other small covered surfaces

#### 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 (e.g., pipes, furnaces, other small surfaces) that will be disturbed through the course of weatherization work?

The Energy Auditor and contractor shall take all reasonable and necessary precautions to prevent asbestos contamination in the dwelling unit when testing and/or working with pipes, furnaces, boilers and other small appliances and surfaces suspected of Asbestos Containing Materials. When suspected friable Asbestos Containing Materials are present the Energy Auditor shall take precautionary measures as if it is asbestos unless testing determines otherwise. "Friable" means the material can be crumbled, pulverized, or reduced to powder by the pressure of an ordinary human hand. The Energy Auditor shall consult with a Nevada Certified Asbestos Contractor/Consultant as may be necessary to resolve the matter if possible.

Covering materials on pipes, boilers, and other small appliances should be assumed to contain asbestos and, if determined to be in friable condition, are to be encapsulated by a contractor trained and licensed to work with Asbestos Containing Materials prior to conducting blower door testing. Coverings that are obviously not asbestos (e.g., foam and paper covered fiberglass) do not require encapsulation.

The removal of asbestos on existing pipes for the purpose of replacing a heating system is allowed. When asbestos is removed, only the amount necessary to make the final connections plus three (3) inches is allowed. The remainder should be encapsulated if necessary. Only properly trained and licensed contractors may disturb Asbestos Containing Materials during the course of the weatherization work.

Only direct charges for asbestos testing, encapsulation, and/or removal and disposal are allowable Health and Safety costs if they are reasonable to perform.

When a deferral is necessary due to Asbestos Containing Materials, the occupant must provide the Sub-grantee documentation that a certified professional performed the remediation before weatherization may commence.

#### Testing Protocols

The Energy Auditor shall conduct a visual inspection for possible Asbestos Containing Material on pipes, furnaces, boilers and other small appliances and surfaces. Suspected Asbestos Containing Materials identified during the inspection will be brought to the attention of the client. The condition of the Asbestos Containing Material will be assessed to determine if it is friable and occupants will be advised not to disturb the material.

As may be necessary to conduct the weatherization project, asbestos testing and/or containment by a properly trained and licensed contractor is an allowable Health and Safety cost. Per Asbestos Hazard Emergency Response Act of 1986 (AHERA) sample collection and testing must be conducted by a certified tester. The Energy Auditor shall work closely with the trained and licensed contractor in determining how best to address Asbestos Containing Materials.

An Energy Auditor may defer a weatherization project if he decides that the scope of the project due to Asbestos Containing Materials is not practical to complete and/or is beyond the Sub-grantees resources to safely mitigate. Any decision to defer a project for this reason(s) will not be challenged by the Nevada Housing Division,

Weatherization Assistance Program.
<b>Client Education</b>
<p>If suspected Asbestos Containing Materials are discovered and its condition is friable, occupants will be notified in writing not to disturb the material. Also, the client should receive the EPA pamphlet "Asbestos in the Home, a Homeowners Guide". If testing is performed, the client shall be provided a copy of the written report of the results.</p> <p>When a deferral is necessary, the Sub-grantee shall provide information in writing describing conditions that must be met in order for weatherization work to commence. A contractor trained and licensed to work with Asbestos Containing Materials may be contacted to detail out in writing what specific steps need to be done to address the hazard and leave this information with the client. The contractor should be paid the normal deferral fee.</p>
<b>Training and Certification Requirements</b>
<p>All Energy Auditors must attend an asbestos awareness training to learn how to identify Asbestos Containing Materials and when Asbestos Containing Materials may pose a hazard to occupants or workers. This training and re-training shall be done by Nevada Occupational Safety and Health Administration (OHSA) pursuant to their recommendations for Energy Auditors.</p> <p>Contractors working with asbestos must be licensed and certified by Nevada OHSA prior to performing any testing and/or work on Suspected Asbestos Containing Materials.</p>



<b>7.3 – Biologicals and Unsanitary Conditions</b> (Odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc.)				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
Unallowable Measure <input type="checkbox"/>				
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>What guidance do you provide Sub-grantees for dealing with biological and/or unsanitary conditions in homes slated for weatherization?</b>				
<p>Sub-grantees may work to remediate conditions that may lead to or promote biological concerns and unsanitary conditions and charge these costs to the Health and Safety budget. Repair of biological-<u>creating conditions</u> as indicated include but are not limited to:</p> <ul style="list-style-type: none"> <li>• Repair of plumbing and sewer leaks inside the dwelling unit or plumbing leaks outside the dwelling unit such as hose bibs (garden hose faucets) that may be leaking and draining against the foundation.</li> <li>• Repair of water damaged materials that <u>must</u> be repaired to allow for installation of the associated efficiency measure. Repair of water damaged material that will dry after the offending repair is complete and isn't required to perform weatherization is NOT allowed.</li> </ul> <p>Addressing odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc. are <u>NOT</u> eligible Health and Safety measures nor are they eligible to be charge to as Incidental Repair measures. A deferral may be necessary in cases where conditions in the dwelling unit pose a health risk to occupants and/or weatherization workers.</p> <p><i>See Mold and Moisture (Section 7.14) for more information.</i></p>				
<b>Testing Protocols</b>				
Energy Auditor shall notice any unsanitary conditions and investigate any unusual odors and try to determine their source.				
<b>Client Education</b>				
An Energy Auditor shall inform a client in writing of observed conditions and provide information on how to maintain a sanitary dwelling unit, if available. It may be appropriate to refer a client to other agencies or resources to assist with addressing the matter.				
When a deferral is necessary, the Sub-grantee shall provide information in writing describing conditions that must be met in order for weatherization work to commence.				
<b>Training</b>				
Energy Auditors shall be trained to recognize unsafe and unsanitary conditions. It is recommended that all Energy Auditors attend a Healthy Home course.				
Energy Auditors shall also be trained to know when a condition warrants a deferral.				

