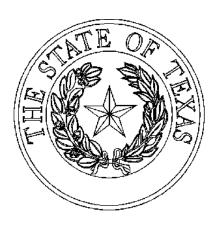
2015 DOE WAP STATE PLAN DRAFT

TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS



PY 2015 STATE PLAN & APPLICATION FOR WEATHERIZATION ASSISTANCE PROGRAM FOR LOW-INCOME PERSONS

MARCH 2015

OMB Number: 4040-004

APPLICATION FOR FEDERAL ASSISTANCE SF-424	Version 02
1. Type of Submission: Preapplication X Application Changed/Corrected Application 3. Date Received	
3. Date Neceived	4. Applicant identilier.
5a. Fed Entity Identifier:	5b. Federal Award Identifier: DE-EE0006186
State Use Only:	
6. Date Received by State: 04/01/2013	7. State Application Identifier: TX-W-200
8. APPLICANT INFORMATION:	
a. Legal Name: STATE OF TEXAS	
b. Employer/Taxpayer Identification Number (EIN/TIN): 742610542	c. Organizational DUNS: 806781902
d. Address:	
Street 1: P.O. BOX 13941 Street 2:	
City: AUSTIN County:	
State: TX	
Province:	
Country: U.S.A.	
Zip / Postal Code: 787113941	
e. Organizational Unit:	Division Name:
Department Name: TEXAS HOUSING & COMMUNITY AFF.	TEXAS DEPT. OF HOUSING & COMMUNITY AFFAIRS
	analization.
f. Name and contact information of person to be contacted on matters involving this	application:
Prefix: Mr First Name: Michael Middle Name: Last Name: DeYoung Suffix:	
Title: Community Affairs Division Director	
Organizational Affiliation: Texas Dept. of Housing and Community Affairs	
Telephone Number: 5124752125	Fax Number: 5124753935
Email: michael.deyoung@tdhca.state.tx.us	

OMB Number: 4040-004 xpiration Date: 08/31/2016

	Expiration Date: 08/31/2016
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-0002015	
Title:	
2015 Weatherization Assistance Funding Opportunity	
13. Competition Identification Number:	
Title:	
14. Areas Affected by Project (Cities, Counties, States, etc.):	
Statewide	
15. Descriptive Title of Applicant's Project:	
Provide Statewide Weatherization Assistance	

OMB Number: 4040-004 Expiration Date: 08/31/2016

APPLICATION I	FOR FEDERAL ASSISTANCE SF-424			Version 02
16.Congressional Di	strict Of:			
a. Applicant:	Texas Congressional District 01	b. Program/Project:	TX-Statewide	
Attach an additional	list of Program/Project Congressional Districts if needed	l:		
17. Proposed Projec	t:			
a. Start Date:	04/01/2013	b. End Date:	06/30/2015	
18. Estimated Fundi	ng (\$):			
a. Federal	4,657,454.00			
b. Applicant	0.00			
c. State	0.00			
d. Local	0.00			
e. Other	0.00			
f. Program Income	0.00			
g. TOTAL	4,657,454.00			
a. This applica b. Program is X c. Program is	ation was made available to the State under the Executive O subject to E.O. 12372 but has not been selected by the State not covered by E.O. 12372 Delinquent On Any Federal Debt? (If "Yes", provide explan	order 12372 Process for review	von:	
No				
herein are true, com comply with any res may subject me to c	application, I certify (1) to the statements contained in the plete and accurate to the best of my knowledge. I also proulting terms if I accept an award. I am aware that any false riminal, civil, or administrative penalties. (U.S. Code Title attitudes) titions and assurances, or an internet site where you may obtain	ovide the required assurance e, fictitious, or fraudulent sta 218, Section 1001)	s** and agree to tements or claims	(
Authorized Represe	entative:			
Prefix:	Mr First Name: Timothy			
Middle Name:	K.			
Last Name:	Irvine			
Suffix:				
Title:	Executive Director			
Telephone Number:	5124753296	Fax Number: 512	24753858	
Email:	tim.irvine@tdhca.state.tx.us			
Signature of Authoriz Authorized for Local Repro			Date Signed:	01/23/2015 Standard Form 424 (Revised 10/2005) Prescribed by OMB Circular A-102

${\bf BUDGET\ INFORMATION\ -\ Non-Construction\ Programs}$

		Program/Project Title Weatherization Assistance Program	am	
3. Name and Address	STATE OF TEXAS		4. Program/Project Start Date	04/01/2013
	P.O. BOX 13941 AUSTIN, TX 787113941		5. Completion Date	06/30/2015

	SECTION A - BUDGET SUMMARY					
Grant Program		Estimated Uno	bligated Funds	N	New or Revised Budg	et
Function or Activity (a)	Federal Catalog No. (b)	Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. 2015 WAP Formula Funds	81.042	\$ 0.00		\$ 4,657,454.00		\$ 4,657,454.00
2. STATE			\$ 0.00		\$ 0.00	\$ 0.00
3.						
4.						
5. TOTAL		\$ 0.00	\$ 0.00	\$ 4,657,454.00	\$ 0.00	\$ 4,657,454.00

SECTION B - BUDGET CATEGORIES					
6. Object Class Categories		Grant Program, Fu	nction or Activity		Total
	(1) GRANTEE ADMINISTR ATION	(2) SUBGRANTE E ADMINISTR	(3) GRANTEE T&TA	(4) SUBGRANT EE T&TA	(5)
a. Personnel	\$ 125,273.00	\$ 0.00	\$ 120,835.00	\$ 0.00	\$ 246,108.00
b. Benefits	\$ 31,318.00	\$ 0.00	\$ 30,209.00	\$ 0.00	\$ 61,527.00
c. Travel	\$ 12,090.00	\$ 0.00	\$ 38,490.00	\$ 0.00	\$ 50,580.00
d. Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
e. Supplies	\$ 2,000.00	\$ 0.00	\$ 722.00	\$ 0.00	\$ 2,722.00
f. Contract	\$ 0.00	\$ 391,669.00	\$ 0.00	\$ 195,000.00	\$ 4,174,581.00
g. Construction	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
h. Other	\$ 5,820.00	\$ 0.00	\$ 5,367.00	\$ 0.00	\$ 11,187.00
i. Total Direct Charges	\$ 176,501.00	\$ 391,669.00	\$ 195,623.00	\$ 195,000.00	\$ 4,546,705.00
j. Indirect	\$ 56,373.00	\$ 0.00	\$ 54,376.00	\$ 0.00	\$ 110,749.00
k. Totals	\$ 232,874.00	\$ 391,669.00	\$ 249,999.00	\$ 195,000.00	\$ 4,657,454.00
7. Program Income	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

${\bf BUDGET\ INFORMATION\ -\ Non-Construction\ Programs}$

Program/Project Identification No. EE0006186		Program/Project Title Weatherization Assistance Program	nm	
3. Name and Address	STATE OF TEXAS		4. Program/Project Start Date	04/01/2013
	P.O. BOX 13941 AUSTIN, TX 787113941		5. Completion Date	06/30/2015

SECTION A - BUDGET SUMMARY						
Grant Program		Estimated Unc	bligated Funds	Λ	New or Revised Budg	get
Function or Activity (a)	Federal Catalog No. (b)	Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.						
2.						
3.						
4.						
5. TOTAL		\$ 0.00	\$ 0.00	\$ 4,657,454.00	\$ 0.00	\$ 4,657,454.00

SECTION B - BUDGET CATEGORIES					
6. Object Class Categories		Grant Program, Fu	nction or Activity		Total
	(1) PROGRAM OPERATION S	(2) HEALTH AND SAFETY	(3) LIABILITY INSURANCE	(4) FINANCIAL AUDITS	(5)
a. Personnel	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 246,108.00
b. Benefits	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 61,527.00
c. Travel	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 50,580.00
d. Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
e. Supplies	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 2,722.00
f. Contract	\$ 2,751,207.00	\$ 687,802.00	\$ 128,103.00	\$ 20,800.00	\$ 4,174,581.00
g. Construction	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
h. Other	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 11,187.00
i. Total Direct Charges	\$ 2,751,207.00	\$ 687,802.00	\$ 128,103.00	\$ 20,800.00	\$ 4,546,705.00
j. Indirect	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 110,749.00
k. Totals	\$ 2,751,207.00	\$ 687,802.00	\$ 128,103.00	\$ 20,800.00	\$ 4,657,454.00
7. Program Income	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

DOE F 540.2 OMB Control No: 1910-5127 Expiration Date: 11/30/2016

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

(Grant Number: EE0006186, State: TX, Program Year: 2015)

IV.1 Subgrantees

Subgrantee (City)	Planned Funds/Units
Alamo Area Council of Governments (San Antonio)	\$339,832.00 33
Big Bend Community Action Committee (Marfa)	\$61,024.00 5
Brazos Valley Community Action Agency (College Station)	\$138,363.00 13
Combined Community Action, Inc. (Giddings)	\$92,038.00 8
Community Action Committee of Victoria Texas (Victoria)	\$125,531.00 12
Community Action Corporation of South Texas (Alice)	\$340,801.00 33
Community Council of South Central Texas, Inc (Seguin)	\$84,617.00 8
Community Services, Inc. (Corsicana)	\$239,384.00 23
Concho Valley Community Action Agency (San Angelo)	\$77,326.00 7
Dallas County Health & Human Services (Dallas)	\$327,565.00 32
Economic Opportunities Advancement Corporation (Waco)	\$81,658.00 7
El Paso Community Action Program, Project Bravo (El Paso)	\$188,330.00 18
Fort Worth, City of (Fort Worth)	\$202,150.00 19
Greater East Texas Community Action Program (Nacogdoches)	\$237,404.00 23
Hill Country Community Action Association, Inc. (San Saba)	\$112,993.00 10
Neighborhood Centers Inc. (Houston)	\$516,738.00 53
Nueces County Community Action Agency (Corpus Christi)	\$69,763.00 6
Panhandle Community Services (Amarillo)	\$115,023.00 11
Rolling Plains Management Corporation (Crowell)	\$155,270.00 15
South Plains Community Action Associaiton, Inc. (Levelland)	\$104,660.00 10
TBD (Reserved for Cameron and Willacy counties)	\$128,032.00 12
Texoma Council of Governments (Sherman)	\$123,845.00 12
Travis County Health and Human Services and Veterans Services (Austin)	\$126,353.00 12
Tri-County Community Action, Inc. (Center)	\$72,041.00 6
	U

DOE F 540.2

OMB Control No: 1910-5127 (08/05)Expiration Date: 11/30/2016

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

(Grant Number: EE0006186, State: TX, Program Year: 2015)

West Toyos Omnortunities (Lemess)	\$113,840.00
West Texas Opportunities (Lamesa)	11
Total	\$4,174,581.00
Total:	399

IV.2 WAP Production Schedule

Weatherization Plans	Units
Total Units (excluding reweatherized)	399
Reweatherized Units	0
Note: Planned units by quarter or category are no longer required, no information required for persons.	

Avei	Average Unit Costs, Units subject to DOE Project Rules					
VEH	VEHICLE & EQUIPMENT AVERAGE COST PER DWELLING UNIT (DOE RULES)					
A	Total Vehicles & Equipment (\$5,000 or more) Budget	\$0.00				
В	Total Units Weatherized	399				
C	Total Units Reweatherized	00				
D	Total Dwelling Units to be Weatherized and Reweatherized (B + C)	399				
Е	Average Vehicles & Equipment Acquisition Cost per Unit (A divided by D)	\$0.00				
AVE	RAGE COST PER DWELLING UNIT (DOE RULES)					
F	Total Funds for Program Operations	\$2,751,207.00				
G	Total Dwelling Units to be Weatherized and Reweatherized (from line D)	399				
Н	Average Program Operations Costs per Unit (F divided by G)	\$6,895.26				
I	Average Vehicles & Equipment Acquisition Cost per Unit (from line E)	\$0.00				
J	Total Average Cost per Dwelling (H plus I)	\$6,895.26				

IV.3 Energy Savings

Method used to calculate savings: ☑ WAP algorithm ☐ Other (describe below)						
Method used to calculate savings description:						
This year estimated energy savings (MBtus):	12,169					
Prior year estimated energy savings (MBtus):	21,411 Actual: .					

IV.4 DOE-Funded Leveraging Activities

IV.5 Policy Advisory Council Members

	Type of organization: Non-profit (not a financial institution)				
Combined Community Action Inc	Contact Name:	Kelly Franke			
Combined Community Action Inc.	Phone:	(979)540-2985			
	Email:	KJFranke@ccaction.com			
	Type of organization:	Non-profit (not a financial institution)			
Constant Foot Town Community Astion December	Contact Name:	Karen Swenson, Executive Director			
Greater East Texas Community Action Program	Phone:	(936)564-2491			

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

(Grant Number: EE0006186, State: TX, Program Year: 2015)

	Email:	kswenson@sbcglobal.net
	Type of organization:	Unit of State Government
Bailmand Commission of Tayon Alt Fuels Div	Contact Name:	Heather Ball, Dir. Marketing & Public Education
Railroad Commission of Texas, Alt. Fuels Div.	Phone:	(512)463-7359
	Email:	heather.ball@rrc.state.tx.us
	Type of organization:	Unit of State Government
Toyog Donortment of Aging and Disability Comings	Contact Name:	Toni Packard
Texas Department of Aging and Disability Services	Phone:	(512)438-4290
	Email:	toni.packard@dads.state.tx.us
	Type of organization:	Indian Tribe
Ysleta del Sur Pueblo Housing Department	Contact Name:	Al Joseph
I sieta dei Sui Fuebio Housing Department	Phone:	(915)859-9196
	Email:	ajoseph@ydsp-nsn.gov

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
04/06/2015	Public Hearing for the Texas 2015 WAP Plan will be held on April 06, 2015.
04/06/2015	The WAP Policy Advisory Council meeting will be held on April 06, 2015. (See Attachment to SF-424 for transcript of the WAP PAC meeting).
03/27/2015	Notice of Public Hearing for the Texas 2015 WAP Plan will be posted in the March 27, 2015 edition of the Texas Register. (See Attachment to SF-424 for Notice of Public Hearing).
03/12/2015	The TDHCA Board of Directors will authorize release of the plan for public comment.

IV.7 Miscellaneous

Recipient Business Officer

Michael De Young Michael.deyoung@tdhca.state.tx.us 221 East 11th Street Austin, Texas 78701 (512) 475--2125

Recipient Principal Investigator

Michael De Young Michael.deyoung@tdhca.state.tx.us 221 East 11th Street Austin, Texas 78701 (512) 475--2125

Policy Advisory Council

The Policy Advisory Council ("PAC") is broadly representative of organizations and agencies and provides balance, background, and sensitivity with respect to solving the problems of low-income persons, including weatherization and energy conservation problems. Historically, the PAC has met annually after the public hearing for the DOE plan.

The low-income elderly population is represented by the PAC members from Combined Community Action and the Greater East Texas Community Action Association. The low-income persons with disabilities population is represented by the PAC member from the Texas Department of Aging and Disability Services. The low-income Native American population is represented by the PAC member from the Ysleta del Sur Pueblo Housing Department,

Liability Insurance

The liability insurance separate line item includes pollution occurrence insurance in addition to the general liability insurance. Most regular liability insurance policies do not provide coverage for pollution occurrence. If Subgrantees require additional funding for liability insurance, they must first provide the Department with three price quotes. When approved, additional liability insurance costs may be paid from administrative or program support categories. The Department strongly recommends the Subgrantees require their contractors to carry pollution occurrence insurance to avoid liability for any mistakes the contractors may make. Each Subgrantee should get a legal opinion regarding the best course to take for implementing the pollution occurrence insurance coverage.

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

V.1 Eligiblility

V.1.1 Approach to Determining Client Eligibility

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

Pursuant to Weatherization Program Notice ("WPN") 15-3, eligible households will have an income that is at or below 200% of the federal poverty level. Households that contain a member who has received cash assistance payments under Title IV (Temporary Assistance to Needy Families or "TANF") or XVI (Supplemental Security Income for the Aged, Blind, and Disabled or ("SSI") of the Social Security Act or applicable State or local law at any time during the 12-month period preceding the determination of eligibility for weatherization assistance shall be categorically eligible.