<b>7.4 – Building Structure and Roofing</b>				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>What guidance do you provide Sub-grantees for dealing with structural issues (e.g., roofing, wall, foundation) in homes slated for weatherization?</b>				
<p>Building rehabilitation is beyond the scope of the Weatherization Assistance Program (WAP) and only Incidental Repair measures listed in Section 4.0 may be performed. 10 CFR Section 440.3 defines Incidental Repair measures as those repairs necessary for the effective performance or preservation of weatherization materials. Such repairs include, but are not limited to, adding minor structural support to sub-flooring, ceiling, walls or the foundation to areas where energy conservation measures will be installed. Also, framing or repairing windows and doors which could not otherwise be caulked or weather-stripped and providing protective materials, such as paint, used to seal materials installed under this program. Incidental Repair measures must be justified in the client file with an explanation for the need and relationship to a specific energy conservation measure (ECM) or group of ECMs.</p> <p>Other examples of Incidental Repair measures include sealing minor roof leaks to preserve new attic insulation. Spray polyurethane foam that is used for roof coating of mobile homes. (When two-part foam insulation is used clients are made aware of possible off-gassing during the short curing period, and the associated risks to chemically sensitive people. If the client is unable to leave the dwelling unit and the intended work may exacerbate an occupant's health condition, the dwelling unit may need to be deferred.)</p> <p>While repair to a roof to protect the insulation to be installed is allowable, expanding this definition to include roof replacement or for other non-energy related repairs is not permissible. WAP policies strictly prohibit roof replacements, structural repairs, or other non-energy related rehabilitation work. If the roof needs replacing the unit should either be referred to a rehabilitation program or the Sub-grantee must use other funds to cover the costs for this type of work.</p> <p>Buildings that have been determined to have structural problems that are beyond the scope of weatherization services may need to be deferred until the dwelling can be made safe for workers and occupants. Workers must take all reasonable precautions against performing work on dwelling units that will subject workers and occupants to health and safety risks. Dwelling units whose structural integrity is in question should be deferred and referred to other programs.</p> <p><i>See Code Compliance (Section 7.5), Injury Prevention of Occupants and Weatherization Workers (Section 7.12), Mold and Moisture (Section 7.14), and Pests (Section 7.15) for more information.</i></p>				
<b>How do you define "minor" or allowable structure and roofing repairs, and at what point are repairs considered beyond the scope of weatherization?</b>				
<p>Minor structure and roofing repairs are to be considered as Incidental Repair measures and may be installed <u>only</u> when necessary to effectively weatherize the dwelling unit; otherwise these measures are not allowed. There is no specific dollar limit for any individual Incidental Repair measure as long as the entire packet of measures meet or exceed the Savings Investment Ratio (SIR) requirement of the energy audit. All estimated repair costs, including labor and materials, must be included in the SIR calculation. For each weatherized building, the cost of the total packet of energy conservation measures, added to the cost of all Incidental Repair measures for the</p>				

building, must have a calculated SIR of 1.0 or greater to be eligible.
<b>If priority lists are used, and these repairs are designated as Incidental Repairs, at what point is a site-specific audit required?</b>
Not applicable, site-specific energy audits are required on all projects.
<b>Client Education</b>
After conducting a visual inspection, the Energy Auditor shall inform a client in writing of any structurally compromised areas. The Energy Auditor may use the services of a licensed contractor to make this determination when necessary. The contractor should be paid the normal deferral fee, if applicable.
When a deferral is necessary, the Sub-grantee shall provide information in writing describing conditions that must be met in order for weatherization work to commence.
<b>Training</b>
Energy Auditors shall be trained on how to identify structural and roofing issues.

<b>7.5 – Code Compliance</b>				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>What guidance do you provide Sub-grantees for dealing with code compliance issues in homes receiving weatherization measures?</b>				
<p>It is the Sub-grantees' responsibility to ensure that all weatherization-related work conforms with applicable codes in jurisdictions where the work is being performed. State and local building codes must be followed when installing energy conservation measures. When correction of a preexisting code compliance issue is triggered and paid for with weatherization funds, the Energy Auditor shall cite the specific code requirement with reference to the energy conservation measure(s) that triggered the code compliance issue.</p> <p>Code corrections that are required because of weatherization but are not a direct component of an energy conservation measure are to be charged to the Health and Safety budgets. Examples of these code corrections include the installation of carbon monoxide alarms, smoke detectors, and spring hinges for a door accessing a garage.</p> <p><i>See Safety Devices: Smoke and Carbon Monoxide Alarms, Fire Extinguishers (Section 7.17) for more information.</i></p> <p>Correcting existing code violations in a dwelling unit is <u>NOT</u> allowed unless the code corrective action is required because of the installation of an energy conservation measure. Condemned properties and properties where "red tagged" health and safety conditions cannot be corrected under these health and safety standards should be deferred.</p> <p>Installation of space heaters requires knowledge of appropriate industry standards and compliance with the applicable building code(s) in the municipality where installation is taking place. Building permits shall be secured, where required for all space heater work. This is a program operations cost. The manufacturer approved initial start-up procedures must be followed before any heater is put into operation. Sub-grantees are reminded that even licensed heating contractors may not be aware of the stringent requirements of the Weatherization Assistance Program.</p> <p><i>See Air Conditioning and Heating Systems (Section 7.1) for more information.</i></p>				
<b>What specific situations commonly trigger code compliance work requirements for your network? How are they addressed?</b>				
<p>Most typically the replacement of HVAC units and water heaters trigger code compliance especially as it relates to obtaining a building (mechanical) permits from State, county or city agencies having jurisdiction. The Sub-grantee shall ensure that the contractor has obtain passed/approved as final on any and all building permits required to on the job and place a copy of each permit in the client's file.</p>				
<b>Client Education</b>				
<p>After conducting a visual inspection, the Energy Auditor shall inform a client in writing of any code compliance issues that result in a deferral. The Energy Auditor may use the services of a licensed contractor to make this determination, if necessary. The contractor should be paid the normal deferral fee.</p> <p>When a deferral is necessary, the Sub-grantee shall provide information in writing describing conditions that must</p>				

be met in order for weatherization work to commence.

**Training**

All field personnel (including Energy Auditors) are strongly encouraged to attend “building/construction code” instructional classes. The intent of the training is not to learn all codes for all trades, but to be aware of codes in the areas that Energy Auditors and contractors commonly encounter.

<b>7.6 – Combustion Gases</b>				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>What guidance do you provide Sub-grantees for dealing with combustion gases in homes receiving weatherization measures?</b>				
<p>Energy Auditors should check for proper venting to the outside for combustion appliances, including furnaces, gas dyers, boilers, space heaters, gas fireplaces, gas stoves and top burners, water heaters and any other applicable gas appliance.</p> <p>Combustion appliance and their associated venting systems can present fire hazards. Energy Auditors shall identify inadequate clearances between combustion appliances (including venting systems). Correction of fire hazards is allowable when necessary to install energy conservation measures. Venting shall be corrected when testing indicates a problem and is also an eligible Health and Safety measure.</p> <p>If unsafe conditions exist and is necessary to correct to perform weatherization and it cannot be addressed by repair or tuning, replacement of a combustion appliance is an allowable Health and Safety measure. However, with a DOE approved audit tool check to determine if the appliance can be justified as an energy conservation measure prior to replacement as a Health and Safety measure.</p> <p>In the client file, it is necessary to maintain documentation justifying the replacement with a cost comparison between replacement and repair. Replacement units must meeting safety guidelines in current technical field guides.</p> <p><i>See Air Conditioning and Heating Systems (Section 7.1) for more information.</i></p>				
<b>Testing Protocols</b>				
<p>In every dwelling unit, testing for carbon monoxide is required when combustion appliances are present. The testing should include furnaces, gas dyers, boilers, space heaters, gas fireplaces, gas ranges (ovens and top burners), water heaters and any other such combustion appliances as applicable. Energy Auditor should also monitor ambient carbon monoxide in the vicinity of combustion appliances.</p> <p>Test naturally drafting appliances for spillage and monoxide levels during the Combustion Appliance Zone (CAZ) depressurization testing pre- and post-weatherization and before leaving the dwelling unit on any day when work has been done that could affect draft (e.g., tightening the dwelling unit, adding exhaust). Inspect venting of combustion appliances and confirm adequate clearances.</p> <p>When only sealed combustion appliances are present or only non-combustion appliances exist (electric heat, etc.), CAZ depressurization testing and draft testing are not required.</p>				
<b>How are energy auditors instructed to handle problems discovered during testing, and what are the specific protocols for addressing hazards that require an immediate response?</b>				
<p>If necessary during testing due to unexpected problems arising, Energy Auditors should contact local gas company for immediate response or the fire department for potential fire hazards. Energy Auditors may also want to contact trained and license contractors to help resolve matters.</p>				

<b>Client Education</b>
The Energy Auditor shall provide client with combustion safety and hazards information.
<b>Training</b>
Energy Auditors shall be trained to know the action level for carbon monoxide and appropriate testing methods. Also, Energy Auditors should be able to determine when a building is excessively depressurized, and know the difference between air free and as-measured carbon monoxide.

<b>7.7 – Electrical</b>				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>What guidance do you provide Sub-grantees for dealing with electrical hazards, including knob &amp; tube wiring, in homes slated for weatherization?</b>				
<p>When the health and safety of the occupant(s) and/or worker(s) is at risk, minor repairs, as defined below, are allowed when necessary for the weatherization measures. All electrical hazards are to be considered Incidental Repair measures and charged accordingly. However, electrical testing is an eligible Health and Safety cost if needed.</p> <p>The two primary energy-related health and safety electrical concerns are insulating dwelling units that contain knob-and-tube wiring and identifying overloaded electrical circuits. Older electric wiring, primarily knob-and-tube wiring, located in a wall cavity or exposed on an attic floor was intended by code to have free air movement that would cool the wire when it is carrying an electric current. Laboratory tests have shown that retrofitting thermal insulation around damaged knob-and-tube electric wiring can cause it to overheat, resulting in a fire hazard.</p> <p>When knob-and-tube wiring is present in a dwelling unit, it should be determined if the walls and attic have active knob-and-tube wiring present. Walls that have live knob-and-tube wiring present are not to be insulated by the weatherization program. Attics that have live knob-and-tube wiring present can have insulation installed up to just below the wire but must be dammed to the sides and above to providing a minimum of 2" clear space between the wire and the dam. The knob-and-tube wiring "run" should be "marked" using surveyor's type tape or other marking device such as lawn flags. Open junction boxes located in the attic where insulation will be installed must be appropriately covered with metal covers and should also be marked with tape or other signage indicating their location for future service. Repairs to knob-and-tube wiring are not a direct component to insulating and should not be included in the cost of any energy saving measure.</p> <p>Serious electrical hazards exist when gross overloads are present. Should Energy Auditors find such existing problems, they must notify the client. Energy conservation measures that involve the installation of new equipment such as air conditioners, heat pumps, or electric water heaters can exacerbate previously marginal overload problems to hazardous levels. The problem should also be noted in the client file. Installing or repairing circuits to allow for new appliances or "systems" recommended as energy conservation measures or other minor electrical repairs necessary for the effective installation of energy conservation measures or because of the installation of electronic weatherization measures are allowable and should be included with the cost of the energy conservation measure and should <u>NOT</u> be charged to the Health and Safety budget. The client must be notified if any unsafe conditions are found during the energy audit that cannot be addressed through weatherization.</p>				
<b>How do you define "minor" or allowable electrical repairs, and at what point are repairs considered beyond the scope of weatherization?</b>				
<p>Minor electrical repairs are to be considered as Incidental Repair measures and may be installed <u>only</u> when necessary to effectively weatherize the dwelling unit; otherwise these measures are not allowed. There is no specific dollar limit for any individual Incidental Repair measure as long as the entire packet of measures meet or exceed the Savings Investment Ratio (SIR) requirement of the energy audit. All estimated repair costs, including labor and materials, must be included in the SIR calculation. For each weatherized building, the cost of the total</p>				



packet of energy conservation measures, added to the cost of all Incidental Repair measures for the building, must have a calculated SIR of 1.0 or greater to be eligible.
<b>Testing Protocols</b>
Visually inspect for the presents and condition of knob-and-tube wiring.  Check for any alterations that may create an electrical hazard. Also, check for any system issues that may result in a voltage drop.  Knob-and-tube wiring inspections and voltage drop detection are allowable Health and Safety expenses if they are necessary. Voltage testing should be done by a licensed and training electrical contractor if needed to diagnose issues.
<b>Client Education</b>
When electrical issues are the cause of a deferral, provide information to client on over-current protection, overloading circuits and basic electrical safety and risks.
<b>Training</b>
Energy Auditors shall be trained on how to identify electrical hazards and code compliance with agencies having jurisdictions.

<b>7.8 – Formaldehyde, Volatile Organic Compounds (VOCs), Flammable Liquids, and other Air Pollutants</b>				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>What guidance do you provide Sub-grantees for dealing with formaldehyde, VOCs, flammable liquids, and other air pollutants identified in homes slated for weatherization?</b>				
<p>Formaldehyde vapors may be slowly released by some new carpets, oriented strand board (OSB), plywood, etc. Volatile organic compounds (VOCs) are also emitted by some household cleaning agents. If items pose a risk to workers, removal is required but if removal cannot be performed or is not allowed by the client, the unit must be deferred. Removal and proper disposal of dangerous pollutants is an allowed Health and Safety cost.</p> <p><i>See Hazardous Materials Disposal (Section 7.11) for more information.</i></p>				
<b>Testing Protocols</b>				
Energy Auditor shall conduct an inspection based on sensory perception of pollutants.				
<b>Client Education</b>				
<p>Inform client in writing of observed hazardous condition and associated risks and provide client written materials on safety issues and proper disposal of household pollutants.</p> <p>When a deferral is necessary, the Sub-grantee shall provide information in writing describing conditions that must be met in order for weatherization work to commence.</p>				
<b>Training</b>				
Energy Auditors shall be trained on how to identify potential hazards and when removal is necessary.				

<b>7.9 – Fuel Leaks</b> <i>(Natural Gas and Propane Gas)</i>		
<b>Concurrence, Alternative, or Deferral</b>		
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>
<b>Funding</b>		
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
<b>Remediation Protocols</b>		
<p>When a gas leak is found on the utility side of service, the utility company must be contacted before work may commence. If the leak is discovery during the work, the Energy Auditor or contractor shall notify the utility company and temporarily halt the work.</p> <p>Gas leaks that are the responsibility of the client, not the utility company, must be repaired before weatherizing a dwelling unit. Unless directly associated with the installation or repair of an eligible combustion appliance as an Ancillary Item, all gas leak repairs are eligible Health and Safety costs but shall not be beyond the scope of the weatherization as defined below.</p> <p><b>Gas Leak Testing:</b> Test for gas leaks at all exposed and accessible piping and joints from utility coupling into, and throughout, the dwelling unit. Also, test all combustion appliances for gas leaks. If applicable, propane tanks shall be examined for leaks.</p> <p>Testing can occur by an Energy Auditor using equipment designed for this purpose or by hiring a qualified contractor for testing such as to perform a pressure test of the piping and joints. If a contractor is used for this purpose, the cost is to be charged to the Health and Safety budget.</p>		
<b>How do you define allowable fuel leak repairs, and at what point are repairs considered beyond the scope of weatherization?</b>		
The cost for a fuel leak repair(s) may not exceed \$1,500 including replacement of a portion of a fuel lines, if necessary.		
<b>Client Education</b>		
The Energy Auditor should inform the client in writing if fuel leaks are detected.		
<b>Training</b>		
Energy Auditors shall be trained on fuel leak testing.		