Describe what household Eligibility basis will be used in the Program

Subgrantees shall follow the Department's Texas Administrative Code rules, Title 10, Part 1, Chapter 5, when considering eligibility and income determination criteria. The Department will ensure that its Subgrantees have determined eligibility criteria based upon:

Defined terms as detailed in 10 TAC §5.2; and

Income eligibility guidelines as detailed in 10 TAC §5.19, as amended to comply with WPN 15-3.

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

The Welfare Reform Act, officially referred to as the Personal Responsibility and Work Opportunity Act of 1996, H.R. 3734, placed specific restrictions on the eligibility of aliens for "Federal means-tested public benefits" for a period of five years. As defined in a Federal Register notice dated August 26, 1997 (62 FR 45256) the Department of Health and Human Services (HHS) is interpreting "Federal means-tested public benefits" to include only those benefits provided under Federal means-tested, mandatory spending programs. HHS Information Memorandum LIHEAP-IM-25 dated August 28, 1997, states that all qualified aliens, regardless of when they entered the U.S., continue to be eligible to receive assistance and services under the Low-Income Home Energy Assistance Program (LIHEAP) if they meet other program requirements.

To ensure program continuity between LIHEAP and DOE Weatherization for the many Subgrantees operating both programs, the DOE Weatherization Assistance Program will follow the interpretation as adopted by HHS. The primary area of confusion resides in the types of local agencies that are exempt/nonexempt from "status verification requirements." Local agencies that are both charitable and nonprofit would be exempt, which comprise about three-quarters of the local agency network. However, those agencies which are designated as local government agencies operating the Weatherization Assistance Program and do not subgrant eligibility determination to a qualified nonprofit organization would not be exempt and, therefore, must conduct "status verification." WAP Subgrantees that are not exempt shall use the Systematic Alien Verification for Entitlements (SAVE) system to verify the status of qualified aliens that apply for weatherization services.

The DOE and LIHEAP WAP are in compliance with LIHEAP-IM-99-10 issued June 15, 1999 retracting any requirement that weatherization providers must do any type of certification of alien status in multifamily buildings.

V.1.2 Approach to Determining Building Eligibility

Procedures to determine that units weatherized have eligibility documentation

Subgrantees maintain a client file for each unit weatherized, including documented proof that the dwelling unit is an eligible dwelling unit as defined in 10 CFR §440.22. The Department determines that weatherized units have eligibility documentation during monitoring reviews.

Describe Reweatherization compliance

Texas limits reweatherization to 5% of all units weatherized. To ensure the cap is not exceeded, Subgrantees may not reweatherize a unit without prior approval

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from the Department.

Reweatherization will be allowed on units that have received limited weatherization prior to September 30, 1994. A new energy audit must be conducted on each unit reweatherized

Describe what structures are eligible for weatherization

10 TAC §5.2 includes the following definitions which describe structures eligible for weatherization:

Dwelling Unit--A house, including a stationary mobile home, an apartment, a group of rooms, or a single room occupied as separate living quarters.

Multifamily Dwelling Unit--A structure containing more than one Dwelling Unit.

Rental Unit.-A Dwelling Unit occupied by a person who pays rent for the use of the Dwelling Unit.

Shelter--A Dwelling Unit or units whose principal purpose is to house on a temporary basis individuals who may or may not be related to one another and who are not living in nursing homes, prisons, or similar institutional care facilities.

Describe how Rental Units/Multifamily Buildings will be addressed

In accordance with 10 CFR §440.22(b)(3), the Department requires that Subgrantees keep on file procedures that address protection of renters' rights, to ensure:

- Written permission of the building owner or his agent before commencing work.
- Cash/in-kind contribution from building owner when feasible.
- Benefits of the services accrue primarily to the low-income tenants residing in such units.
- For a reasonable period of time after completion, the household will not be subjected to rent increases (unless those increases are demonstrably related to other matters other than the weatherization work performed).
 - o There are adequate procedures whereby the Grantee can receive tenant complaints and owners can appeal, should rental increases occur.
- No undue or excessive enhancement shall occur to the value of the dwelling unit.
- To secure the federal investment and to address issues of eviction from and sale of property, per 10 CFR §440.22(c), Grantees may seek landlord agreement to placement of a lien (or other contractual restrictions) upon the property being weatherized.

The Department will abide by 10 CFR §440.22, ensuring that not less than 66% of the eligible building units (50% for duplexes and four-unit buildings, and certain eligible types of large multifamily buildings) are eligible units or will become eligible dwelling units within 180 days under a Federal, State or local government program for rehabilitating the building or making similar improvements. WPN 10-15 provides guidance on Department of Housing and urban Development ("HUD") and Department of Agriculture ("USDA") multifamily buildings that have been pre-determined to meet income eligibility guidelines. WPN 11-09 provides guidance on the review and verification required for those buildings. Assessments and client file documentation for rental units and multifamily units are also detailed in the Multifamily Weatherization Best Practice posted on the Department's website at http://www.tdhca.state.tx.us/community-affairs/wap/docs/WAP-BP-MFWeatherization.pdf.

Because large multifamily buildings have different audit requirements, Subgrantees must obtain prior written approval through the Department to use the 50% eligibility, and DOE must approve the proposed activity. The Department will seek DOE approval.

Describe the deferral Process

A dwelling unit should not be weatherized when there is a potentially harmful situation that may adversely affect the occupants or the agency's weatherization crew and staff. Only after the unit owner corrects the problems shall weatherization work begin. It is not necessarily the responsibility of the Subgrantee to correct such problems. The crew must declare their intent to defer weatherization on an eligible unit on the audit form. The audit form should include the client's name and address, dates of the audit/assessment, and the date on which the client was informed of the issue in writing. The written notice to the client must include a clear description of the problem, conditions under which weatherization could continue, the responsibility of all parties involved, and any rights or options the client has. A copy of the notice must be given to the client, and a signed copy placed in the client application file.

Should a client request a second opinion on a deferral or walk-away, the Subgrantee is encouraged to contact the appropriate local government inspector to request an inspection of the site. Should the client refuse to have a local government inspector inspect the unit, the crew will note the refusal in the client file, and no work shall be performed on the unit. If the inspector deems that work pending deferral can or should be performed, crews/contractors and contractors are

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encouraged to work with the inspector's suggestions to make the improvements. However, the inspector does not make the final determination on the amount of work, cost of work, or measures applied to the unit. Should the Subgrantee deem the suggested measures to be financially or programmatically out of the scope of weatherization, the Subgrantee may defer the weatherization work on the unit. Documentation of this determination, whether the weatherization is completed or not, must be included in the client file.

Crewmembers or contractors who work on a unit that could or should be a deferral or walk-away do so at their own risk.

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.

The 70th Texas Legislature created the Native American Restitutionary Program (Oil Overcharge Restitutionary Act, Texas Government Code, Chapter 2305) for the purposes of providing oil overcharge restitution to the Texas Native Americans. In the Texas WAP, the Native-American Indian population is treated and served in the same manner as other applicants.

V.2 Selection of Areas to Be Served

The Texas WAP is available to eligible low-income households in all 254 counties of the state. Subgrantees are held responsible for all intake, eligibility, and weatherization activities. If the Subgrantees' performance record is satisfactory according to both state and federal regulations, then the Department will offer to renew the contract if the Subgrantee so desires. The Department's award committee may decline to recommend an award or place additional conditions on an award based upon its previous participation review as outlined in 10 TAC §1.5.

New or additional DOE subgrantees for counties that become unserved by the DOE WAP will be selected according to DOE regulations found in 10 CFR§440.15. A new or additional subgrantee is defined as a CAA or other public or nonprofit entity that is not currently operating a Department-funded Weatherization Assistance Program. At present, all Texas counties are served with a network of 25 existing Subgrantees. This number is subject to change depending on the needs of the program throughout the year.

At this time Programs for Human Services, the entity that administers the DOE WAP in Chambers, Galveston, Hardin Jefferson, Liberty and Orange counties, is in the process of merging with another existing service provider. The DOE WAP funds allocated to the service area covered by this entity by formula will be held for the service area pending completion of the merger.

Further, Tri-County Community Action (TCCA), the entity that serves Harrison, Jasper, Newton, Panola, Sabine, San Augustine, Shelby, Tyler and Upshur counties has placed its weatherization program on hold pending the hire of additional staff. The Department will continue to work with TCCA as it gets its program on track. Should TCCA or the Department determine that the program should move forward without TCCA as the administrator of the program, the service area will be assigned to an existing Subgrantee or a new subgrantee will be selected according to DOE regulations found in 10 CFR§440.15.

Finally, due to unresolved monitoring issues, Cameron and Willacy Counties Community Projects, Inc. (CWCCP), the entity that serves Cameron and Willacy counties, was not recommended for a WAP award by the Department's committee that recommends such awards. The TDHCA Governing Board approved a request to directly select or release a Request for Applications for a temporary or permanent replacement provider to provide prompt assistance in delivering services in Cameron and Willacy counties.

Formula Distribution

The Department updates the budget allocation proportion by county and Subgrantee based on poverty income, elderly poverty, median household income (from the 2010 U.S. Census data), and climate data (from the National Climatic Data Center, Climate Normals, 2010), as outlined in 10 TAC §5.503.

The Department allocates funds to Subgrantees by applying a formula based upon the DOE allocation for program year; or if the allocation amount is not known, based on an assumption of level funding from the previous program year. Once the allocation amount is known, the formula is re-run. The allocation formulas reflect the 2010 Census data. If any carryover funds are available, they will be distributed by allocation formula and used to increase the number of units to be weatherized. The Department will adjust guidance to reflect the adjusted average expenditure limit per unit for the program year.

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If the Department determines it is necessary to permanently reassign a service area to a new subgrantee, the subgrantee will be chosen in accordance with 10 CFR §440.15. The fund allocations for individual service areas are determined by a 5-factor distribution formula as outlined in 10 TAC §5.503:

- (1) Number of non-elderly poverty households per county;
- (2) Number of elderly poverty households (65+) per county;
- (3) Median income variance per county;
- (4) Inverse poverty household density ratio per county; and
- (5) Heating/Cooling Degree days per county.

The Department may deobligate all or part of the funds provided under this contract if a Subgrantee has not expended funds as specified in the contract according to the expenditure rate and households served during the sixth month of the program year. A Subgrantee's failure to expend the funds provided under this contract in a timely manner may also result in the Subgrantee's ineligibility to receive additional funding during the program year.

V.3 Priorities for Service Delivery

The Department will ensure by contract that its Subgrantees give priority to weatherizing dwellings owned or occupied by low-income persons who are particularly vulnerable such as the Elderly, Persons with Disabilities, Families with Young Children, Households with High Energy Burden, and Households with High Energy Consumption. Applicants from these groups must be placed at the top of a Subgrantee's waiting list. The Department ensures that Subgrantees give proper attention to these requirements through monitoring/evaluation of the Subgrantee.

V.4 Climatic Conditions

The climatic conditions for the State of Texas are imbedded in the algorithms of the Weatherization Assistant (WA 8.9) energy audit software toll engineered by the Oak Ridge National Laboratory for the Department of Energy. As part of the energy audit modeling, the Department requires the Subgrantee Network to select the nearest weather station to the dwelling units. The Weather files imbedded in the WA 8.9 contains 30 year data of Heating and Cooling degree days for each weather station.

As described in the report prepared by the Pacific Northwest National Laboratory & Oak Ridge National Laboratory for the Department of Energy, the state of Texas has several IECC climate zones. http://apps1.eere.energy.gov/buildings/publications/pdfs/building_america/ba_climateguide_7_1.pdf. These climate zones are used as an aid in helping Subgrantees to identify the appropriate climate designation for the counties in which they are providing WAP services. In addition to prescribing appropriate mechanical equipment (example of climate specific measures would be evaporative cooling which may be prescribed in the Hot Dry climate of Texas and not in the Mixed Humid part of Texas) the IRC prescriptive thermal envelope of measures are different. The climate zones found in Texas are as follows:

1. Hot-Humid

A hot-humid climate is defined as a region that receives more than 20 inches (50 cm) of annual precipitation and where one or both of the following occur:

- A 67°F (19.5°C) or higher wet bulb temperature for 3,000 or more hours during the warmest six consecutive months of the year; or
- A 73°F (23°C) or higher wet bulb temperature for 1,500 or more hours during the warmest six consecutive months of the year.

IRC Prescriptive Thermal Envelope Measures:

Zone 2A and 2B	Zone 3A	
Ceiling	R 30	R30
Windows	U 0.65	U 0.50
Walls	R-13	R-13
Floors	R – 13	R 13
SHGC	0.30	0.30

2. Hot-Dry

A hot-dry climate is defined as a region that receives less than 20 inches (50 cm) of annual precipitation and where the monthly average outdoor temperature remains

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above 45°F (7°C) throu	ghout the year.	
IRC Prescriptive Therm	al Envelope Measures:	
Zone 3A and 3B Ceiling Windows Walls Floors SHGC	R30 U0.50 R13 R 13 .030	
3. Mixed-Humid		
		eives more than 20 inches (50 cm) of annual precipitation, has approximately 5,400 heating degree days (65°F for temperature drops below 45°F (7°C) during the winter months.
IRC Prescriptive Therm	al Envelope Measures:	
Zone 3A Ceiling Windows Walls Floors SHGC	R30 U 0.50 R13 R 13 .030	
4. Mixed-Dry		
		es less than 20 inches (50 cm) of annual precipitation, has approximately 5,400 heating degree days (50°F basis) erature drops below 45°F (7°C) during the winter months.
IRC Prescriptive Therm	al Envelope Measures:	
Zone 4 Ceiling Windows Walls Floors	R38 U 0.35 R13 R 19	
L. 1177 4. 4. 200	0 IDC - 1 - 4 - 11 - 4 - 94 - 4	

In addition to the 2009 IRC adopted by the State of Texas, several individual cities have adopted amendments to the code. The adoption and amendments to the 2009 IRC impact the WA 8.9 energy audits in that cities are required to evaluate user defined measures to meet the codes adopted by each individual City.

V.5 Type of Weatherization Work to Be Done

V.5.1 Technical Guides and Materials

Type of Work to be Done

- A. Low Cost/No Cost: The Department will not require any low cost/no cost services.
- B. Incidental Repair: If such repairs are necessary to make the installation or preservation of weatherization materials effective, the cost of incidental repair materials shall not exceed the cost of weatherization materials. The goal of the WAP remains energy conservation, not housing rehabilitation.
- C. The purchase and installation of through the door water/ice units and stand alone freezers in not allowed.
- D. Storm doors are not allowable weatherization measures in the State of Texas.

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E. The Department will not require a minimum material expenditure ratio.

Shelters. Shelters may be weatherized if prior written approval is given by the Department. Living space (size) for purposes of determining expenditure level is to be calculated at 800 square feet per unit or each floor considered a unit.

Fuel Switching. Per WPN 13-5, Revised Energy Audit Approval Procedures and Other Related Audit Issues, dated September 23, 2013, the Department does not permit the general practice of fuel switching when replacing furnaces, water heaters, and other appliances. However, the Department **may** allow the changing or converting of a furnace/appliance using one fuel source to another on a limited, case-by-case basis. These approvals will only be granted when all related costs demonstrate the effectiveness of the fuel switch over the life of the measure.

Electric Base Load Measures (EBL). Approved EBL measures include replacement of refrigerators, electric water heaters, and compact fluorescent lights. EBL measures must be determined cost effective with an SIR of 1 or greater by either audit analysis or separate DOE approved analytical tools. Refrigerators must be metered for a minimum of two (2) hours. All dwelling units will be evaluated to determine the most cost effective measures to be installed in each unit weatherized and to determine the order in which measures will be installed. The evaluation of each unit must include building envelope measures, mechanical measures, and Electric Base Load measures.

Lead-Based Paint Safe Work Practices. Approved Lead Safe Work practices include but may not be limited to "Renovate Right" pamphlet given to clients, test kits, worker protection gear, materials for set-up, and camera(s) to document process.

Technical Guides and Materials

The Department is currently revising the documents bulleted below to include the Standard Work Specifications for Home Energy Upgrades (SWS) where applicable. Department Staff has attended several webinars through DOE-sponsored partners and continues to have ongoing communication with DOE trainers to ensure compliance by July 1, 2015. Communication of the forthcoming requirements will be delivered to the Subrecipient Network via contracts, Texas Administrative Code, website announcements/posting and webinar(s) prior to commencement of the 2015 program year.