<b>7.10 – Gas Ovens / Stovetops / Ranges</b>				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>What guidance do you provide Sub-grantees for addressing unsafe gas ovens/stoves/ranges in homes slated for weatherization?</b>				
When testing indicates a problem, Sub-grantees may perform standard maintenance on or repair gas ranges, cooktops, and ovens. However, replacement is not allowed with DOE funding. LIHEAP and State funds may be used but only for a Combustion Appliance Zone (CAZ) failure due to the cooking appliance.				
<b>Testing Protocols</b>				
In every dwelling unit, testing for carbon monoxide is required when combustion appliances are present. The testing should include furnaces, gas driers, boilers, space heaters, gas fireplaces, gas ranges (ovens and top burners), water heaters and any other such combustion appliances as applicable. Energy Auditor should also monitor ambient carbon monoxide in the vicinity of combustion appliances.				
Test naturally drafting appliances for spillage and carbon monoxide levels during the Combustion Appliance Zone (CAZ) depressurization testing pre- and post-weatherization and before leaving the dwelling unit on any day when work has been done that could affect draft (e.g., tightening the dwelling unit, adding exhaust). Inspect venting of combustion appliances and confirm adequate clearances.				
When only sealed combustion appliances are present or only non-combustion appliances exist (electric range, etc.), CAZ depressurization testing and draft testing are not required.				
<i>See Combustion Gases (Section 7.6) for more information.</i>				
<b>Client Education</b>				
The Energy Auditor shall inform the client of the importance of using exhaust ventilation when cooking and the importance of keeping burners clean to limit carbon monoxide.				
<b>Training</b>				
Energy Auditors shall be trained to know the action level for carbon monoxide and appropriate testing methods.				

<b>7.11 – Hazardous Materials Disposal</b>				
<b>[Lead, Refrigerant, Asbestos, Mercury (including CFLs/fluorescents), etc.]</b>				
<i>(please indicate material where policy differs by material)</i>				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>Client Education</b>				
The Energy Auditor shall inform the client in writing of concerns associated with specific hazardous waste materials being utilized and handled in the dwelling unit as may be applicable to the weatherization work being performed.				
<b>Training</b>				
Energy Auditors shall be trained to know the health and environmental risks when working with hazardous waste materials and how to use appropriate personal protective equipment (PPE). Sub-grantees shall ensure that weatherization contractors know disposal requirements and appropriate locations of disposal sites.				
<b>Disposal Procedures and Documentation Requirements</b>				
Hazardous waste materials generate in the course of weatherization work shall be disposed of according to all local laws, regulations and/or federal guidelines, as may be applicable. Sub-grantees shall include in contract agreements for weatherization work language addressing proper disposal of hazardous waste materials. Disposal of hazardous waste materials may be charged to the Health and Safety budget.				
<b>Lead:</b> Proper disposal of debris is required to adequately clean up the job site. Disposal of debris must meet federal, state and local regulations.				
<i>See Lead Based Paint (Section 7.13) for more information.</i>				
<b>Refrigerant:</b> As part of any refrigerator replacement program, Sub-grantees must reclaim refrigerant per the Clean Air Act of 1990, section 608, as amended by 40 CFR 82, 5/14/93. The appliance vendor, de-manufacturing center, or other entity recovering the refrigerant must possess EPA-approved section 608 type I or universal certification. Sub-grantees should ensure they have appropriate protocols in place that comply with all standards relating to the disposal of the existing appliances.				
<b>Asbestos:</b> Proper disposal of debris is required to adequately clean up the job site. Disposal of debris must meet federal, state and local regulations.				
<i>See Asbestos (Section 7.2 and 7.2a) for more information.</i>				
<b>Mercury:</b> Proper disposal of fluorescent light bulbs is required to adequately clean up the job site. This includes compact fluorescent lamps (CFLs) and other fluorescent light bulbs, which are known to contain mercury. Disposal of the CFLs and fluorescent light bulbs must meet federal, state and local regulations.				

<b>7.12 – Injury Prevention of Occupants and Weatherization Workers (Measures such as repairing stairs and replacing handrails)</b>				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>What guidance do you provide Sub-grantees regarding allowable injury-related repairs (e.g., stairs, handrails, porch deck board)?</b>				
<p>When necessary to effectively weatherize a dwelling unit, the weatherization contractor may make minor repairs and installations to stairs, grab-bars, handrails, porch deck board or other weak structures that are necessary to support the weight of a worker or will be in his path of travel in performing the weatherization measures. The contractor may also remove hazards that protrude out in away where the item may become dangerous to a worker or the client. These minor repairs shall be charged as Incidental Repair measures.</p> <p>The Energy Auditor shall inspect for hazards that may could cause an injury and address, if possible. If conditions exists that are beyond the scope of the weatherization program as defined below, it may be necessary to issue a deferral.</p> <p>When a deferral is necessary, the Sub-grantee shall provide information in writing describing conditions that must be met in order for weatherization work to commence.</p>				
<b>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.</b>				
<p>Minor allowable injury prevention measures are to be considered as Incidental Repair measures and may be installed to create a safe work environment to effectively weatherize the dwelling unit; otherwise these measures are not allowed. There is no specific dollar limit for any individual Incidental Repair measure as long as the entire packet of measures meet or exceed the Savings Investment Ratio (SIR) requirement of the energy audit. All estimated repair costs, including labor and materials, must be included in the SIR calculation. For each weatherized building, the cost of the total packet of energy conservation measures, added to the cost of all Incidental Repair measures for the building, must have a calculated SIR of 1.0 or greater to be eligible.</p>				
<b>Training</b>				
<p>Energy Auditors shall be trained to identify possible hazards that could result in injuries to clients and weatherization workers at the project site.</p>				

### 7.13 – Lead Based Paint

#### Concurrence, Alternative, or Deferral

Concurrence with Guidance       Alternative Guidance       Results in Deferral

#### Funding

DOE       LIHEAP       State       Utility       Other

#### Safe Work Protocols

Lead is highly toxic, especially to young children. Even low levels of lead in infants, children, and pregnant women are associated with impaired cognitive function, behavior difficulties, fetal organ development and other problems. Low levels of lead in children can cause reduced intelligence and impaired hearing. The most common source of lead exposure for children is lead paint in older dwelling units and the contaminated dust and soil it generates. For this reason, it is very important weatherization work is completed in a lead-safe way.

Sub-grantees must ask if a resident of a pre-1978 dwelling unit has been identified as being lead poisoned while living in the dwelling unit. If the answer is yes, proceed with the inspection but coordinate with the local health department before disturbing any paint. If a child has lead poisoning, deferral is required until the child has been treated and is no longer determined to be lead poisoned. A deferral is required when the extent and condition of lead-based paint in the house would potentially create further health and safety hazards.

Contractors must follow the Environmental Protection Agency's (EPA) Lead, Renovation, Repair and Painting Program (RRP) when working in pre-1978 dwelling units unless testing confirms the area to be lead free. Containment is ALWAYS REQUIRED when lead based painted surfaces are disturbed. Complete lead abatement under the Weatherization Assistance Program is not an allowable expense.

**Mobile Homes:** Often, interiors of mobile homes were not painted but rather, paneling was applied to the surfaces. Therefore, pre-1978 mobile homes that were not painted by the manufacturer, occupant, landlord, or past owner of the unit before 1978, may be exempt from lead safe work (LSW) practices. However, Sub-grantees must verify the areas receiving weatherization measures have never been painted or were painted for the first time after 1978. If this is not verifiable, then LSW protocols must be followed. Painted exterior surfaces on pre-1978 mobile homes should not be drilled, scraped, sanded, or receive any other work that disturbs the paint unless LSW protocols are followed.

**Lead Safe Work:** This section does not cover all the requirements for lead safe work (LSW) practices but rather provides some highlights of specific requirements.

**Containment:** Containment is required in all cases when lead safe work (LSW) practices must be performed. The level of containment is determined by the surface area being disturbed. Containment is anything that stops dust and debris from spreading beyond the work area. The level of containment must be determined by the Certified Renovator before work is assigned to the contractor.

**Level 1 Containment** is required in pre-1978 dwelling units when LESS than 6 sq. ft. of interior painted surface per room or LESS than 20 sq. ft. of exterior painted surface will be disturbed. Level 1 containment consists of methods and means for preventing dust generation and contains debris generated during the work process. The specific containment used should be of appropriate type and size for the work being performed. Measures that may fall within this guideline include but are not limited to:

- Installing or replacing a thermostat

- Drilling and patching test holes
- Replacing HEPA filters and cleaning HEPA vacuums
- Changing furnace filter
- Removing caulk or window putty (interior or exterior)
- Removing weather-stripping

**Level 2 Containment** is required when weatherization activities will disturb MORE than 6 sq. ft. of interior surface per room or MORE than 20 sq. ft. of exterior surfaces. Level 2 containment consists of methods that define a work area that will not allow any dust or debris from the work area to spread. Level 2 containment requires the covering of all horizontal surfaces, constructing barrier walls, sealing doorways, covering HVAC registers with approved materials, and closing windows to prevent the spread of dust and debris. Measures requiring level 2 containment MAY include:

- Drilling holes in interior walls for installing insulation
- Drilling holes and/or removing siding on exterior walls
- Cutting attic access into ceiling or knee walls
- Planing a door in place
- Replacing door jambs and thresholds
- Replacing windows or doors
- Furnace replacements

Disturbed Surface Area- When removing painted components or portions of painted components, the entire surface area removed is the amount of painted surface disturbed.

Additionally, Level 2 containment must ALWAYS be used when any of the following is conducted (even if the activities will disturb less than the hazard surface levels within the Level 1 category):

- Window replacement;
- Demolition of painted surfaces;
- Open-flame burning or torching;
- Machines to remove paint through high-speed operation without HEPA exhaust control; and
- Operating a heat gun at temperatures at or above 1100 degrees Fahrenheit.

Proper LSW clean-up and disposal debris is required to adequately clean up the job site. HEPA vacuum must be used to clean up the work areas and further cleaning may be necessary, based on the hazard. Disposal of debris must meet federal, state and local regulations.

Job site set up and cleaning verification is required by an EPA Certified Renovator. Also, installation of measures must be overseen by an EPA Certified Renovator. Sub-grantees will be monitored by the Nevada Housing Division Weatherization Compliance Inspector to confirm that Sub-grantee’s contractors are using lead safe work practices. Sub-grantees are encouraged to obtain Pollution Occurrence Insurance.

Only those costs directly associated with the testing and lead safe work practices for surfaces directly disturbed during weatherization activities are allowable. These costs should be charged to the Health and Safety budget.

**Testing Protocols**

EPA-approved testing is allowed for the purposes of determining the presence of lead in paint that will be disturbed by installation of the weatherization measure(s). However, the testing methods must be economically feasible and justified.

**Client Education**

The Energy Auditor and/or contractor must follow pre-renovation education provisions for the Environmental



Protection Agency's (EAP) Lead; Renovation, Repair and Painting Program (RRP).

When a deferral is necessary, the Sub-grantee shall provide information in writing describing conditions that must be met in order for weatherization work to commence.

#### **Training and Certification Requirements**

All Energy Auditors and contractors working on pre-1978 dwelling units must receive training to install measures in a lead-safe manner in accordance with Standard Work Specifications (SWS) and Environmental Protection Agency (EPA) protocols.

Sub-grantees and contractors must have at least one employee that is an EPA Certified Renovator pursuant to the requirements under the Lead, Renovation, Repair and Painting Program (RRP). Contractors shall obtain their EPA Renovation Lead Safe Firm certification.

#### **Documentation Requirements**

Documentation in the client file must include:

1. A client signed acknowledgment of receipt of an EPA publication, "Renovate Rights, Important Lead Hazard Information for Families Child Care Providers and Schools (Renovate Rights);
2. Name of the Certified Renovator responsible for the project;
3. Any training provided on-site;
4. Description of specific actions taken;
5. Lead testing and assessment documentation; and
6. Photos of site and containment set up.

Sub-grantees shall maintain copies of their own and all contractors required certifications with their office files.

**Client Notification Requirements:** For occupied dwelling units, the Sub-grantee must have an adult tenant or homeowner sign an acknowledgement after receiving the EPA Renovate Right pamphlet. The Renovate Right pamphlet can also be sent by certified mail with receipt to be placed in the customer file.

In multi-unit housing, the agency must provide written notice to each affected unit (notice must describe general nature and locations of the planned renovation activities; the expected starting and ending dates; statement of how occupant can get Renovate Right pamphlet at no charge); or

Post informational signs (signs must describe general nature and locations of the renovation and the anticipated completion date) and post the EPA Renovate Right pamphlet. If Renovate Right pamphlet is not posted then agencies are required to provide information on how interested occupants can review a copy of the Renovate Right pamphlet or obtain a copy at no cost from the Weatherization Assistance Program.

If unable to hand-deliver, acknowledgement can be sent by certified mail, return-receipt requested. A copy of the receipt then goes into the client's file. The owner/occupant must acknowledge receipt of the EPA Renovate Right pamphlet indicating the address of the unit undergoing renovation, name and signature of owner or occupant, and the date of signature prior to the start of renovations. It must be in the same language as "contract for renovation" for an owner occupied (or the same language as the lease for occupant of non-owner occupied) target housing.

If the Sub-grantee cannot obtain a signed acknowledgment (either the occupant is not home or refuses to sign the form), then a self-certification form must be signed to prove delivery. This can be found at the back of the Renovate Right pamphlet.

The acknowledgement form must be filed and remain with the client. In addition to providing a copy of the Renovate Right pamphlet to owners and occupants, Certified Renovator must discuss the hazards associated with lead-based paint and lead dust, and describe how they will conduct LSW in the dwelling unit when possible.