The following Technical Guides and Materials are available on the Department's website: (http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm):

Material Installation Standards Manual (September 28, 2012) Weatherization Field Guide (May 21, 2010) Mechanical Systems Field Guide (October 30, 2010) NEAT Training Guide (October 25, 2011)

Updates are pending receipt of "Deck of Cards" guidance from Santa Fe Community College regarding multifamily units and mobile homes. Once the updates are completed and approved by DOE, the documents will be posted online and Subgrantees and their subcontractors required to attend one or more webinars for training on how to use the guides.

Further, the Department has several Weatherization Best Practices posted at: http://www.tdhca.state.tx.us/community-affairs/wap/wap-best-practices.htm.

All Subgrantee agreements and vendor contracts active in PY 2015 and beyond will contain language which clearly documents the SWS specifications for work quality outlined in WPN 15-4, Section 2. A signed contract shall confirm that the organization understands and agrees to these expectations. Each contract will include the following clause or exhibit:

Materials and Work Standards

A. Subrecipient shall weatherize eligible dwelling units using only weatherization materials which meet or exceed the standards prescribed by DOE in Appendix A of 10 CFR Part 440.

- B. All weatherization measures installed shall meet or exceed the standards prescribed by DOE in Weatherization Program Notice (WPN) 15-4 regarding Standard Work Specifications, as detailed in the Department's Materials Installation Standards Manual.
- D. All weatherization work must be performed in accordance to the DOE-approved energy audit procedures, 10 CFR Part 440 Appendix A, State of Texas adopted International Residential Code (or that of jurisdictions authorized by State law to adopt later editions).
- E. Subgrantee will include the substance of this section in all subcontracts.

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V.5.2 Energy Audit Procedures

Audit Procedures and Dates Most Recently Approved by DOE

Single-Family: NEAT- DOE approved March 28, 2011

Manufactured Housing:

MHEA- DOE approved March 28, 2011

Multi-Family: NEAT- under 24 units NEAT (which are individually heated or cooled)- DOE approved March 28, 2011

Comments

The Department will be sending a request for re-approval of its energy audit programs. The Department will request a tier-one review, using an already-DOE-approved audit tool designed to calculate the required Savings-to- Investment ratios, particularly the National Energy Audit (NEAT) for single family and small multifamily (conditional) and the Manufactured Home Energy Audit (MHEA) for manufactured housing. To guide preparations for this request, the Department uses an Audit Approval Task Tracker (example attached to SF-424). The Department will not request the use of a Priority List.

The Department expects to begin review and updates of the measures considered, audit procedures and field protocols, measures installed, general heat waste reduction lists, and health and safety aspects of the audits in June 2015. The Department will submit its request on or before December 31, 2015 for approval prior to the March 28, 2016 expiration of our current approval.

Pursuant to WPN 13-5, since the Department will request to use an already-DOE-approved audit tool, our request will not include a description of the energy estimating methodology, measure interaction, or cost-effectiveness requirements listed in Attachment 1. Our request will include the measures that are typically enabled and provide the input data, assumptions, and audit results (recommended measures) for at least ten sample dwelling units from a sampling of Subgrantees. These audits will be typical of those weatherized by the Texas WAP representing climate zones throughout the state. All of the information on field procedures and administrative requirements described in Attachment 1 will be provided with the request.

V.5.3 Final Inspection

The Department has provided the Subgrantee network with sufficient T&TA funding to complete the QCI certification process through an IREC certified training provider. The Department is tracking the progress of each Subgrantee to ensure full compliance with unit inspection requirements of WPN 15-4. The QCI certification for Subgrantee staff will continue through spring 2015 with a goal of having state and Subgrantee staff trained up before the start of the program in July 2015.

The Department currently has five certified QCI staff. When a certified QCI from the Department goes out to review a unit, they will sign a form stating that the audit for the unit was reviewed and that a state QCI inspected the unit. To ensure that work is completed according to program standards, the Department is updating the Materials Installation Standards Manual ("MISM") to include the SWS requirements. Updates to this and other program documents are pending release of the complete "Deck of Cards" from Santa Fe Community College. The weatherization network will be notified when this document is completed and posted on the Department's website. Language included in all WAP contracts will require use of the MISM on every unit.

Our goal is that every Subgrantee has at least one QCI on staff. The Department is requesting that Subgrantees with a QCI on staff use that staff member as an Independent QCI that is not involved with the weatherized unit prior to final inspection. The Department defines prior involvement as performing the audit, creating the work order, or performing any weatherization work on the weatherized unit. The Department has created a QCI Final Inspection sheet for Subgrantees which will allow TDHCA to determine if a QCI employed by the Subgrantee had prior involvement with that unit.

Due to Subgrantee staffing levels, the Department understands that some Subgrantees may not have the ability to have a QCI that is independent of prior activity with the weatherized unit. To ensure compliance with DOE requirements regarding the minimum number of weatherized units to be inspected, the Department has decided to utilize the DOE Prescribed QCI Policy as described below:

- Independent QCI: In situations where a Subgrantee's QCI is an individual that has no involvement in the prior work on the home either as the auditor or as a member of the crew the following will apply: The Department will perform quality assurance reviews (Unit Inspections) of at least 5 percent of all completed units.
- Independent Auditor/QCI: In situations where a Subgrantee's QCI Auditor performs either the assessment, the audit, creates the work order and performs the final quality control inspection, the following will apply: The Department will perform quality assurance reviews of at least 10 percent of all completed units.

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During Unit Inspections or desk reviews, specific data will be collected from Quality Control Inspection forms. The data collected will be reviewed by the Compliance Monitors and/or Community Affairs Division Training and Technical staff to ensure that the individual(s) functioning as both the auditor and the inspector are able to consistently perform both tasks. The Department will use its QCI staff to perform directed training and technical assistance in instances where the individual is found to be deficient. Where necessary, additional Subgrantee staff may be sent for Tier 1 Training at an IREC approved training site.

The Department uses a Building Weatherization Report ("BWR") to gather information about each weatherized unit and to get the Subgrantee's certification that the unit passed a final inspection. The Department has revised the BWR to include a certification from the Subgrantee's QCI that the audit for the unit was reviewed and that the unit passed final inspection by a certified QCI. The revised BWR is submitted as an attachment to the SF-424.

The Department will perform monitoring and verification measures to ensure that no dwelling units are reported as completed prior to the installation of all prescribed weatherization measures, final inspections, and certification of completion of work in a workmanlike manner and in accordance with the priorities determined by required audit procedures. In conducting the fiscal portion of the monitoring process, the State will verify that all files reviewed and all units inspected have appropriate documentation and supporting fiscal records that demonstrate the completion of the unit prior to reporting the unit as completed. The Subgrantee may not pay an independent third party for any work performed on a unit until the unit has been completed and approved during final inspection. Verification will be accomplished by review of fiscal records, including: purchase request/orders, invoices, general ledgers, check request, dates checks are issued and clearing dates.

V.6 Weatherization Analysis of Effectiveness

Pursuant to 10 TAC, Chapter 1, Subchapter A, §1.5, a review of a Subgrantee's compliance history in Department programs must be approved by the Department's Executive Award and Review Advisory Committee ("EARAC") and provided to the Department's Board of Directors in order that the Board may consider the compliance history and make and document its award decisions with full knowledge of these matters. Prior to the award of DOE funds to any Subgrantee, the EARAC is provided for review:

- 1. A report of any instance(s) of noncompliance that remain uncorrected and for which the applicable period for corrective action has expired;
- 2. A report of any instance(s) of noncompliance that have been corrected within the last three years, but that were not corrected within the applicable period for corrective action; and
- 3. If the Subgrantee is subject to the requirement of an annual single audit:
 - A. A report of any required single audit or single audit certification form that is currently past due; and
 - B. If such single audit has been submitted and the most recent single audit report contained findings, a copy of that single audit.

The Community Affairs Monitoring section, the section of the Compliance Division that monitors the WAP, submits information regarding its monitoring activity to the EARAC for review. If EARAC finds that a Subgrantee has outstanding issues related to any of the criterion listed above that the Subgrantee's review may not be approved by EARAC, or may be approved with conditions that will be written into the Subgrantee's WAP contract.

Issues identified during this review point to areas in a Subgrantee that require attention, both from a monitoring standpoint and a T&TA standpoint. The reviews not only hold the Subgrantee accountable, they also give the monitoring and T&TA sections guidance in planning future activities.

On a more direct level, the T&TA staff meets with monitoring staff every other week in order to keep an updated evaluation of each Subgrantee. In those meetings, monitoring staff relay issues they find related to individual Subgrantee's as well as overall trends they identify. The T&TA staff applies this information when determining the needs for agency-specific T&TA (for instance, if a Subgrantee has failed inspections) and to plan the curriculum for the regional trainings.

Further, Subgrantee performance is reviewed periodically and at the end of the program year. The Department tracks Subgrantee performance over time by reviewing their monthly production and expenditure reports. Each T&TA staff member reviews the reports submitted by a certain number of Subgrantees and plans activities and the provision of T&TA when necessary. Analysis of reports includes the following:

- Number of homes completed;
- Number of applications pending;
- Number of homes in progress;
- Contract amount;
- Total funds expended;
- · Balance of funds; and
- Special comments

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V.7 Health and Safety

Attached to SF-424

V.8 Program Management

V.8.1 Overview and Organization

The Department is the state's lead agency responsible for affordable housing and community assistance programs. The Department annually administers funds derived from mortgage revenue bond financing and refinancing, federal grants, and federal tax credits.

In 1991, the 72nd Texas Legislature created the Department. The Department's enabling legislation combined programs from the Texas Housing Agency, the Community Development Block Grant Program from the Texas Department of Community Affairs.

On September 1, 1992, two programs were transferred to the Department from the Texas Department of Human Services: the Low Income Home Energy Assistance Program and the Emergency Nutrition and Temporary Emergency Relief Program. Effective September 1, 1995, in accordance with House Bill 785, regulation of manufactured housing was transferred to the Department. In accordance with House Bill 7, effective September 1, 2002, the Community Development Block Grant and Local Government Services Programs were transferred to the newly created Office of Rural Community Affairs. Effective September 1, 2002, in accordance with Senate Bill 322, the Manufactured Housing Division became an independent entity administratively attached to TDHCA. As a state agency, the Department is under the authority of the Governor of the State of Texas.

The Department's services are offered through four program divisions: Office of Colonia Initiatives, Multifamily Finance Production, Single Family Finance Production, and Community Affairs, which administers the WAP.

The Department subcontracts with a network of Subgrantees that provide the WAP services. The network is comprised of community action agencies (CAAs), regional Councils of Government (COGs), and organizations in the other public or private nonprofit entity category (PPNPs). All network Subgrantees are provided a draft copy of the yearly weatherization state plan, a notice of the state public hearing, and invited to participate in the public comment process.

Historically, the regular weatherization program year ran from April through March. Starting PY 2015, the weatherization program year will run from July through June.

The Department will continue to administer the program through Subgrantees in accordance with 10 CFR §440.15 provisions and State regulations. If existing Subgrantees are successfully administering the Program, the Department will offer to renew the contract if the Subgrantee so desires and if grant funds are available. When the Department determines that an organization is not administering the program satisfactorily, it may take the following action:

- -Correction of the problem(s) with training or technical assistance;
- -Re-assignment of the service area (or service area portion) to another Department existing Subgrantee; or,
- -Solicitation or selection of a new or additional Subgrantee in accordance with 10 CFR §440.15 provisions.

A new or additional Subgrantee is defined as a CAA or other public or nonprofit entity that is not currently operating a DOE Weatherization Assistance Program.

Consolidation/downsizing: Any downsizing will occur through normal attrition, through a Subgrantee's determination that it can no longer administer the program efficiently/effectively, or through the Department's determination that a Subgrantee can no longer administer the program efficiently/effectively.

Reassignment of service areas for just cause: In the event that a service area can no longer be served by a Subgrantee, the Department reserves the right to reassign services areas. If it appears necessary to permanently reassign the service area, a new Subgrantee may be chosen in an open, competitive solicitation process in accordance with 10 CFR §440.15 or the reassignment may become permanent.

Client Education

The Department will continue to require WAP Subgrantees to provide client education to each WAP client. Subgrantees will be required to provide (at a minimum) educational materials in verbal and written format. Client education will include temperature strips that indicate the temperature in the room and energy savings materials.

V.8.2 Administrative Expenditure Limits

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The Department will use 5% of its grant funds for state administration. An additional 5% will be distributed for local WAP field operations under contract. Contract funds are intended for local administration, liability insurance coverage, local fiscal audit, materials, labor, program support and health and safety measures. To help ensure that Subgrantees comply with the full and proper use of all the contract funds, written definitions are to be provided to Subgrantees on budget categories as deemed necessary. The Department has elected to provide the maximum allowable funds for Subgrantee administration to Subgrantees receiving less than \$350,000, so it has not included procedures for deciding which Subgrantees will receive additional funds. This decision is based on the following factors:

- Subgrantees often have to rely on other programs for WAP outreach and other administrative support;
- Subgrantees have had to adjust budgeting to keep pace with cost-of-living increases -- staff salaries, fringe benefits, rent, postage, travel, etc.;
- The State of Texas is 877 miles from Northern to Southern tips, 834 miles from Eastern to Western tips, and is comprised of a total of 266,807 square miles. The extra geography that Subgrantees have to cover to serve all the area's clients equitably requires additional staff, staff time, postage and phone costs, and vehicle wear and maintenance. (Source of Mileage Data: Texas Department of Transportation);
- Salaries, space, utilities, telephone, and similar costs associated with program support personnel should be charged to program support; and
- The increasing cost of maintaining appropriate qualified staff is challenging.

For Subgrantees receiving over \$350,000, the administrative allowance will be 5% of each subgrant. For Subgrantees receiving less than \$350,000, the administrative allowance will be 10% of each subgrant.

V.8.3 Monitoring Activities

The Department will monitor the Weatherization Assistance Program ("WAP") with the Monitoring staff included in the budget. Subgrantee is defined as an organization with whom the Department contracts and provides WAP funds.

Names and credentials of Department staff dedicated to monitoring DOE activities follow. Monitoring staff are paid out of Grantee Administration budget category.

- Rosy Falcon over 6 years of weatherization monitoring; BPI certified; has attended DOE sponsored conferences.
- J.R. Mendoza over 12 years of program management and weatherization monitoring experience; Certified Fraud Examiner; RESNET certified; attended KBSI and HERS trainings; has attended DOE sponsored conferences; QCI certified.
- Kevin Glienke over 6 years of weatherization monitoring experience; BPI Certified; has attended DOE sponsored conferences; QCI certified.
- Christie Joyner one year of weatherization monitoring; Masters Degree in Accounting.

There is staff in the T&TA section of the Department that are QCI certified. It is not anticipated, but possible, that some of those staff members could assist with the unit inspections of homes weatherized through funds provided through this State Plan.

The Department will monitor each of the DOE Subgrantees during the contract period which will be July 1, 2015 through June 30, 2016. Many of the DOE Subgrantees also receive funds through the Department of Health and Human Services' Community Service Block Grant and Low Income Home Energy Assistance Program. Whenever possible, all three programs will be monitored during one visit to the Subgrantee.

Financial and Administrative monitoring will include, at minimum, a review the Subgrantee's General Ledgers and policies and procedures (including procurement) as well as support documentation for reported expenditures. These documents will be reviewed to ensure compliance with DOE, Department and other applicable rules and regulations. Through client file monitoring, the Department will ensure that program beneficiaries are eligible low-income families. Through unit inspections, Department staff will ensure that installed measures are allowable and meet or exceed DOE requirements. The Department will review whether charged measures were installed properly and determine compliance with health and safety procedures, client eligibility, energy audit procedures, client education procedures and compliance with the SWS.

The Department plans to inspect 5% of all completed weatherized units. In order to achieve the 5% inspection rate, and comply with the requirements of WPN 15-4, the Department is requesting that Subgrantees with a QCI on staff do not have that staff member involved with the weatherized unit prior to final inspection. The Department defines prior involvement as performing the audit, creating the work order or performing any weatherization work on the weatherized unit. The Department has created a QCI Final Inspection sheet, for Subgrantees which will allow TDHCA to determine if a QCI employed by the Subgrantee had prior involvement with that unit. The Department will review each QCI final inspection document to ensure compliance with the requirement to inspect 5% and will increase the required inspections if necessary.

The Department recognizes that there may be a need to perform additional unit inspections towards the end of the contract period to comply with the requirements of WPN 15-4 if there were not enough units available to sample during the full monitoring review.

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Monitors will complete checklists to evaluate a Subgrantee's compliance. The checklists cover Financial and Administrative requirements, health and safety procedures, client eligibility, energy audit procedures, client education procedures, and compliance with the SWS. Compliance Monitors also review the hard copy of NEAT audit which is required to be in the client file to assure that the scope of the work was directed by the audit.

Monitors typically scan documents as support if there will be findings noted. Upon completion of the review, monitors conduct an exit interview and explain findings noted, if any.

The following list provides additional monitoring details that may occur during the monitoring review.

- Monitors may request copies of fiscal records/support documentation and perform a desk review to gauge the fiscal condition of the Subgrantee prior to
 onsite monitoring.
- In addition, as needed, monitors may perform a desk review of records requested but not provided during the onsite review and records requested to clarify issues identified during the onsite monitoring visit. The Department recognizes the requirement to issue monitoring letter within 30 days of the review. The Department does not consider the review complete until receipt of information needed to ascertain compliance. Monitoring letters will be issued within 30 days of receipt of all necessary information.
- On occasion, while onsite monitors overlook findings that are identified through a management or peer review of the report and working papers. In these instances, Department staff will strive to call the Subgrantee to discuss the matter prior to the report being issued.

The Department will issue monitoring reports within 30 days of completion of the review. Subgrantees are provided a 30 day corrective action period to respond and provide evidence of correction. On a case by case basis, the Department may grant an extension to respond to the report if there is good cause and the request is made during the corrective action period. The Department will review each response and determine if the Subgrantee has resolved the compliance issue. If the Department determines that the issue is not resolved, the Subgrantee will be notified and required to submit an additional response(s) until the compliance issue is resolved. In certain circumstances, the Department may "close" a compliance issue when there remain no additional actions that can be taken to resolve the issue. At the conclusion of this process, any unresolved compliance issues will be reported to DOE (instances of suspected fraud or serious program abuse will be reported immediately to DOE).

The Texas WAP has a successful and compliant history. However, in the event that TDHCA identifies a Subgrantee with significant and unresolved noncompliance the following plan will be implemented. Subgrantees that cannot or will not comply will be referred by the Compliance Division to the Training and Technical Assistance Team for placement on an Improvement Plan. Those Subgrantees will be required to meet assigned milestones before they are released from the plan. Failure to meet milestones may result in contract sanctions, up to and including administrative penalties, debarment, placement on a modified cost reimbursement method of payment, contract suspension, or contract termination.

- 1. Program Oriented Management Training Prior to continuing any weatherization-related program activity, all Subgrantee staff that performs any action related to the WAP will be required to complete Program Oriented Management Training ("POM"). POM will include:
 - A. Review of WAP statutes and rules
 - B. Review of state program requirements
 - C. Review of financial and administrative best practices
 - D. Review of program best practices
- 2. Intensive Training and Technical Assistance Once POM is completed, Subgrantee staff will receive training on critical program components. At each stage of Intensive T&TA, TDHCA team members will provide one-on-one guidance to Subgrantee staff to ensure the correct completion of each component. At the end of Intensive T&TA, Subgrantee staff will have completed another step toward completion a weatherized unit.
 - A. Client file documentation
 - B. Payment and reimbursement documentation
- C. Accompanied unit assessment
- D. Accompanied Audit completion
- E. Accompanied Interim construction walk-through
- F. Accompanied Final inspection
- 3. Staged Program Operation When Subgrantee staff has completed Intensive T&TA, the Subgrantee will be released to complete a determined number of client intakes. Once the client intakes are completed, TDHCA team members will review the ensuing steps of the weatherization process in the following steps:
 - A. Review of the client file documentation
 - B. Review of unit assessments
 - C. Review of audit input and completion to work order
 - D. Accompanied final inspection

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Once the Subgrantee has completed the determined number of units and the units have passed TDHCA monitoring, the Subgrantee will be released from the Improvement Plan for the remainder of the program year. The Subgrantee will be reviewed at the end of the program year for determination of continued funding.

If it is determined that the Subgrantee is not able to administer the weatherization program, the Department will follow the requirements in 10 TAC §2.202 Contract Closeout.

V.8.4 Training and Technical Assistance Approach and Activities

All training provided will include requirements for compliance with QWP specifications. The Department will conduct training and technical assistance throughout the program year. Department staff may determine that additional training is needed for a particular Subgrantee or the Subgrantee may request it. The Training staff consults with Monitoring staff to determine Subgrantees' additional training needs on an on-going basis. Training will include manufactured housing, management and production schedule, lead safe work practices, building envelope measures, energy audit, health and safety, all with a goal of increasing the efficiency, quality and effectiveness of our program.

In order to assist with the implementation of the OWP specifications, the Department will identify training needs through a four pronged approach:

- A) Review of Findings The training team will provide training to address specific findings in order to correct identified deficiencies.
- B) Referral by the Monitoring staff Training areas will focus on input from the referring Monitor.
- C) Online request produced by the Subgrantee The Department has created an online training and technical assistance database to track training requested by the Subgrantee network. The requestor has a menu of WAP topics to select from. The online training request form can be found on the Department's website, http://www.tdhca.state.tx.us/community-affairs/wap/index.htm. The Department's training staff will contact the requestor and customize the training around their needs.
- D) Management Request Management may make a specific request and dictate the type of training needed.

Tier 1 Training.

Tier 1 Training began in the spring of 2014 with five Department staff members becoming certified in QCI at an IREC-approved training center. The Department then started providing pre-assessment T&TA to assist Subgrantee staff in preparing for the QCI certification prior to a Subrecipient scheduling QCI training. The Department has a Certified BPI Online Proctor on staff who is able to proctor the written exam for those that do not pass it the first time, thereby reducing the time and travel costs for our network. The exam is proctored in collaboration with Santa Fe Community College. The Department has yet to devise an adequate system for preparing Subgrantees for the written portion of the test, other than reiterating the study of the Job Task Analysis ("JTAs") and using test taking strategies utilizing a decision tree for multiple choice tests. The Department would appreciate any technical assistance DOE can provide regarding this issue.

Of the twenty-five Subgrantees, eleven have at least one staff member that is QCI certified. Six others will be re-taking the written test, four are scheduled to test in March, three are in the pre-assessment or procurement stage, and the last one will likely subcontract its inspections. The QCI certification for Subgrantee staff will continue through spring 2015 with a goal of having state and Subgrantee staff trained up before the start of the program in July 2015.

Added to the training plan is Tier 1 Training for subcontractors. Heading into PY 2014, the Department's training plan focused on comprehensive training for all WAP agency staff workers that is aligned with the NREL Job Task Analysis for the position in which the worker is employed. Going into PY 2015, the Department proposes to add to that focus JTA-aligned training for subcontractors. This addition reflects feedback from Department monitoring staff and DOE's plan for improvements in work quality. Each subcontractor will be required to have at least one crew member who is certified as a Retrofit Installer and one who is certified as a Crew Leader.

Tier 1 Training will continue long-term with Department and Subgrantee staff gaining Energy Auditor certification in single family and multifamily, and with Weatherization Installer certifications for subcontractors, along with ongoing training to maintain those skills and certifications. Department and Subgrantee network staff will be required to obtain Energy Auditor (EA) certification by the beginning of program year 2016, and the Department will be requiring all Subgrantees to ensure their contractors also receive other Tier 1 trainings, including Renovation, Repair, and Painting and Occupational Safety and Health Administration (OSHA) 10. Each subcontractor for whom DOE funds are used to provide training for the certification will be required to enter into a retention agreement with the Subgrantee.

The Department has provided the Subgrantee network information for obtaining workforce credentials by providing on our website

(Grant Number: EE0006186, State: TX, Program Year: 2015)

(http://www.tdhca.state.tx.us/community-affairs/wap/quality-work-plan.htm) a QWP section dedicated to agencies obtaining the QCI. As other Tier 1 training information becomes available we will be adding content to our website.

Tier 2 Training.

Tier 2 training will be provided by Department training and technical assistance staff. With experience as Program Officers and Trainers, the staff has experience in Subgrantee monitoring, unit assessments, audits, materials installation, inspections, and the training and technical assistance that support each. The staff consists of:

- Marco Cruz 20+ years experience in the WAP. Certified QCI, Lead-Safe Renovator, OSHA-30
- Doug Misenheimer 18+ years experience in the WAP. Certified QCI, Lead-Safe Renovator, OSHA-30, BPI Building Analyst Professional
- Laura Saintey 10+ years experience in the construction industry and 5+ years experience in the WAP. Certified QCI, Lead-Safe Renovator, OSHA-10, BPI Building Analyst Professional, BPI Certified Online Proctor

TDHCA will follow its regular T&TA plan (as described below) for its entire Subgrantee network with an emphasis on using the JTAs as the guide to provide acute training to correct identified deficiencies and general training to ensure continuous improvement in the network. The Department has divided the state into five regions and has planned to provide quarterly training in each region: El Paso (west), Lubbock (northwest), Dallas (north central), Houston (east), and San Antonio (south central). The Department plans to assist Subgrantees in their travel costs to State-sponsored and DOE-sponsored/approved training opportunities as funds permit.

At each regional training, topics related to the JTAs for energy auditors and installers will be covered. JTAs for crew leaders will be covered as well, however as relating to how to supervise a hired crew as only one of our Subgrantees uses in-house crews. The regional trainings will cover issues regularly identified by monitoring and training staff as well as Quality Management, Health and Safety, Client Education, ASHRAE, heating and cooling systems assessments and blower door usage, and refresher material related to each JTA, including but not limited to:

Energy Auditor Domains:

Demonstrating Professional Energy Auditor Conduct

Collecting information about the Building for an Energy Audit

Testing the Building for an Energy Audit Evaluating Collected Energy Audit Data

Retrofit Installer Domains: (While only one of our Subgrantees has in-house installers, it is critical that they all understand exactly what is required of an installer as well as the specifications for installation. These modules will discuss the installer JTAs on a supervisory level, and will focus more pointedly on specifications for installation.)

Maintaining Safety

Preparing for the Job

Maintaining tools and the job site

Work Implementation (specifications)

Site close-out

Crew Leader Domains: (While only one of our Subgrantees has in-house installers, it is critical that they all understand exactly what is required of a crew leader so that they can properly supervise.)

Develop and/or Review the Work Order

Identify materials and staffing needs

Develop plan to execute work order on site

Prepare house to execute work order

Execute work order and manage project

Final Documentation

The Department will provide the Lead Renovator certification and refresher and any OSHA courses through a certified third party vendor. These trainings will be required, and the Department will keep a running database of the certifications to assure each Subgrantee obtains the needed certifications to implement the Health and Safety requirements of the WAP program.

The Department will continue to provide training opportunities for staff and Subgrantees including online training, attendance at DOE and DOE-approved conferences, and other opportunities for education and training that might become available. Network wide trainings will primarily be conducted through webinars. At least every quarter the Department conducts teleconferences on DOE WAP initiatives and program notices. The PY 2015 Health and Safety Plan will be followed-up with a webinar to reiterate current standards and any changes made so that the network remains aware of program expectations. Attendance will be monitored to ensure at least one member of each subrecipient is in attendance during the webinar.

Evaluation of Training Activities

(Grant Number: EE0006186, State: TX, Program Year: 2015)

In order to evaluate compliance with the quality work specifications and the efficacy of its training activities, the training staff will review its training activities semi-annually and compare those to the Subgrantee monitoring reports. Additionally, Subgrantees will be given the opportunity to provide feedback through evaluation forms distributed at all training sessions. Training staff will conduct periodic surveys to solicit input from Subgrantees as to their training needs.

More specific training will be designed for each Agency based on the information prompting the request. TA will be documented by using the online training and technical assistance database. Additionally, for onsite T&TA visits, a report will be produced indicating Subgrantee staff present, materials and documents presented to the Subgrantee, and expected outcomes.

Should a Subgrantee hire a new weatherization coordinator, the Subgrantee will be required to notify the Department in writing within 30 days of the date of hiring the coordinator and request training. The Department will contact Subgrantees within 30 days of the date of notification to arrange for training.

Program Evaluation

Overall program evaluation remains an admitted struggle for the Department. The Department utilizes an online contract system to collect expenditure and performance data from Subgrantees. As designed, this system does not have the capability to capture unit-level data from our Subgrantees. Provision of a comparative snapshot of the current Subgrantees, would require a database that could capture retrofit activities for each unit completed to include air-leakage reduction, duct leakage, square footage of each unit, and pre- and post- retrofit energy consumption data. The system would have to account for the different climates found in a state as large as Texas (even within some individual service areas), weather anomalies and client family size variations over a multi-year period if comparing energy savings based on consumption alone. While the Department certainly sees the value of a system that could provide this information, the feasibility of doing such extensive data collection is difficult to conceive with existing resources.

Client Education

The Department will continue to require WAP Subgrantees to provide client education to each WAP client. Subgrantees will be required to provide (at a minimum) educational materials in verbal and written format. Client education may include temperature strips that indicate the temperature in the room and energy savings materials.

V.9 Energy Crisis and Disaster Plan

n/a

			BUI	ILDING	WEATH	ER	IZATIO	N REPOR	RT				
Agency:													
Contract #:										Audit #:			
County:	unty: Name:				Address:	Address:			Client Phone #:				
Assessment D	ate:		С	Contractor	Work Start D	Vork Start Date: Work End Date			nte:				
Energy Audit	Estimated C	lost:	F	inal Blow	er Door Read	Door Reading: Total square for		ootage of conditioned space:			ce:		
Heating Equipment Location	RPR	RPL	Туре	e Fuel	Efficiency Pre		fficiency	Carbon monoxide Pre	m	arbon onoxide ost	SIR/ H&S	H	Ieater Types (check) VSH UVSH VWF FF CH WS COOK- STOVE
Cooling Equipment Location	RPR	RPL	Туре	e Fuel	COP Pre		OP ost				SIR/ H&S		A/C Types (check) WU EVAP CS
Weatheriza	tion Mater	ials Inst	alled	- (List in	ı SIR Orde	r)	Labor Cost	Materi Cost		Quantii #	y P	rogram *	Final Inspection
Total Cost of	of Weathe	rization	Mate	rials:									

*DOE, LIHEAP, etc.

BUILDING WEATHERIZATION REPORT

Repair Materials Installed	Labor	Material	Quantity	Program	Final
-	Cost	Cost	#	*	Inspection
Total Cost of Repair Materials:					
			-		
Health and Safety Materials Installed	Labor	Material	Quantity	Program	Final
·	Cost	Cost	#	*	Inspection

*NOTE: Weatherization materials donated or funded with other funds should be listed in the appropriate section on this form and indicated as N/C or "no charge."

Cost Category	DOE (\$)	LIHEAP (\$)
Total Material Cost (including incidental repairs and excluding Health and Safety)		
Total Labor Costs		
(excluding Health and Safety)		
Total Low-Cost /No Cost Materials		
(not to exceed \$50)		
Total Cost of Health and Safety		
(including Labor and Materials)		
TOTAL COST OF LABOR AND MATERIALS		
(including Health and Safety costs)		

THIS UNITS FUND					
SOURCE (SOURCE (check)				
DOE					
	LIHEAP				
LEVERAGED UNIT Yes					
	No				
Other Program:					

Total Cost of Health and Safety Materials:

JUSTIFICATION FOR OMMISSI	ON					
I decline the installation of the weatherization assistance program. I have been informed of the energy savings of	f said materials.	provided by				
Yo, declino la instalacion de programa de asistencia en climatizacion. He sido informado de los ahorros de energia	Yo, declino la instalacion de programa de asistencia en climatizacion. He sido informado de los ahorros de energia de dichos materiales					
Client Signature/Firma del cliente		Date/Fecha				
CLIENT CERTIFICATION (CERTIFIC	CATION)					
I certify that this weatherization work on my home has been completed. I will, to the tips provided to me in order to further reduce my energy expenses.	best of my ability, utiliz	e; the energy conservation				
Yo, certifico que este trabajo de climatizacion en mi casa ha sido terminado. Utilzare consejos de conservacion de energia que han provisto para que asi reduzca aun mas ga		gun mi habilidad, los				
Client Signature/Firma de cliente		Date/Fecha				
OTALITY CONTROL INCRECTU	ONI					
QUALITY CONTROL INSPECTION	UN					
 I certify that I have reviewed the initial assessment completed on this unit and it in Department. (initials:) I certify that I have verified that the Energy Audit for this unit was performed in a approved by the Department of Energy. (initials:) 	•	·				
I certify that the measures installed ranked appropriately in the Energy Audit and (initials:)	were appropriately call	ed for on the work orders.				
• I certify that measures were installed in accordance with the Department of Energinto the Texas Materials Installation Manual. (initials:)	y Standard Work Speci	fications, as incorporated				
I certify that I have completed a final inspection of this unit. (initials:)					
I certify that I have provided the client with energy conservation tips and education (initials:)	on on how to operate an	y appliances installed.				
• I certify that the information provided in this Building Weatherization Report is a	ccurate and complete.	(initials:)				
Inspector Notes: Signature of Quality Control Inspector	Date					
biginature of Quanty Control inspector	Date					

Building Weatherization Report Instructions

Agency: Your agency's full legal name.