**7.14 – 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       Alternative Guidance       Results in Deferral

**Funding**

DOE       LIHEAP       State       Utility       Other

**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?**

A major indoor air quality problem is excess moisture or humidity in a dwelling unit. Excessive moisture may result in moisture penetration, condensation, and build-up in walls and ceilings. Moisture accumulation may also cause wood rot. Too much indoor moisture or humidity can also lead to the growth of mold and mildew, which can cause adverse health effects for the occupants. As defined in the paragraphs below, limited water damage and source control repair measures related to moisture issues are eligible Health and Safety expenditures. Furthermore, some exterior drainage issues are eligible Incidental Repair measures.

**Eligible Moisture Related Health and Safety Measures:**

Limited water damage and source control repairs are eligible Health and Safety measures when necessary in order to weatherize the dwelling unit and to ensure the long-term stability and durability of the energy conservation measure(s). Limited water damage repairs that can be addressed by contractors are allowed when necessary in order to weatherize the dwelling unit. Examples include repairing water-damaged flooring as part of replacing a water heater. Source control that is a correction of moisture and mold creating conditions is also allowed. This may include repairs to plumbing or sanitary leaks causing moisture problems or damage and sanitization of small areas of mold under a sink or elsewhere necessary for shell sealing. However, source control is independent of latent damage and related repairs.

**Eligible Moisture Related Incidental Repair Measures:**

Exterior drainages needs to be examined for possible issues affecting the dwelling unit and the installation of possible Incidental Repair measures should be considered. To ensure immediate and future health of clients it may be necessary to make minor repairs to gutter and downspout, and install downspouts splash blocks or extensions when basements or crawlspaces have evidence of moisture infiltration. It may also be necessary to install flashings to direct water away from the building and/or foundation where there is evidence of moisture damage due to long term water exposure. A sump pump with associated plumbing and electrical may be installed in basements or crawl spaces to prevent bulk moisture buildup. In cases where sump pumps are installed for moisture management, they should also be vented to allow radon gas that accumulates in the sump pit to evacuate through the vent. Additionally, it may be necessary to make minor drainage or landscape modifications to divert roof or natural water runoff from infiltrating into the foundation provided motorized earth moving equipment is NOT used to make these repairs. All dwelling units with dirt floors in the basement or crawlspace should have a moisture/vapor barrier installed whenever feasible. Moisture/vapor barriers need to be air sealed as well as possible. If mold and moisture issues are severe and cannot be addressed, a deferral is required.

*See Radon (Section 7.16) for more information.*

Mold testing and general mold cleanup are NOT an allowable Health and Safety cost or Incidental Repair measure. In addition, surface preparation where an energy conservation measure (ECM) is being installed should be charged as part of the ECM, not to the Health and Safety budget. For instance, if it is necessary to clean mold off window trim in order to apply caulk this should be part of total cost for that measure.

Energy Auditor shall complete the Moisture and Mold Checklist and while looking for the following indicators to identify potential moisture problems when assessing a client's dwelling unit:

- Damp atmosphere or a musty smell in the dwelling, basement, or crawlspace;
- Mold growth on walls and ceilings, especially in bathrooms and kitchens;
- Mold growth on attic roof sheathing;
- Signs of condensation on walls or window;
- Water damage or mold on the underside of roof decking;
- Evidence of crawlspace moisture;
- Water stains on foundation walls; and
- Client complaints of allergy-like symptoms.

A diagnostic tool such as a moisture meter is recommended pre-weatherization and at the final inspection when mold has been identified as a problem. Controlling moisture is crucial to controlling mold.

**How do you define "minor" or allowable moisture-related measures, and at what point is work considered beyond the scope of weatherization?**

As identified above, limited water damage and source control repairs are eligible Health and Safety measures but may not exceed a total cost of \$750 for moisture-related measures per dwelling unit.

Allowable moisture-related repairs that related to exterior drainage (see above) are to be considered as Incidental Repair measures and may be installed as a way to remedy existing mold and moisture issues in the dwelling unit. There is no specific dollar limit for any individual Incidental Repair measure as long as the entire packet of measures meet or exceed the Savings Investment Ratio (SIR) requirement of the energy audit. All estimated repair costs, including labor and materials, must be included in the SIR calculation. For each weatherized building, the cost of the total packet of energy conservation measures, added to the cost of all Incidental Repair measures for the building, must have a calculated SIR of 1.0 or greater to be eligible.

**Client Education**

If mold and moisture is an issue, the Energy Auditor shall have the client sign the Moisture and Mold Checklist and provide the client with a copy of the Checklist and the Environmental Protection Agency (EPA) pamphlet, A Brief Guide to Mold, Moisture, and Your Home. This pamphlet must be provided prior to weatherization commencing or upon notification of a deferral. Client should acknowledge receipt of the Checklist and the pamphlet.

If necessary, the Energy Auditor, contractor and/or other program staff should educate the client on the importance of cleaning and maintaining drainage systems. Furthermore, it may also be necessary to provide information on proper landscape design and how this impacts site drainage and moisture control.

When a deferral is necessary, the Sub-grantee shall provide information in writing describing conditions that must be met in order for weatherization work to commence.

**Training**

Energy Auditors shall be trained on how to identify mold and moisture issues. Training from EPA or other equivalent programs is recommended. There may also be training opportunities provided by the State and local health departments.

Energy Auditors shall be trained on how to recognize drainage issues.

<b>7.15 – Pests</b>				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>What guidance do you provide Sub-grantees for dealing with pests and pest intrusion prevention in homes slated for weatherization?</b>				
<p>Pest removal is allowed only where infestation will prevent weatherization and/or impact the long-term stability and durability of the energy conservation measures to be installed. Pest remediation should be charged as an Incidental Repair measure. Screening of windows and points of access, and incorporating pest exclusion into air sealing practices to prevent intrusion is allowed.</p> <p>Infestation of pests may be cause for deferral where it cannot be reasonably removed and poses health and safety concerns for worker.</p>				
<b>Define Pest Infestation Thresholds, Beyond Which Weatherization Is Deferred</b>				
<p>Manageable pest infestation remedies are to be considered as Incidental Repair measures and may <u>only</u> be addressed when necessary to effectively weatherize the dwelling unit; otherwise these measures are not allowed. There is no specific dollar limit for any individual Incidental Repair measure as long as the entire packet of measures meet or exceed the Savings Investment Ratio (SIR) requirement of the energy audit. All estimated repair costs, including labor and materials, must be included in the SIR calculation. For each weatherized building, the cost of the total packet of energy conservation measures, added to the cost of all Incidental Repair measures for the building, must have a calculated SIR of 1.0 or greater to be eligible.</p>				
<b>Testing Protocols</b>				
<p>Visual assessment should be performed to determine the presence and degree of infestation and any risk to workers.</p>				
<b>Client Education</b>				
<p>The Energy Auditor should inform client in writing of observed condition and associated risks.</p> <p>When a deferral is necessary, the Sub-grantee shall provide information in writing describing conditions that must be met in order for weatherization work to commence. Client should be requested to contact an exterminator and provide written documentation that the matter has been addressed.</p>				
<b>Training</b>				
<p>Energy Auditors should be trained to assess presence and degree of infestation and associated risks.</p>				