Contract #: Your Contract # with TDHCA.

Audit #: Energy Audit Unit Number.

County: The County in which the weatherized unit is located.

Name: The name of the client.

Address: The physical address of the dwelling unit weatherized. Include apartment # if applicable.

Assessment Date: The day the agency completes the whole house assessment.

Contractor Work Start Date:

The day the work order is submitted to the contractor to begin work/order materials.

The Energy Audit must be completed before this date.

Work End Date:

The day the unit passes a final inspection and is signed off by the client.

Final inspection box must be completed during the time of final inspection.

Energy Audit Estimated Cost:

The total cost from the EASY Suggested Measures and Repairs Report

Phone #:

Self explanatory

Final Blower Door Reading:

Self explanatory

Total Square Footage of Conditioned Space:

Self explanatory

Heating Equipment:

Location: Indicate where in the unit the heating equipment is located

RPR: Indicate if you will repair the equipment with a yes or check mark

RPL: Indicate if you will replace the equipment with a yes or check mark

(The following must be entered whether or not the heater will be repaired or replaced)

Type: Use initials listed on the right of the section

VSH - Vented Space Heater

UVSH - Unvented Space Heater

VWF - Vented wall furnace

FF - Floor furnace

CH - Central forced air heater

WS - Wood stove

Cookstove - self explanatory

Fuel: Natural Gas/Propane/Electric

Efficiency: Pre: Before repair or replacement Post: After repair or replacement

Building Weatherization Report Instructions

Monoxor: self-explanatory

SIR/H&S: Indicate whether the heater will be RPR/RPL with weatherization

funds (requires SIR >1) or H&S funds or neither.

Cooling Equipment

All fields the same as for heaters except the monoxor.

A/C Types are

WU - Window Unit

EVAP - Evaporative Water Cooler

CS - Central System

Weatherization Materials Installed with Labor (list in SIR order, highest first)

NOTE

In order to properly complete the consumption studies, the Department is now requiring all agencies to list individual material: Example

Materials Installed	Labor	Materials	Quantity	Program	Final
	Cost	Cost	#		Inspection
Sheetrock	50	50	5 sheets	DOE	
					✓
Gaskets	5	5	10	DOE	
					✓
25 year caulk	24	24	12	DOE	
					✓

Repair Materials Installed

Enter as above. Labor may be listed on each material or may be listed as a total at the end of the section.

Health and Safety Materials Installed

Enter as example above.

Total Material Cost

Enter the total material cost from Weatherization Section plus Repair Materials Section. <u>Do not</u> include any H&S materials.

Total Labor Cost

Enter the total labor cost from Weatherization Section plus Repair Materials Section. <u>Do not</u> include any H&S labor.

Total Low Cost/No Cost Materials

For an explanation of this total see 10CFR440.20 and or contact TDHCA Training and Technical Staff.

Total Cost of Health and Safety

Enter the total labor and materials cost for H&S measures performed.

Total Cost of Labor and Materials

Add the items above and enter the total.

This Unit designated as:

Place a check mark or X in the appropriate box to indicate from which program this unit cost are to be funded. If the unit is leveraged with another program (such as HOME, HOME/WAP or one of the utility programs), place a Check Mark \checkmark or X in the yes box and enter the program name below.

Justification for Omission

In the event that a client refuses to allow one or more weatherization measure(s) that have an SIR of 1 or better, this form must be filled out and signed by the client and the agency representative.

Client Certification

Must be signed and dated <u>on or after</u> the date of the by the client. Any signatures obtained prior to that date will be subject to **corrective action** and/or **disallowed cost.**

Certification by Quality Control Inspector

Inspector must initial each item. Please provide notes on any out of the ordinary requirements for the unit. The BWR must be signed and dated <u>on or after</u> the date of the inspection by a certified Quality Control Inspector. Any signatures obtained prior to the date of final inspection will be subject to **corrective action** and/or **disallowed cost.**

			BUI	ILDING	WEATH	ER	IZATIO	N REPOR	RT				
Agency:													
Contract #:										Audit #:			
County:	Name:		Address:							Client Pl	none #:		
Assessment D	ate:		С	Contractor	Work Start D	Date	:	Work End	Dat	e:			
Energy Audit	Estimated C	lost:	F	inal Blow	er Door Read	ling	:	Total squa	re fo	ootage of	condition	oned space	ce:
Heating Equipment Location	RPR	RPL	Туре	e Fuel	Efficiency Pre		fficiency	Carbon monoxide Pre	m	arbon onoxide ost	SIR/ H&S	H	leater Types (check) VSH UVSH VWF FF CH WS COOK- STOVE
Cooling Equipment Location	RPR	RPL	Туре	e Fuel	COP Pre		OP ost				SIR/ H&S		A/C Types (check) WU EVAP CS
Weatheriza	tion Mater	ials Inst	alled	- (List in	ı SIR Orde	r)	Labor Cost	Materi Cost		Quantii #	y P	rogram *	Final Inspection
Total Cost of	of Weathe	rization	Mate	rials:									

*DOE, LIHEAP, etc.

BUILDING WEATHERIZATION REPORT

Repair Materials Installed	Labor	Material	Quantity	Program	Final
-	Cost	Cost	#	*	Inspection
Total Cost of Repair Materials:					
			-		
Health and Safety Materials Installed	Labor	Material	Quantity	Program	Final
-	Cost	Cost	#	*	Inspection

*NOTE: Weatherization materials donated or funded with other funds should be listed in the appropriate section on this form and indicated as N/C or "no charge."

Cost Category	DOE (\$)	LIHEAP (\$)
Total Material Cost (including incidental repairs and excluding Health and Safety)		
Total Labor Costs		
(excluding Health and Safety)		
Total Low-Cost /No Cost Materials		
(not to exceed \$50)		
Total Cost of Health and Safety		
(including Labor and Materials)		
TOTAL COST OF LABOR AND MATERIALS		
(including Health and Safety costs)		

THIS UNITS FUND							
SOURCE (SOURCE (check)						
DOE							
	LIHEAP						
LEVERAGED UNIT Yes							
	No						
Other Program:							

Total Cost of Health and Safety Materials:

JUSTIFICATION FOR OMMISSI	ON	
I decline the installation of the weatherization assistance program. I have been informed of the energy savings of	f said materials.	provided by
Yo, declino la instalacion de programa de asistencia en climatizacion. He sido informado de los ahorros de energia	de dichos materiales	provista por el
Client Signature/Firma del cliente		Date/Fecha
CLIENT CERTIFICATION (CERTIFIC	CATION)	
I certify that this weatherization work on my home has been completed. I will, to the tips provided to me in order to further reduce my energy expenses.	best of my ability, utiliz	e; the energy conservation
Yo, certifico que este trabajo de climatizacion en mi casa ha sido terminado. Utilzare consejos de conservacion de energia que han provisto para que asi reduzca aun mas ga		gun mi habilidad, los
Client Signature/Firma de cliente		Date/Fecha
OTALITY CONTROL INCRECTU	ONI	
QUALITY CONTROL INSPECTION	UN	
 I certify that I have reviewed the initial assessment completed on this unit and it in Department. (initials:) I certify that I have verified that the Energy Audit for this unit was performed in a approved by the Department of Energy. (initials:) 	•	·
I certify that the measures installed ranked appropriately in the Energy Audit and (initials:)	were appropriately call	ed for on the work orders.
• I certify that measures were installed in accordance with the Department of Energinto the Texas Materials Installation Manual. (initials:)	y Standard Work Speci	fications, as incorporated
I certify that I have completed a final inspection of this unit. (initials:)	
I certify that I have provided the client with energy conservation tips and education (initials:)	on on how to operate an	y appliances installed.
• I certify that the information provided in this Building Weatherization Report is a	ccurate and complete.	(initials:)
Inspector Notes: Signature of Quality Control Inspector	Date	
biginature of Quanty Control inspector	Date	

Building Weatherization Report Instructions

Agency: Your agency's full legal name.

Contract #: Your Contract # with TDHCA.

Audit #: Energy Audit Unit Number.

County: The County in which the weatherized unit is located.

Name: The name of the client.

Address: The physical address of the dwelling unit weatherized. Include apartment # if applicable.

Assessment Date: The day the agency completes the whole house assessment.

Contractor Work Start Date:

The day the work order is submitted to the contractor to begin work/order materials.

The Energy Audit must be completed before this date.

Work End Date:

The day the unit passes a final inspection and is signed off by the client.

Final inspection box must be completed during the time of final inspection.

Energy Audit Estimated Cost:

The total cost from the EASY Suggested Measures and Repairs Report

Phone #:

Self explanatory

Final Blower Door Reading:

Self explanatory

Total Square Footage of Conditioned Space:

Self explanatory

Heating Equipment:

Location: Indicate where in the unit the heating equipment is located

RPR: Indicate if you will repair the equipment with a yes or check mark

RPL: Indicate if you will replace the equipment with a yes or check mark

(The following must be entered whether or not the heater will be repaired or replaced)

Type: Use initials listed on the right of the section

VSH - Vented Space Heater

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VWF - Vented wall furnace

FF - Floor furnace

CH - Central forced air heater

WS - Wood stove

Cookstove - self explanatory

Fuel: Natural Gas/Propane/Electric

Efficiency: Pre: Before repair or replacement Post: After repair or replacement

Building Weatherization Report Instructions

Monoxor: self-explanatory

SIR/H&S: Indicate whether the heater will be RPR/RPL with weatherization

funds (requires SIR >1) or H&S funds or neither.

Cooling Equipment

All fields the same as for heaters except the monoxor.

A/C Types are

WU - Window Unit

EVAP - Evaporative Water Cooler

CS - Central System

Weatherization Materials Installed with Labor (list in SIR order, highest first)

NOTE

In order to properly complete the consumption studies, the Department is now requiring all agencies to list individual material: Example

Materials Installed	Labor	Materials	Quantity	Program	Final
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Sheetrock	50	50	5 sheets	DOE	
					✓
Gaskets	5	5	10	DOE	
					✓
25 year caulk	24	24	12	DOE	
					✓

Repair Materials Installed

Enter as above. Labor may be listed on each material or may be listed as a total at the end of the section.

Health and Safety Materials Installed

Enter as example above.

Total Material Cost

Enter the total material cost from Weatherization Section plus Repair Materials Section. <u>Do not</u> include any H&S materials.

Total Labor Cost

Enter the total labor cost from Weatherization Section plus Repair Materials Section. <u>Do not</u> include any H&S labor.

Total Low Cost/No Cost Materials

For an explanation of this total see 10CFR440.20 and or contact TDHCA Training and Technical Staff.

Total Cost of Health and Safety

Enter the total labor and materials cost for H&S measures performed.

Total Cost of Labor and Materials

Add the items above and enter the total.

This Unit designated as:

Place a check mark or X in the appropriate box to indicate from which program this unit cost are to be funded. If the unit is leveraged with another program (such as HOME, HOME/WAP or one of the utility programs), place a Check Mark \checkmark or X in the yes box and enter the program name below.

Justification for Omission

In the event that a client refuses to allow one or more weatherization measure(s) that have an SIR of 1 or better, this form must be filled out and signed by the client and the agency representative.

Client Certification

Must be signed and dated <u>on or after</u> the date of the by the client. Any signatures obtained prior to that date will be subject to **corrective action** and/or **disallowed cost.**

Certification by Quality Control Inspector

Inspector must initial each item. Please provide notes on any out of the ordinary requirements for the unit. The BWR must be signed and dated <u>on or after</u> the date of the inspection by a certified Quality Control Inspector. Any signatures obtained prior to the date of final inspection will be subject to **corrective action** and/or **disallowed cost.**

Audit Approval Task Tracker

		Action by				Isolated or	Texas Plan of action	
Energy Audit Topic	Issues	TDHCA	Status	Specific	Date done	widespread?	to address	date done
NEAT								
1. Energy estimating								
methodology	1. Compliant- NEAT.							
2. Measure interaction	2. Compliant- NEAT.							
3. Cost-effectiveness								
requirements	3. Compliant- NEAT.							
4. Measures considered	4. Lifetimes OK.							
5. Sample audits								
6. Audit procedures and field protocols								
7. Measures installed								
8. Priority list	8. N/A							
9. General Heat Waste Reduction lists								
10. Health and safety								
11. Energy audit procedures required for each building type served	11. Compliant.							

Audit Approval Task Tracker

Energy Audit Topic	Issues	Action by TDHCA	Status	Specific	Date done	Isolated or widespread?	Texas Plan of action to address	date done
MHEA								
1. Energy estimating								
methodology	1. Compliant. MHEA							
2. Measure interaction	2. Compliant. MHEA							
3. Cost-effectiveness								
requirements	3. Compliant. MHEA							
4. Measures considered	4. Lifetimes OK.							
5. Sample audits								
6. Audit procedures and								
field protocols								
7. Measures installed								
8. Priority list	8. Not Requested.							
9. General heat waste								
reduction lists								
10. Health and safety								
11. Energy audit								
procedures required for								
each								
building type served	11. Compliant.							

State of Texas Weatherization Assistance Program 2015 HEALTH AND SAFETY PLAN

This plan will provide guidance to the Texas Weatherization Network. Health and Safety issues will be identified by Program Assessors during the initial assessment. Weatherization Crews (either subcontracted or in house) will perform the task(s) identified in the initial assessment and listed in the work order(s).

Budgeting (Check one):

The grantee is encouraged to budget health and safety costs as a separate category and, thereby, excludes such costs from the average per-unit cost calculation. This separate category also allows these costs to be isolated from energy efficiency costs in program evaluations. The grantee is reminded that, if health and safety costs are budgeted and reported under the program operations category rather than the health and safety category, the related health and safety costs must be included in the calculation of the average cost per home and cost-justified through the audit.

<u>Separate Health & Safety Budget:</u> Texas exercises the option to budget health and safety costs as a separate budget line item.

H&S budget is not contained in Program Operations. It is not included in the average unit cost or SIR.

Incidental Repairs (List repairs, if any, that will be removed as health and safety measures and implemented as incidental repairs.):

If the grantee chooses to identify any health and safety measures as incidental repairs, they must be implemented as such under the grantee's weatherization program in all cases – meaning, they can never be applied to the health and safety budget category. In order to be considered incidental repairs, 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.

Minor issues related to drainage, electrical, structural, floor, roof repairs, and replacement of doors and windows that are unrepairable are considered to be an incidental repair in Texas. In instances where >32 sq ft of roof repair, or repair/replacement of doors or windows is recommended because the door/window could not otherwise be caulked or weather-stripped effectively this measure should not be billed as a Health and Safety cost; it must be categorized as an incidental repair. Providing protective materials such as primer or paint to seal and protect the weatherization materials installed shall be categorized as an incidental repair and shall be billed as such. Such materials shall only be allowed to protect weatherization materials installed. They shall not be allowable for cosmetic reasons alone. Reference: "Window Door Replacement Best Practice" (DOE-WAP) and "Window Door Repair Best Practice" (LIHEAP-WAP)

Health and Safety Expenditure Limits (Provide a per-unit average percentage and justification relative to the amount. Low percentages should include a statement of what other funding is being used to support health and safety costs, while larger percentages will require greater justification and relevant historical support.):

The grantee must set health and safety expenditure limits for their Subgrantees, providing justification by explaining the basis for setting these limits and providing related historical experience. 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 average cost per dwelling unit. For example, if the average cost per dwelling is \$5000, then an expenditure of \$500 per dwelling would equal 10 percent expenditures for health and safety. 10 percent is not a limit on H&S expenditures but exceeding this amount will require ample justification. These funds are to be expended by Subgrantees in direct weatherization activities. While required as a percentage of the average unit cost, if budgeted separately, the health and safety costs are not calculated into the per-house limitation.