<b>7.16 – Radon</b>				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>What guidance do you provide Sub-grantees around radon?</b>				
<p>Energy Auditors shall provide clients with the Environmental Protection Agency (EPA) Citizen’s Guide to Radon during the initial evaluation. The client file must contain a signed informed consent form prior to receiving weatherization services. (Please see Client Education below.)</p> <p>In dwelling units where radon may be present, the scope of work should include precautionary measures base on the EPA Healthy Indoor Environment Protocols for Home Energy Upgrades, to reduce the possibility of making radon issues worse. This document is available from Nevada Housing Division or at the following web address: <a href="https://www.epa.gov/sites/production/files/2014-12/documents/epa_retrofit_protocols.pdf">https://www.epa.gov/sites/production/files/2014-12/documents/epa_retrofit_protocols.pdf</a></p> <p>Whenever site conditions permit, cover exposed dirt floors within the pressure/thermal boundary with 6 mill (or greater) polyethylene sheeting, lapped at least 12” and sealed with appropriate sealant at all seams, wall and penetrations. Other precautions may include, but are not limited to, sealing any observed floor and/or foundation penetrations, including open sump pits, isolating the basement from the conditioned space, and ensuring crawlspace venting is installed.</p> <p>Allowable radon precautionary measures are to be considered as Incidental Repair measures and may be installed to reduce radon gas from entering the living space of a dwelling unit. There is no specific dollar limit for any individual Incidental Repair measure as long as the entire packet of measures meet or exceed the Savings Investment Ratio (SIR) requirement of the energy audit. All estimated repair costs, including labor and materials, must be included in the SIR calculation. For each weatherized building, the cost of the total packet of energy conservation measures, added to the cost of all Incidental Repair measures for the building, must have a calculated SIR of 1.0 or greater to be eligible.</p> <p>Radon mitigation is <u>NOT</u> an allowable Health and Safety cost.</p>				
<b>Testing Protocols</b>				
<p>Testing is an allowable Health and Safety cost and may occur in single units (excluding mobile homes) in areas having high levels of radon (&gt;4pCi//L). All testing must be performed in accordance with EPA protocol for testing to be considered valid. If EPA testing conditions cannot be met, testing should not occur.</p>				
<b>Client Education</b>				
<p>Sub-grantees must provide all clients EPA’s A Citizen’s Guide to Radon, which is available from the Nevada Housing Division or the following web address: <a href="https://www.epa.gov/sites/production/files/2016-12/documents/2016_a_citizens_guide_to_radon.pdf">https://www.epa.gov/sites/production/files/2016-12/documents/2016 a citizens guide to radon.pdf</a></p> <p>Documentation of informed consent. The inform consent form must include:</p> <ul style="list-style-type: none"> <li>• Information from the results of the IAO Study that there is a small risk of increasing radon levels when building tightness is improved;</li> <li>• A list of precautionary measures the Weatherization Assistance Program will install based on the EPA Healthy Indoor Protocols;</li> <li>• Some of the benefits of Weatherization including energy savings, energy cost savings, improved home</li> </ul>				

comfort, and increased safety; and
<ul style="list-style-type: none"><li>• Confirmation that EPA's A Citizen's Guide to Radon was received and radon related risks discussed with the client.</li></ul>
<b>Training and Certification Requirements</b>
Energy Auditors must have knowledge of radon, what it is and how it occurs, including what factors may make radon worse, and precautionary measures that may be helpful. However, no specific certifications are required.
Contractors must be trained in proper vapor barrier installation.
A zonal map can be obtained from the Nevada Housing Division or the following web address: <a href="https://www.epa.gov/radon/epa-map-radon-zones">https://www.epa.gov/radon/epa-map-radon-zones</a>
<b>Documentation Requirements</b>
None at this time.



<b>7.17 – Safety Devices: Smoke and Carbon Monoxide Alarms, Fire Extinguishers</b>				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>What is your policy for installation or replacement of the following:</b>				
<b>Smoke Detectors:</b> Smoke detectors may be installed where detectors are not present or are inoperable. The cost for smoke detectors shall be charged to the Health and Safety budget.				
<b>Carbon Monoxide Alarms:</b> Carbon monoxide alarms may be required to be installed where alarms are not present or are inoperable. The cost for carbon monoxide alarms shall be charged to the Health and Safety budget.  When a dwelling unit has any combustion appliances or an attached garage at least one carbon monoxide alarm must be present in the unit. If an entire multifamily building is to receive weatherization services, a carbon monoxide alarm should be present or installed in each unit of the complex as necessary, unless the complex doesn't have any combustion appliances.				
<b>Fire Extinguishers:</b> Fire extinguishers may be provided when solid fuel burning equipment is present. The cost for fire extinguishers shall be charged to the Health and Safety budget.  Sub-grantees shall determine the location and number of smoke detectors, carbon monoxide alarms and fire extinguishers for each project. Local code requirements should be considered in making this determination. Manufacture's installation recommendations may also be used to select the appropriate mounting location when a new detector or alarm is installed.				
<b>Testing Protocols</b>				
Energy Auditors shall check existing devices and verify the operation of any installed detectors, alarms and fire extinguishers.				
<b>Client Education</b>				
Energy Auditors shall provide clients with verbal and written information on use of devices installed.				
<b>Training</b>				
Sub-grantee shall train their Energy Auditors where to install detectors and alarms in accordance with local code compliance and manufacture's recommendations.				

<b>7.18 – Occupant Health and Safety Concerns and Conditions</b>				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>What guidance do you provide Sub-grantees for soliciting the occupants' health and safety concerns related to components of their homes?</b>				
Sub-grantees shall discuss with occupants any health and safety concerns related to the components in their dwelling units prior to conducting the energy audit. Sub-grantees may want to request that applicants list any health and safety concerns as part of the application process allowing the Energy Auditor to use that as a starting point for the discussion when the Energy Auditors first go to the project location.				
<b>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?</b>				
Sub-grantees shall complete the Health Assessment Evaluation Form to determine whether any occupants may suffer from health conditions that could potentially be negatively affected by the installation of energy conservation measures or weatherization activities. The Health Assessment Evaluation Form is to be completed during the course of the initial interview with the client. Sub-grantees are to question the client whether they or any household members have asthma, allergies, lead poisoning or respiratory problems. The Sub-grantees are to provide a copy of the Health Assessment Evaluation Form to the Energy Auditor conducting the initial energy audit.				
<b>What guidance do you provide Sub-grantees for dealing with potential health concerns when they are identified?</b>				
The Energy Auditor is to determine if an existing health problem would be worsened by installing any of the energy conservation measures or conducting any of the weatherization test procedures. If the work could result in making an existing condition worse, the measure or activity will be disallowed. The Energy Auditor is to discuss any measure or activity being disallowed with the client and state the measure/activity being disallowed on the Form.				
<b>Client Education</b>				
Using the Health Assessment Evaluation Form, the Energy Auditor shall provide the client with a copy of the signed Form before any weatherization services may be performed. The Energy Auditor shall explained to the client the impact of installing energy conservation measures or weatherization activities described in the Form that could have negatively affect the occupant's health.				
When a deferral is necessary, the Sub-grantee shall provide information in writing describing conditions that must be met in order for weatherization work to commence.				
Documentation Form(s) have been developed and comply with guidance?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sub-grantees shall use the Health Assessment Evaluation Form provide by the Nevada Housing Division.				