Texas exercises the option to budget health and safety costs separately. **NOTE**: DOE calculates Health and Safety for the State of Texas as 25% of the program operations budget. Texas calculates Health and Safety as a percentage of house dollars (materials+labor+program support+health and safety). The calculation (house dollars x 20%) yields a Health and Safety amount that meets the maximum of 20% for Texas Subgrantees.

For Subgrantees, Health and Safety expenditures may not exceed 20% of total unit expenditures (materials, labor, program support, and health and safety) at the end of the contract period. H&S expenditures exceeding this percentage will require justification by the Subgrantee.

The Department feels that the 20% H&S amount is justified based on several factors:

- 1. The Department anticipates more stringent H&S requirements outlined in WPN 11-6 and WPN 11-6A. It is expected that these additional and specific requirements will result in significant H&S costs. These requirements are historically more aggressive than the H&S agenda Texas has pursued in homes weatherized under the DOE WAP Program.
- 2. Until January 2011 non-incorporated (non-municipal) rural areas had few established codes and little code enforcement. The WAP ARRA experience has demonstrated that installation costs in these areas are frequently higher because any altered appliance or area must now be brought up to the IRC code.
- 3. ASHRAE has been adopted and implemented; accounting for an average of \$750/unit, or 15% of the H&S budget.
- 4. The Department has included Air Conditioning Units as a Health and Safety Measure.

Deferral Policy (Provide a detailed narrative of the grantees overall deferral policy):

Deferral may be necessary if health and safety issues cannot be adequately addressed according to WPN 11-6 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. In the judgment of the auditor, any conditions that exist, which may endanger the health and/or safety of the workers or occupants, should be deferred until the conditions are corrected. Deferral may also be necessary where occupants are uncooperative, abusive, or threatening. The grantee should be specific in their approach and provide the process for clients to be notified in writing of the deferral and what corrective actions are necessary for weatherization to continue. The grantee should also provide a process for the client to appeal to a higher level in the organization.

Per Texas's Health & Safety Plan, a dwelling unit should not be weatherized where there is a major code violation or where there is a potentially harmful situation that may adversely affect the occupants or agency's weatherization crew and/or other staff. When such issues are found to be present, the owner/occupant is notified verbally and in writing; and, only after the owner corrects the identified issues satisfactorily and to code shall any weatherization work begin. The crew must declare their intent to defer weatherization work on an eligible unit on the energy audit worksheet. The audit form shall include the client's name and address, dates of the audit/assessment, date the client was informed, a clear description of the issue(s), a clear description of the condition(s) under which weatherization work could begin/continue, a clear description of the responsibilities of

all parties involved, client's signature(s) indicating that they have been informed of their rights and options and that they understand the issues and their responsibilities. A copy shall be given to the client and a copy shall be placed in the client file.

See Best Practices addressing Client Denials and Referrals posted on the website http://www.tdhca.state.tx.us/community-affairs/wap/wap-best-practices.htm

Client Denials and Referrals

Denials/Deferrals--Beyond the Scope

Denials/Deferrals-Health & Safety

Denials/Deferrals-NEAT Audit

Texas has a standard template/sample deferral letter that weatherization agencies may use to create the deferral notice that is sent to the client when conditions so warrant.

Procedure for Identifying Occupant Health Concerns:

Procedures must be developed and explained on how information is solicited from clients to reveal known or suspected occupant health concerns as part of the initial application for weatherization, additional screening of occupants again during the audit, and what steps will be taken to ensure that weatherization work will not worsen the health concern.

Texas has developed a Health & Safety Questionnaire that will be used as part of the application process that will then be further verified by the assessor at the time of the initial assessment and when conducting the H&S Inspection Checklist. (See "Health & Safety Client Questionnaire and Inspection Checklist" under Client Field and Assessment Forms on Department website: http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm

Due to Texas' high humidity levels in much of the state, moisture and mold-like substances are an integral part of assessments. See Best Practices addressing moisture and mold-like substances posted on the website http://www.tdhca.state.tx.us/community-affairs/wap/wap-best-practices.htm:

Mold Best Practices: , Flow Chart

Mold-Like Substance Notification and Release Form for Texas Weatherization Programs Identification of a Mold-Like Substance

In addition, if a Mold-Like Substance is detected clients are provided a copy of the Texas Department of State Health Services, "CONSUMER MOLD INFORMATION SHEET* Regulation of Mold Assessment and Remediation in Texas."

Weatherization agencies and their representatives, including subcontractors, are required to take all reasonable precautions against performing work on homes that will subject the occupants or themselves to health and/or safety risks. In cases where an occupant's health is fragile, or an occupant has been identified to have a health condition, including allergies, and/or the crew work activities would themselves constitute a health and/or safety hazard, the occupant(s) at risk shall be required to leave during the performance of the work activities. In cases where an occupant is identified as having an allergy to a specific weatherization material, that material will not be installed. If comparable alternative materials are available and the occupant has no known allergic to the alternative materials and they meet DOE regulations, crews/contractors may substitute the alternative material(s). If no safe alternative material meeting DOE standards is available, the measure shall not be installed. This must be well documented in the client file.

Documentation Form(s) have been developed (Check Yes or No):

Documentation forms must be developed, include the client's name and address, dates of the audit/assessment and when the client was informed of a potential health and safety 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

Yes X Texas has developed documentation forms and has a deferral notice in place; all will be used for the documentation of potential health and safety issues. These forms include all of the items listed in the gray box directly above.

No

Air Conditioning and Heating Systems

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6

"Red tagged", inoperable, or nonexistent heating system replacement, repair, or installation is allowed where climate conditions warrant and in households that include at least one member who is 5 years of age and under, elderly, or disabled.

Because Texas is a predominantly hot weather state, air conditioning system replacement, repair, or installation is allowed in households that include at least one member who is 5 years of age and under, elderly, or disabled.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the heating/cooling system issue is determined to be beyond the scope of DOE WAP, weatherization agencies will defer the work and refer the client to other resource agencies who may be able to address the problem. Texas's deferral policy and protocols shall always be strictly adhered to when deferring weatherization work. If client is completely without cooling and the weather warrants, the weatherization agencies shall make a referral to an agency with funding that can provide at-risk clients with a portable air conditioner. In the case where the heating system issue is determined to be beyond the scope of DOE WAP; and the client is completely without heat and the weather warrants, the weatherization agencies shall make a referral to an agency with funding that can provide client with a temporary means of heat, such as a portable heat pump or blankets.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

The Department will initially attempt to qualify existing Air Conditioning units and Heating systems as an ECM. If the AC unit or Heating system does not rank and if the client qualifies under the at risk criteria, then the Subgrantee may repair, replace, or provide a new AC unit or furnace as a Health and Safety Measure.

The goal of all testing shall be to make sure Heating/cooling systems are present, operable, and performing safely. Additionally, we want to determine the presence of at-risk occupants.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral should be exercised when existing code violations are present and correcting them would result in a whole-house SIR below a 1, or when there are problems affecting the heat system/furnace that are beyond the

scope of the DOE WAP, such as certain electrical problems. For additional deferral criteria, see deferral section above.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referrals should be made when problems are identified that are beyond the scope of the DOE WAP, such as electrical or other code violations. Examples of referral agencies include, but are not limited to, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

The Department provided CAZ Testing training across the state. The course covered worst case depressurization testing, with a focus on when to replace systems for high CO levels, when to shut off the system, open window, and when to notify the client and gas company. Best Practices addressing worst case depressurization testing are posted on the website. http://www.tdhca.state.tx.us/community-affairs/wap/wap-best-practices.htm

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm

In addition the Texas Mechanical Systems Field Guides have been distributed to all Subgrantees and posted on the Department's website under Weatherization Tools and Guides. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Clients shall be given all pertinent information on the appropriate use and maintenance of heating units as well as information regarding the proper disposal of bulk fuel tanks when not removed, if applicable.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Weatherization agencies shall require licensed HVAC subcontractors to dispose of old Heating/cooling systems as part of the repair/installation job. All weatherization agencies and subcontractors must follow local and state regulations when disposing of old Heating/cooling systems components and /or fuels.

Air Conditioning Installation (as specific to installation as a health and safety measure): Provide a narrative on implementation protocols of air conditioning repair, replacement, and installation including justification for allowability that includes climate justification with degree days and how to define at-risk occupants

Air conditioning installation is an allowable health and safety measure in Texas. Texas' weather and geography directly affects energy consumption in homes. Cooling degree days is a climatic statistic that can be used to reflect the severity and length of the cooling season. Basically, cooling degree days represent the number of hours over the course of a year that the outside air temperature is above 78 degrees Fahrenheit.

Texas is a diverse state with a myriad of climatic conditions. As noted in the following historic average temperatures per larger cities, most areas rarely drop below the heating degree day outside temperature of 65 degrees Fahrenheit. In many areas, heating is needed on a limited basis. However, throughout Texas, cooling is often a necessity.

Texas has several climate zones and the degree of heating necessary varies depending on the area. Combustion Safety is always a prime concern regarding heating systems. Texas is primarily a cooling climate. When conducting energy audits, cooling is a more significant factor than heating in determining energy conservation measures and the health of "vulnerable populations" (i.e.- elderly, children under the age of 5, and those who

have medical needs). In every instance, the cooling loads require more comprehensive measures than heating loads; such as low-e windows, solar screens, reducing humidity, and air conditioners. Therefore, air conditioning installation is an allowable measure in Texas.

Heating/cooling systems Installation (as specific to installation as a health and safety measure): Provide a narrative on implementation protocols of Heating/cooling systems repair, replacement, and installation including justification for allowability that includes climate justification with degree days

See above under air conditioning installation for climate justification for Heating/cooling systems installation. Texas is primarily a cooling climate with occasional severe cold weather conditions. Heat loss emergencies in Texas can put clients at severe health and safety risk that could potentially be life-threatening. Thus, Heating/cooling systems installation as a health and safety measure is allowable. Texas requires heat system installation to follow local and state code and it must be performed by a licensed HVAC professional. Weatherization agencies may subcontract licensed HVAC companies/individuals to perform Heating/cooling systems installations and repairs if they follow proper state procurement procedures.

Appliances and Water Heaters

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6

Replacement or repair of water heaters is allowed on a case by case basis. Replacement and installation of other appliances are not allowable health and safety costs. Repair and cleaning are allowed.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used for repair and cleaning. Replacement of cook stoves may be done with unrestricted funds from a funding source other than DOE.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the water heater or appliance issue is determined to be beyond the scope of DOE WAP, the agency will defer the work and refer the client to other resource agencies who may be able to address the problem. Texas's deferral policy and protocols shall always be strictly adhered to when deferring weatherization work.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

TDHCA Subgrantee Guidance: The goal of all testing is to verify appliances are present, operable, and performing safely. Testing is outlined in the Weatherization and Mechanical Field Guide posted on the Department's website under Weatherization Tools and Guides.

http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

TDHCA Subgrantee Guidance for Stoves

Stove replacement is Not allowed:

Cook Stoves with high CO:

- Clean or repair
- If still has high CO levels, then see if another funding source is able to pay for the stove replacement.
- If no other source, the house must be deferred until the occupant can address the stove.
- Document all steps.
- CO deferral levels for Stoves that cannot be remedied

25 ppm for stove top burners 150 ppm for oven.

The Subgrantees must initially attempt to qualify existing Water Heater as an ECM. If the Water Heater does not rank, Subgrantees may repair or replace the existing unit as a Health and Safety Measure. Testing is out lined in the Weatherization and Mechanical Field Guide.

CO deferral Levels for Gas water heaters that cannot be remedied
 100 ppm tested at the flue.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral shall be exercised when the estimated H&S cost exceeds the total cost of all Weatherization Measures.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referrals should be made when problems are identified that are beyond the scope of the DOE WAP, such as electrical or other code violations. Examples of referral agencies include, but are not limited to, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

On-going Health & Safety training will continue via regional training, webinars, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Clients shall be given all manufacturers information on the appropriate use and maintenance of water heating units.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

All weatherization agencies and subcontractors must follow local and state regulations when disposing of old water heating system components. Go to: http://www.epa.gov/osw/ for current rules and regulations; along with EPA approved disposal sites.

Asbestos - in siding, walls, ceilings, etc.

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6Removal of siding is allowed to perform energy conservation measures. All precautions must be taken not to damage siding. Asbestos siding should never be cut or drilled. Recommended, where possible, to insulate through home interior.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address

this particular health and safety category.

DOE funds may be used.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Crews/contractors will never cut or drill through asbestos siding. Where asbestos siding exists, they must determine if it can be removed and rehung to work from the outside; and use (LSW) practices. Work will be performed from the inside of the unit, whenever possible.

Definition: Asbestos is the name given to a number of naturally occurring fibrous minerals with high tensile strength, the ability to be woven, and resistance to heat and most chemicals. Because of these properties, asbestos fibers have been used in a wide range of manufactured goods, including roofing shingles, ceiling and floor tiles, paper and cement products, textiles, coatings, and friction products such as automobile clutch, brake and transmission parts. The Toxic Substances Control Act defines asbestos as the asbestiform varieties of: chrysotile (serpentine); crocidolite (riebeckite); amosite (cummingtonite/grunerite); anthophyllite; tremolite; and actinolite.

The three most common varieties of asbestos are: chrysotile, amosite, and crocidolite. Chrysotile fibers are pliable and cylindrical, and often arranged in bundles. Amosite and crocidolite fibers are like tiny needles. Unlike most minerals, which turn into dust particles when crushed, asbestos breaks up into fine fibers that are too small to be seen by the human eye.

It is difficult to tell whether a material contains asbestos simply by looking at it, unless it is labeled. If in doubt, treat the material as if it contains asbestos. Testing is allowed by a certified AHERA tester.

Inspect exterior wall surfaces and sub-surfaces for asbestos siding prior to drilling or cutting. Typically, asbestos appears as a whitish, fibrous material which may release fibers that range in texture from coarse to silky.

Check state and local codes prior to the temporary removal and replacement of asbestos siding. It may only be allowable if local and state codes allow temporary removal and replacement of asbestos siding.

Keep activities to a minimum in any areas having damaged material that may contain asbestos. Document and inform the client regarding the damaged material and suspected asbestos. Do not further disturb the material. If necessary, weatherization work to that area may have to be deferred.

In Texas, allow for the temporary removal of asbestos siding so that insulation materials may be installed, provided:

Technicians wear personal protective equipment;

- ·The ground in the work area is covered with plastic sheeting to capture broken fragments;
- •The pieces of siding to be removed are first sprayed with water;
- ·Breakage is kept to an absolute minimum;
- ·The siding is replaced; and
- ·The cost to benefit ratio is justified.

Do not dust, sweep, or vacuum debris that may contain asbestos.

Never saw, sand, scrape, or drill holes in asbestos materials.

Do not track material that could contain asbestos through the house.

All precautions must be taken not to damage the siding during removal. Asbestos siding should never be cut or drilled.

It is recommended that insulation be installed through interior wall surfaces if possible to completely avoid disturbing or removing the asbestos siding on the exterior of the home.

Follow EPA and OSHA regulations regarding the safe handling of asbestos to ensure worker and client safety. OSHA Fact Sheet No. 92-06 "Better Protection Against Asbestos in the Workplace" is posted on the Department's website under Health and Safety. Follow State and Local codes pertaining to asbestos.