<b>7.19 – Ventilation and Indoor Air Quality</b>				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>Identify the Most Recent Version of ASHRAE 62.2 Implemented (optional: identify Addenda used)</b>				
<p>Sub-grantees shall 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 action to prevent zonal pressure differences greater than three pascals across the closed door, if one exists.</p> <p>Per Department of Energy WAP Memorandum 007, ASHRAE 62.2 Ventilation Standard has been amended to include “Addendum b”. This allows for a minimum air flow requirement for existing buildings below which installation of whole-house ventilation is not required and would include the 15 cfm threshold.</p>				
<b>Testing and Final Verification Protocols</b>				
Energy Auditors shall conduct an ASHRAE 62.2 evaluation to determine required ventilation by measuring fan flow of existing fans and of installed equipment for the purpose of verifying performance.				
<b>Client Education</b>				
<p>Energy Auditors shall provide clients with information on function, use, and maintenance (including location of service switch and cleaning instructions) of ventilation system and components. Any manual from installed equipment shall also be provided to the client.</p> <p>The Sub-grantee shall request that the client sign the Nevada Housing Division Home Ventilation Agreement for the installation of mechanical ventilation in all dwelling units that do not already meet the ASHRAE 62.2 standard for residential ventilation. If the client is unwilling to have the necessary mechanical ventilation installed, the project shall be deferred.</p> <p>When a deferral is necessary, the Sub-grantee shall provide information in writing describing conditions that must be met in order for weatherization work to commence.</p> <p>Upon final inspection, the Energy Auditor shall explain that ASHRAE 62.2 standard does not account for high polluting sources or guarantee indoor air quality at any set level.</p>				
<b>Training</b>				
Energy Auditors shall receive ASHRAE 62.2 training, including proper sizing, evaluation of existing and new systems. When a new version of ASHRAE 62.2 is adopted by the Nevada Housing Division, training shall be provided to Energy Auditors and contractors to successfully implement the new standard.				

<b>7.20 – Window and Door Replacement, Window Guards</b>				
<b>Concurrence, Alternative, or Deferral</b>				
Concurrence with Guidance <input checked="" type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>		
<b>Funding</b>				
DOE <input checked="" type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/>	Utility <input type="checkbox"/>	Other <input type="checkbox"/>
<b>What guidance do you provide to Sub-grantees regarding window and door replacement and window guards?</b>				
<p>Replacement, repair or installation of windows and doors may be eligible in some cases:</p> <ul style="list-style-type: none"> <li>• Repair or replacement of windows and/or doors that allow water infiltration into a building structure cannot be repaired as Health and Safety measure but may be allowed as an Incidental Repair measure or efficiency measure if it is cost justified.</li> <li>• Repair of trim and/or flashings around windows or doors to prevent water infiltration cannot be repaired as Health and Safety but may be allowed as an Incidental Repair measure or efficiency measure if it is cost justified.</li> <li>• Replacement of skylights that leak water and have visible evidence of moisture damage (beyond water staining) and deterioration of the window assembly or building material around the window cannot be repaired as Health and Safety but are allowed as an Incidental Repair measure or efficiency measure if it is cost justified.</li> <li>• Window guards are not an allowable Health and Safety cost nor an eligible Incidental Repair measure.</li> </ul> <p>Window and door repairs or replacements that are to be considered as Incidental Repair measures may be installed <u>only</u> when necessary to effectively weatherize the dwelling unit; otherwise these measures are not allowed. There is no specific dollar limit for any individual Incidental Repair measure as long as the entire packet of measures meet or exceed the Savings Investment Ratio (SIR) requirement of the energy audit. All estimated repair costs, including labor and materials, must be included in the SIR calculation. For each weatherized building, the cost of the total packet of energy conservation measures, added to the cost of all Incidental Repair measures for the building, must have a calculated SIR of 1.0 or greater to be eligible.</p>				
<b>Testing Protocols</b>				
A visual inspection is required to determine what may need to be done.				
<b>Client Education</b>				
Energy Auditors shall provide clients with written information on lead risks wherever issues are identified.				
<b>Training</b>				
Energy Auditors shall be made aware of guidance on this matter.				

## 7.21 – Worker Safety (OSHA, etc.)

### Concurrence, Alternative, or Deferral

Concurrence with Guidance       Alternative Guidance       Results in Deferral

### Funding

DOE       LIHEAP       State       Utility       Other

### How do you verify safe work practices? What is your policy for in-progress monitoring?

Sub-grantees are responsible to ensure all weatherization contractors follow the Nevada Occupational Safety and Health Administration (OSHA) standards where required and take precautions to ensure the health and safety of themselves and other workers. Information is available at the United States Department of Labor website:

<https://www.osha.gov/>

All Sub-grantees and contractors must maintain compliance with the current OSHA Hazard Communication Standard, including on-site organized Safety Data Sheets (SDS).

#### [Hazard Communication Standard](#)

**In order to ensure chemical safety in the workplace, information about the identities and hazards of the chemicals must be available and understandable to workers. OSHA's Hazard Communication Standard (HCS) requires the development and dissemination of such information:**

- Chemical manufacturers and importers are required to evaluate the hazards of the chemicals they produce or import, and prepare labels and safety data sheets to convey the hazard information to their downstream customers;
- All employers with hazardous chemicals in their workplaces must have labels and safety data sheets for their exposed workers, and train them to handle the chemicals appropriately.

#### [Major changes to the Hazard Communication Standard](#)

- **Hazard classification:** Provides specific criteria for classification of health and physical hazards, as well as classification of mixtures.
- **Labels:** Chemical manufacturers and importers will be required to provide a label that includes a harmonized signal word, pictogram, and hazard statement for each hazard class and category. Precautionary statements must also be provided.
- **Safety Data Sheets:** Will now have a specified 16-section format.
- **Information and training:** Employers are required to train workers by December 1, 2013 on the new labels elements and safety data sheets format to facilitate recognition and understanding.

More information on the Hazard Communication Standard is available at the following website:

<https://www.osha.gov/dsg/hazcom/index.html>

The Weatherization Compliance Inspector will be conducting random in-progress monitoring of active weatherization projects to ensure compliance with OSHA standards verifying the use of safe work practices by the workers on the job site.

**Training and Certification Requirements**

Energy Auditors and contractors must have the minimum 10 hour OSHA training and ongoing training as may be required in the Hazard Communication Program. Sub-grantees shall maintain applicable certification of their Energy Auditors and contractors making this information available during NHD monitoring process.

Sub-grantees shall also ensure Energy Auditors and contractors are trained in the use and importance of personal protection equipment.

7.22 – <Add in Topic> Reserved		
Concurrence, Alternative, or Deferral		
Concurrence with Guidance <input type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>
Funding		
DOE <input type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
Remediation Protocols		
Testing Protocols		
Client Education		
Training		

7.23 – <Add in Topic> Reserved		
Concurrence, Alternative, or Deferral		
Concurrence with Guidance <input type="checkbox"/>	Alternative Guidance <input type="checkbox"/>	Results in Deferral <input type="checkbox"/>
Funding		
DOE <input type="checkbox"/>	LIHEAP <input type="checkbox"/>	State <input type="checkbox"/> Utility <input type="checkbox"/> Other <input type="checkbox"/>
Remediation Protocols		
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