For additional information and guidance regarding asbestos, reference:

REFERENCE: Texas Asbestos Health Protection Rules (TAHPR)

REFERENCE: ADMINISTRATIVE CODE - TITLE 25 - PART 1

CHAPTER 295.31 - CHAPTER 295.73

'Texas (TX) Asbestos Removal & Abatement Resources' Sources:

- "Texas Administrative Code." Health Services, Texas Asbestos Health Protection. 23 May 2006. 27 Jan 2008. http://www.dshs.state.tx.us/asbestos/rules.shtm
- "Asbestos Program." Texas Department of State Health Services. 12 Dec 2005. 9 Feb 2008. http://www.dshs.state.tx.us/asbestos/about.shtm.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral should be exercised when local and/or state code does not allow the removal of asbestos siding as part of general contracting work, or when the asbestos siding cannot be removed without disturbing the asbestos. Deferral and appropriate referral should also be exercised when the asbestos siding is already in such a damaged state that it is releasing asbestos fibers and insulation cannot be installed via interior wall surfaces.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referral shall be made at the State level at:

Environmental and Sanitation Licensing Group MC 2835

Texas Department of State Health Services

http://www.dshs.state.tx.us/asbestos/default.shtm

MAILING ADDRESS

P. O. Box 149347

Austin, Texas 78714-9347

PHYSICAL ADDRESS

The Exchange Building

8407 Wall Street

Austin, Texas 78754

MAIN PHONE:

(512) 834-6787 Ext. 2198 or (800) 572-5548 Ext. 2198

MAIN FAX:

(512) 834-6707

Asbestos Program Coordinator

Phone: (512) 834-6787, Extension 2198

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

OSHA Fact Sheet No. 92-06 "Better Protection Against Asbestos in the Workplace" is available on the

Department's website under Health and Safety for all Subgrantees' use: http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

In every instance, clients shall be informed both verbally and in writing that suspected asbestos siding is present. Clients shall also be informed as to the precautions that will be taken. Client written materials shall include information about the potential health risks associated with asbestos.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Proper disposal procedures are available at Texas Commission on Environmental Quality: Special Waste Disposal:http://www.tceq.texas.gov/permitting/waste_permits/msw_permits/msw_specialwaste.html

Texas Natural Resource Conservation Commission

Technical Assistance Team, Permits Section/MC 124

Municipal Solid Waste Division/TNRCC

PO Box 13087, Austin, TX 78711-3087

Phone 512-239-6781 Fax 512-239-6717

Asbestos - in vermiculite

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6

When vermiculite is present, unless testing determines otherwise, take precautionary measures as if it contains asbestos, such as not using blower door tests and utilizing personal air monitoring while in attics. Where blower door tests are performed, it is a best practice to perform pressurization instead of depressurization. Encapsulation by an appropriately trained asbestos control professional shall be allowed. Removal shall not be allowed.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If determined to be beyond the scope of the DOE WAP, follow all appropriate Deferral and Referral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Minimal standards for remedy include, but are not limited to the following:

If a home contains vermiculite insulation, assume that this material is contaminated with asbestos and do not disturb it.

To determine if the insulation is made from vermiculite refer to the photographs posted at http://www.epa.gov/asbestos/pubs/verm_questions.html. Compare the photos on the website to the undisturbed insulation in the home. Vermiculite insulation is a pebble-like, pour-in product and is usually gray-brown or silver-gold in color.

Asbestos Hazard Emergency Response Act of 1986 (AHERA) certified prescriptive sampling is allowed by a certified tester. However, it is recommended to assume that vermiculite insulation contains asbestos and proceed accordingly.

Do not open any walls to check for vermiculite. Only check for vermiculite in the attic, and if found, leave it undisturbed, when possible.

If it is absolutely necessary to go into the attic containing vermiculite insulation, limit the number of trips and shorten the length of those trips in order to limit any potential exposure and to avoid disturbing the product as any disturbance could potentially release asbestos fibers into the air.

Wear protective equipment when entering an attic area that may contain vermiculite insulation.

Do not track vermiculite insulation or associated dust into the living spaces of the home.

Follow EPA and OSHA regulations regarding the safe handling of asbestos to ensure worker and client safety. OSHA Fact Sheet No. 92-06 "Better Protection Against Asbestos in the Workplace" is posted on the Department's website under Health and Safety. Follow State and Local codes pertaining to asbestos.

For additional information and guidance regarding asbestos, reference:

Texas Asbestos Health Protection Rules (TAHPR)

TEXAS ADMINISTRATIVE CODE - TITLE 25 - PART 1

CHAPTER 295.31 - CHAPTER 295.73

'Texas (TX) Asbestos Removal & Abatement Resources' Sources:

• "Texas Administrative Code." Health Services, Texas Asbestos Health Protection. 23 May 2006. 27 Jan 2008. http://www.dshs.state.tx.us/asbestos/rules.shtm

"Asbestos Program." Texas Department of State Health Services. 12 Dec 2005. 9 Feb 2008. http://www.dshs.state.tx.us/asbestos/about.shtm.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral may be exercised if it is determined that the vermiculite insulation material and/or associated dust is seeping into the home living spaces to an extent that cannot be resolved with typical weatherization sealing measures. Deferral of attic portion of the work may be exercised if it is determined that the attic already contains vermiculite insulation and it would be best to leave it undisturbed and encapsulated in its original form. Encapsulation of vermiculite should be performed by an AHERA asbestos control professional only.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referral shall be made at the State level at:

Environmental and Sanitation Licensing Group MC 2835

Texas Department of State Health Services

http://www.dshs.state.tx.us/asbestos/default.shtm

MAILING ADDRESS

P. O. Box 149347

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Austin, Texas 78754

MAIN PHONE:

(512) 834-6787 Ext. 2198 or (800) 572-5548 Ext. 2198

MAIN FAX:

(512) 834-6707

Asbestos Program Coordinator

Phone: (512) 834-6787, Extension 2198

Another source of vermiculite insulation information may be found at:

http://www.epa.gov/asbestos/pubs/vermiculite message to the public.pdf

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

OSHA Fact Sheet No. 92-06 "Better Protection Against Asbestos in the Workplace" is posted on the Department's website under Health and Safety.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

In every instance, clients shall be informed both verbally and in writing that suspected asbestos is present. Clients shall also be informed as to the precautions that will be taken. Client written materials shall include information about the potential health risks associated with asbestos. When it is determined that vermiculite insulation is present in a client's home, the EPA Fact Sheet, "Protect Your Family from Asbestos-Contaminated Vermiculite Insulation" shall be provided to the client. It can be found at http://www.epa.gov/asbestos/pubs/vermiculite message to the public.pdf

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Removal and/or disposal are not allowed for vermiculite insulation.

Referral shall be made at the State level at:

Environmental and Sanitation Licensing Group MC 2835

Texas Department of State Health Services

http://www.dshs.state.tx.us/asbestos/default.shtm

MAILING ADDRESS

P. O. Box 149347

Austin, Texas 78714-9347

PHYSICAL ADDRESS

The Exchange Building

8407 Wall Street

Austin, Texas 78754

MAIN PHONE:

(512) 834-6787 Ext. 2198 or (800) 572-5548 Ext. 2198

MAIN FAX:

(512) 834-6707

Asbestos Program Coordinator

Phone: (512) 834-6787, Extension 2198DOE guidance does not allow for the removal of asbestos, unless on small covered surfaces. This guidance must always be followed.

Asbestos - on pipes, furnaces, other small covered surfaces

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6

Assume asbestos is present in covering materials. Encapsulation is allowed by an AHERA asbestos control professional and should be conducted prior to any blower door testing. Removal may also be allowed by an AHERA asbestos control professional based on the situation as determined by the inspector or Agency Representative.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If determined to be beyond the scope of the DOE WAP, follow all appropriate Deferral and Referral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Inspect pipe and other coverings for asbestos. Testing is allowed only by a certified Tester. Check local codes prior to removal and replacement of asbestos containing materials. Removal and replacement of asbestos containing materials may be allowable by an AHERA asbestos control professional if local codes allow.

Keep activities to a minimum in any areas having damaged material that may contain asbestos. Document and inform the client regarding the damaged material and suspected asbestos. Do not further disturb the material.

Do not dust, sweep, or vacuum debris that may contain asbestos.

Never saw, sand, scrape, or drill holes in asbestos materials.

Do not track material that could contain asbestos through the house.

Follow EPA and OSHA regulations regarding the safe handling of asbestos to ensure worker and client safety. Follow State and Local codes pertaining to asbestos.

Texas Asbestos Health Protection Rules (TAHPR)

TEXAS ADMINISTRATIVE CODE - TITLE 25 - PART 1

CHAPTER 295.31 - CHAPTER 295.73

'Texas (TX) Asbestos Removal & Abatement Resources' Sources:

- "Texas Administrative Code." Health Services, Texas Asbestos Health Protection. 23 May 2006. 27 Jan 2008. http://www.dshs.state.tx.us/asbestos/rules.shtm
- "Asbestos Program." Texas Department of State Health Services. 12 Dec 2005. 9 Feb 2008. http://www.dshs.state.tx.us/asbestos/about.shtm.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral should be exercised when the cost of an AHERA asbestos control professional to remove the asbestos, exceeds the total cost of all Weatherization Measures. For additional deferral criteria, see deferral section above.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referral shall be made at the State level at:

Environmental and Sanitation Licensing Group MC 2835

Texas Department of State Health Services

http://www.dshs.state.tx.us/asbestos/default.shtm

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Asbestos Program Coordinator

Phone: (512) 834-6787, Extension 2198

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

OSHA Fact Sheet No. 92-06 "Better Protection Against Asbestos in the Workplace" is posted on the Department's website under Health and Safety.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

In every instance, clients shall be informed both verbally and in writing that suspected asbestos is present. Clients shall also be informed as to the precautions that will be taken. Client written materials shall include information about the potential health risks associated with asbestos.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

All local, state and federal requirements and regulations shall be followed by Texas Subgrantees. At the State level, asbestos related referral and/or disposal questions, as well as other asbestos related questions/issues, may be referred to DOE guidance does not allow for the removal of asbestos, unless on small covered surfaces. This guidance must always be followed.

Biologicals and Unsanitary Conditions - odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc.

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6

Remediation of conditions that may lead to or promote biological concerns and unsanitary conditions is allowed. Addressing bacteria and viruses is not an allowable cost. Deferral may be necessary in cases where a known agent is present in the home that may create a serious risk to occupants or weatherization workers. More information is available under the Mold and Moisture guidance below.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

This health and safety category shall require sensory inspection for the purpose of detection.

Types of health and safety hazards that may be included under this category include, but are not limited to:

- ·Odors:
- ·Mustiness;
- ·Bacteria;
- ·Viruses;
- ·Raw sewage;
- ·Rotting wood;
- ·Garbage;
- ·Etc.

Addressing bacteria and viruses shall not be allowed. Deferral may be necessary in cases where a known agent is present in the home that may create a serious risk to occupants or weatherization crews/contractors.

The use of personal protective equipment shall be strictly enforced. Respirators, protective eyewear, and protective clothing will be worn when there is suspicion or knowledge that biological agents may be present in order to eliminate or minimize crew exposure.

In the past, remediation of conditions listed under this health and safety category was not allowed. It is allowable under WPN 11-6, except for the removal of known bacteria and viruses, and Texas will train crews/contractors regarding specific remediation activities that may be allowable. Remediation requires prior

approval from the Department. Texas will assess the cost-effectiveness and necessity of remediation of these conditions on a case by case basis.

See Mold and Moisture guidance below for additional standards for remedy.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Visual and sensory inspection must be performed for the purpose of detection of health and safety hazards such as, but are not limited to:

- ·Odors;
- ·Mustiness;
- ·Bacteria;
- ·Viruses;
- ·Raw sewage;
- ·Rotting wood;
- ·Garbage;
- ·Etc.

The use of personal protective equipment (Respirators, protective eyewear), and protective clothing will be worn when there is suspicion or knowledge that biological agents may be present in order to eliminate or minimize crew exposure.

Deferral may be necessary in cases where a known agent is present in the home that may create a serious risk to occupants or weatherization crews/contractors. For additional deferral criteria, see deferral section above.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referral should be made when problems are identified that are beyond the scope of the DOE WAP, such as the presence of raw sewage or other known agents. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources. When biological or virus agents are suspected, referral to the Texas Health and Human Services Commission may be warranted. Information is available at http://www.hhsc.state.tx.us

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Clients shall be given information on the appropriate clean-up and removal of biological hazards identified during the initial inspection performed by the Assessor.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

All Federal, State, and local regulations shall be followed regarding the disposal procedures as they pertain to this health and safety category.

Building Structure and Roofing

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6

Building rehabilitation is beyond the scope of the WAP. Homes with conditions that require more than incidental repair should be deferred. More information is available under the Mold and Moisture guidance below.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may not be used for building rehabilitation work that goes beyond the scope of the WAP and requires more than incidental repairs.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

Structurally compromised areas requiring more than incidental repairs shall be deemed beyond the scope of the WAP and shall be deferred.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Minimal standards for remedy include, but are not limited to the following:

Visual inspection.

Ensure that access to areas necessary for weatherization is safe for entry and performance of assessment, work, and inspection.

Notify client of structurally compromised areas; defer weatherization work to those areas.

Basic guidance for WAP crews/contractors:

While conducting the initial audit, the building structure shall be inspected for structural integrity. Minor repairs to protect the DOE materials installed may be performed to protect the energy saving investment. However, building rehabilitation is beyond the scope of the WAP. Dwellings whose structural integrity is in question should be referred to agencies that deliver HUD funds or other appropriate local and state agencies. Weatherization services may need to be delayed or deferred until the dwelling can be made safe for crews/contractors and occupants. Incidental (minor) repairs necessary to effectively perform or preserve weatherization materials/measures are allowed. Examples of these include sealing minor roof leaks to preserve new attic insulation and repairing water-damaged flooring as part of replacing a water heater. Incidental structural repairs shall not include cosmetic applications, such as replacing a floor covering such as a carpet or linoleum. Only the structural part shall be replaced/repaired.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Homes that require more than incidental (minor) repair should be deferred.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Dwellings whose structural integrity is in question should be referred to local code enforcement authorities or agencies such as Habitat for Humanity, United Way, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Clients shall be notified verbally and in writing regarding any structurally compromised areas. Appropriate referral resources shall also be provided to the client.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

All Federal, state and local regulations regarding disposal of construction waste shall be followed.

Code Compliance

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6

Correction of pre-existing code compliance issues is not an allowable cost other than where weatherization measures are being conducted. State and local (or jurisdiction having authority) codes **must** be followed while installing weatherization measures. Condemned properties and properties where "red tagged" health and safety conditions exist that cannot be corrected under this guidance should be deferred.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used when weatherization measures are being conducted. They may not be used simply to correct pre-existing code compliance issues.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Minimal standards for remedy include, but are not limited to the following:

Visual inspection as well as local code enforcement inspections shall be necessary to comply with WPN 11-6 guidance.

Follow all State and Local codes when installing weatherization measures.

Acquire all required permits and licenses pertinent to installing weatherization measures. These vary by jurisdiction and it is the responsibility of each Subgrantee agency to know what the codes are in each of the areas

they work, as well as what permits and licenses are required in each of the areas they work.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Condemned properties shall be deferred. Properties where "red-tagged" health and safety conditions exist that cannot be addressed with DOE H&S funding, should be deferred.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Where code compliance issues are identified and cannot be corrected under WPN 11-6 guidance, or program guidance, appropriate referrals should be made. Examples of referral agencies include, but are not limited to Habitat for Humanity, United Way, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

The Department is working with the State Energy Conservation Office (DOE State Energy Program Subgrantee and the state authority to adopt code) on a collaborative effort to address code compliance issues. The collaborative will address code education throughout the State of Texas. Classes will be available to all Subgrantees to attend at a nominal fee set by the collaborative to cover costs. Once finalized, information regarding this will be communicated to Subgrantees.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Inform client of observed code compliance issues. Make appropriate referrals as necessary.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

All Federal, state and local regulations regarding disposal of construction waste shall be followed.

Combustion Gases

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6 Proper venting to the outside for combustion appliances, including gas dryers, is required. Correction of venting is allowed when testing indicates a problem.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used in accordance with guidance in WPN 11-6.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

A complete mechanical systems assessment is required to be completed on every home. All relevant information must be recorded on the Heating/cooling systems and Appliance Worksheet. The procedure includes collecting general information; collecting and recording mechanical systems information; visual and diagnostic inspection of the venting and distribution system; and, combustion analysis and diagnostic testing of gas/propane fired equipment, and post-installation safety tests for CO.

Combustion safety testing is required when combustion appliances are present. Combustion appliances include any appliance using combustible fuels, including gas water heaters, wood stoves, gas or oil fueled furnace/heat system, including free standing space heaters fueled by kerosene, natural gas, or propane.

The combustion appliance safety inspection includes all of the following: carbon monoxide testing, draft measurement, spillage evaluation, and worst case depressurization of the combustion appliance zone (CAZ). Combustion safety test results must be acted upon appropriately according to the combustion safety tables. Testing protocols can be found in Chapter 2 and 3 of the Texas Mechanical Systems Field Guide which has been distributed to the entire weatherization network and is located on the Department's website http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm

As applicable, every combustion appliance will be checked for a safe flue pipe, chimney or vent, adequate combustion air, and gas leakage. DOE will not permit any DOE-funded weatherization work where the dwelling unit is heated with an unvented gas- and/or liquid-fueled space heater as the primary heat source. In such cases the primary space heater must be removed and a vented, code compliant heat source must be installed prior to the installation of weatherization measures. DOE will allow unvented gas- or liquid-fueled space heaters to remain as secondary heat sources provided they comply with ANSI Z21.11.2, the IRC, and the IFGC. LIHEAP-WAP may replace non-compliant secondary unvented gas- or liquid-fueled space heaters.

Weatherization Assessors and Final Inspectors must test naturally drafting appliances for draft and spillage under worst case conditions before and after air tightening is performed.

Weatherization Assessors and Final Inspectors must also test cooking burners for operability, and flame quality.

Subgrantees must test for high carbon monoxide (CO) levels and bring CO levels to acceptable levels before weatherization work can start. The Department has defined maximum acceptable CO readings as follows: (1) 25 parts per million for cook stove burners and unvented space heaters; (2) 100 parts per million for vented combustion appliance; and (3) 150 parts per million for cook stove ovens.

Investigate and correct a steady state CO reading >100 ppm in the following appliances: water heater, furnace or space heater.

CO detectors should be installed in all homes when fuel-fired (combustion) appliances exist. This includes: cook stoves, furnaces, water heaters, wood and coal burning stoves.

Combustion appliances must be installed to the IRC or local code regulations.

TDHCA Subgrantee Guidance:

Oven replacements are Not allowed. If CO readings are above the limits above follow these steps:

- 1. Clean or repair
- 2. If still has high CO levels, then see if another funding source is able to pay for the stove replacement.
- 3. If no other source, the house must be deferred until the occupant can address the stove.
- 4. Document all steps.

REFERENCE: "Combustion Safety & Efficiency Testing" in the Texas Mechanical Systems Field Guide

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral should be exercised when existing code violations are present and correcting them would be beyond the scope of the DOE WAP, and/or when there are problems affecting the combustion appliance that are beyond the

scope of the DOE WAP, such as certain electrical problems. For additional deferral criteria, see deferral section above.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referrals should be made when problems are identified that are beyond the scope of the DOE WAP, such as electrical or other code violations. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The Department implemented ASHRAE 62.2-2013 in its 2014 program year. Training for Subgrantees was provided via webinar on October 29, 2014 and included a refresher on ventilation requirements and instruction on changes from ASHRAE 2010 to 2013, including but not limited to:

- 1. Local exhaust exceptions
- 2. Flow measurement
- 3. Different air flow calculation: The Department will use the updated calculator provided by Residential Energy Dynamics at http://www.residentialenergydynamics.com/REDCalcFree/Tools/ASHRAE6222013.aspx. This tool has been updated to apply the changes in the air flow calculation from 2010 to 2013.
- 4. Infiltration credit
- 5. Newly added carbon monoxide alarm and pressure drop requirements
- 6. Use with Multifamily units

In addition, the new ASHRAE standards are incorporated into the Standard Work Specifications published by NREL, which the Department is currently incorporating. Additional training for Subgrantees will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees, etc. Training for program monitors so that they can monitor for compliance with all requirements will be handled via the webinar and in-house on an as-needed basis. Training and Technical Assistance staff will ensure compliance with ASHRAE 62.2-2013 during technical assistance visits to Subgrantees, and Monitors will ensure compliance with ASHRAE 62.2-2013 when they review completed units.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Client shall be provided with combustion safety and hazards information, including the importance of using exhaust ventilation when cooking and the importance of keeping burners clean to limit the production of CO.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Weatherization agencies shall require subcontractors to dispose of old Heating/cooling systems as part of the repair/installation job. All weatherization agencies and subcontractors must follow local and state regulations when disposing of old Heating/cooling systems components and /or fuels.

Combustion Gas Problem Discovery: Provide a narrative describing the process to be followed when combustion gas testing reveals health and safety concerns.

All homes with combustion appliances shall be tested to determine if carbon monoxide levels exceed those recommended by the Texas Weatherization Technical Standards, EPA, OSHA, and gas utilities. The existing

primary standards for Ambient Air Quality, per EPA, are 9 parts per million (ppm) measured over 8 hours, and 35 ppm measured over 1 hour. OSHA standards for CO exposure: The OSHA PEL is 50 ppm. OSHA standards prohibit worker exposure to more than 50 parts of the gas per million part of air averaged during an 8-hour time period.

The Texas TAC requires that crews/contractors investigate and correct steady state CO readings > 150 ppm from gas ovens and >25ppm for cook-top burners. Crews/contractors must also investigate and correct steady-state CO readings > 100 ppm for gas water heaters, and furnaces/space heaters. Combustion air requirements and availability must be calculated for all combustion appliances. When combustion gas testing reveals health and safety concerns, clients shall be notified of the health and safety concern, and the concern shall be remedied to remove the health and safety risk if it can be remedied within the scope of the DOE WAP. If it cannot be satisfactorily remedied within the scope of the DOE WAP, the work may have to be deferred. Clients shall be notified both in writing and verbally, and crews/contractors shall make every reasonable effort to refer the client to other resources.

Should crew members or occupants show any signs of CO poisoning, proper first aid protocols should be followed, including getting them to fresh air right away and seeking immediate medical attention. Common symptoms of CO exposure include: headaches, dizziness and drowsiness. More severe symptoms include: nausea, vomiting, tightness across the chest. Severe carbon monoxide poisoning can cause neurological damage, illness, coma and death.

Drainage - gutters, down spouts, extensions, flashing, sump pumps, landscape, etc.

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6

Major drainage issues are beyond the scope of the WAP. Homes with conditions that may create a serious health concern that requires more than incidental repairs should be deferred. See Mold and Moisture guidance below.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may not be used to address major drainage issues. The cost to address the drainage issues must not exceed the total cost of all weatherization measures.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Major drainage issues are beyond the scope of the WAP. Homes with conditions that may create a serious health concern that require more than incidental repair shall be deferred. Visual inspection and observation shall be the primary mechanism for detecting drainage issues.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral should be exercised when major drainage issues are present and could present a serious health risk and correcting them would be beyond the scope of the DOE WAP. For additional deferral criteria, see deferral section above.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referral should be made when problems are identified that are beyond the scope of the DOE WAP, such as code violations, structural issues or serious drainage issues. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Client education shall include, but not be limited to, the importance of cleaning and maintaining drainage systems.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes and regulations shall always be adhered to for proper disposal procedures.

Electrical, other than Knob-and-Tube Wiring

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6	Minor electrical repairs are allowed where health or safety of the occupant(s) may	
	be at risk. Upgrades and repairs are allowed when necessary to perform specific	
	weatherization measures.	

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Aluminum wiring should be thoroughly inspected before any insulation work is done. If aluminum wiring is found to be active and in the areas to be insulated, no insulation should be added.

When electrical repairs within the scope of the DOE WAP are required, the typical standard of remedy shall be to sub-contract the repair work to a licensed electrician. All appropriate procurement procedures shall be followed when sub-contracting.

Testing shall include visual inspection, as well as voltage drop and voltage detection testing.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral should be exercised when existing code violations are present and correcting them would be beyond the scope of the DOE WAP, and/or when there are problems affecting the Heating/cooling systems that are beyond the scope of the DOE WAP, such as certain electrical problems which fall outside of the scope of the DOE WAP because they require more than incidental minor repair. For additional deferral criteria, see deferral section above. If electrical wiring and circuitry is found to be in such a condition as to be a serious safety risk, work should be deferred until the electrical safety issue has been satisfactorily corrected. Client and/or building owner must be informed of the safety risk.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referral should be made when problems are identified that go beyond the scope of the DOE WAP, such as electrical or other code violations. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Provide information on overloading circuits and electrical safety and risks.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes and regulations shall always be adhered to for proper disposal procedures and protocols.

Electrical, Knob-and-Tube Wiring

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6

Minor upgrades and repairs necessary for weatherization measures and where the health or safety of the occupant(s) is at risk may be allowed.

TDHCA concurs with refined guidance

However, TDHCA prohibits installing insulation over knob-and-tube wiring. Thus, insulating over knob-and-tube wiring is not allowable under Texas WAP field standards.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used except to install insulation over knob-and-tube wiring which is not allowable. Funds may be used only for minor repairs and upgrades as stipulated above.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Prior to insulating around Knob and Tube wiring, barriers must be installed to keep insulation at least three inches from the K&T. Subgrantees must follow the Best Practice on K&T wiring as well as the Weatherization Field Guides http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral should be exercised when existing code violations are present and correcting them would be beyond the scope of the DOE WAP, such as certain electrical problems. In the specific instance where active knob-and-tube wiring is present and it presents a safety risk, weatherization work may have to be deferred until the electrical safety issue has been adequately addressed. If the cost of repairs to knob and tube wiring exceeds 15% of the health and safety costs of weatherizing the unit, then a detailed documented review must be conducted by a minimum of program coordinator, assessor, and executive director (or someone appointed by the executive director).

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referral should be made when problems are identified that are beyond the scope of the DOE WAP, such as electrical or other code violations. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Provide information to client on over-current protection, overloading circuits, and basic electrical safety/risks.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes shall be adhered to for proper disposal procedures and protocols.

Fire Hazards

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. **Note:** Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6 Correction of fire hazards is allowed when necessary to safely perform weatherization.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

At all times, crews/contractors are to look for potential fire hazards.

Crews/contractors and auditors shall check for potential fire hazards in the home during the audit and while performing the weatherization work.

Fire hazards must be remedied. If the remedy falls within the scope of the DOE WAP, the crew shall remedy the situation to eliminate the fire hazard they identified.

If the remedy required to remove the fire hazard goes beyond the scope of the DOE WAP, weatherization work may have to be deferred until the fire hazard has been eliminated. Proper referral and deferral protocols shall be followed.

Clients must be notified of any identified fire hazards and noted in client file.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

When the crew or a sub-contractor working within the scope of the DOE WAP is unable to rectify the fire hazard, deferral protocols should be exercised.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

A referral should be made when problems are identified that are beyond the scope of the DOE WAP, such as electrical or other code violations. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources. In some instances, it is recommended to have the local fire authority inspect the home to ensure that the fire hazard has been fully remedied. If there are elderly persons, persons with disabilities, or small children in the home and the fire hazard that was identified poses a serious risk to their safety, the agency might consider contacting the local fire marshal.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

State-wide training specific to OSHA 10 & 30 were conducted during the ARRA WAP. Those certifications will expire in 2015 and certification courses will be built into our plan for ongoing regional training.

"Potential Fire Hazards in a Home" is posted on the Department Website under Health and Safety: http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm

Subgrantees are encouraged to have the local fire department conduct trainings for staff.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this [issue of fire hazards] is not explained elsewhere in the State Plan. **Note:** Some health and

safety categories, like mold and moisture, require client education.

Clients, occupants, and building owners/landlords will be notified in writing of potential fire hazards identified during the initial inspection performed by the Assessor. "Potential Fire Hazards in a Home" is posted on the Department Website under Health and Safety: http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes shall always be adhered to for proper disposal procedures and protocols.

Formaldehyde, Volatile Organic Compounds (VOCs), and other Air Pollutants

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concur with WPN 11-6

Removal of pollutants is not allowed by WAP workers without Department approval. If pollutants pose a risk to workers and removal cannot be performed or the client refuses to remove the pollutants, the unit must be deferred.

X-Non-Concurrence: TDHCA guidance

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may not be used to remove pollutants without Department approval.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the identified pollutants pose a risk to workers and removal cannot be performed because it goes beyond the scope of the DOE WAP, or if the client will not allow the removal of the pollutants, the unit will be deferred.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Sensory inspection shall be the primary detection method.

Formaldehyde is a naturally occurring substance in the environment and is made of carbon, hydrogen and oxygen. Formaldehyde is also a by-product of combustion: cars and trucks emit formaldehyde, as does burning wood. Formaldehyde does not accumulate in the environment because it is broken down within a few hours by sunlight or by bacteria present in soil or water. Neither does it accumulate in the body, as humans metabolize formaldehyde quickly.

One of the most important uses of formaldehyde is in adhesives, which are used in the production of wood composite products that are extensively used in furniture, kitchen cabinets, counters and flooring. While small quantities of formaldehyde gas can be emitted from various wood composite products, very little formaldehyde is present in a form that can be released. These low-level emissions diminish over time.

Formaldehyde is an extensively regulated material. Mandatory government regulations set standards to protect human health and the environment. The U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) has standards for workplace exposures to formaldehyde. Texas WAP agencies shall follow the OSHA standards regarding workplace exposures to formaldehyde to ensure worker safety.

Volatile organic compounds (VOCs) are organic chemical compounds that have high enough vapor pressures

under normal conditions to significantly vaporize and enter the earth's atmosphere. VOCs include a variety of chemicals, some of which may have short- and long-term adverse health effects. Concentrations of many VOCs are consistently higher indoors (up to ten times higher) than outdoors. VOCs are emitted by a wide array of products numbering in the thousands. Examples include: paints and lacquers, paint strippers, cleaning supplies, pesticides, building materials and furnishings, office equipment such as copiers and printers, correction fluids and carbonless copy paper, graphics and craft materials including glues and adhesives, permanent markers, and photographic solutions.

Organic chemicals are widely used as ingredients in household products. Paints, varnishes, and wax all contain organic solvents, as do many cleaning, disinfecting, cosmetic, degreasing, and hobby products. Fuels are made up of organic chemicals. All of these products can release organic compounds while you are using them, and, to some degree, when they are stored.

EPA's Office of Research and Development's "Total Exposure Assessment Methodology (TEAM) Study" found levels of about a dozen common organic pollutants to be 2 to 5 times higher inside homes than outside, regardless of whether the homes were located in rural or highly industrial areas. Some of the more common household sources of VOCs include: paints, paint strippers, and other solvents; wood preservatives; aerosol sprays; cleansers and disinfectants; moth repellants and air fresheners; stored fuels and automotive products; hobby supplies; dry-cleaned clothing.

Health effects of exposure to VOCs include: eye, nose, and throat irritation; headaches, loss of coordination, nausea; damage to liver, kidney, and central nervous system. Key signs or symptoms associated with exposure to VOCs include conjunctival irritation, nose and throat discomfort, headache, allergic skin reaction, dyspnea, declines in serum cholinesterase levels, nausea, emesis, epitasis, fatigue, dizziness.

The ability of organic chemicals to cause health effects varies greatly from those that are highly toxic, to those with no known health effect. As with other pollutants, the extent and nature of the health effect will depend on many factors including level of exposure and length of time exposed. Eye and respiratory tract irritation, headaches, dizziness, visual disorders, and memory impairment are among the immediate symptoms that some people have experienced soon after exposure to some organics. At present, not much is known about what health effects occur from the levels of organics usually found in homes.

All reasonable steps shall be taken to limit worker exposure to VOCs. When using products known to emit VOCs, increase ventilation. Meet or exceed any label precautions. Identify, and if possible, remove the source. If not possible to remove, reduce exposure by using a sealant on all exposed surfaces of paneling and other furnishings. Educate clients regarding the use of integrated pest management techniques to reduce the need for continued use of pesticides. Properly dispose of partially full containers of old or unneeded chemicals. Because gases can leak even from closed containers, this single step could help lower concentrations of organic chemicals in the home and/or workplace. Do not simply toss these unwanted products in the garbage can. State and local codes and regulations regarding disposal of toxic household wastes must be followed.

There are certain specific VOCs that require limited exposure guidelines:

Keep exposure to emissions from products containing **methylene chloride** to a minimum. Consumer products that contain methylene chloride include paint strippers, adhesive removers, and aerosol spray paints. Methylene chloride is converted to carbon monoxide in the body and can cause symptoms associated with exposure to carbon monoxide. Carefully read the labels containing health hazard information and cautions on the proper use of these products. Use products that contain methylene chloride outdoors when possible; use indoors only if the area is well ventilated.

Keep exposure to **benzene** to a minimum. Benzene is a known human carcinogen. The main indoor sources of this chemical are environmental tobacco smoke, stored fuels and paint supplies, and automobile emissions in attached garages. Actions that will reduce benzene exposure include eliminating smoking within the home/workplace, providing for maximum ventilation during painting, and discarding paint supplies and special fuels that will not be used immediately.

Keep exposure to **perchloroethylene** emissions from newly dry-cleaned materials to a minimum. Perchloroethylene is the chemical most widely used in dry cleaning. Recent studies indicate that people breathe low levels of this chemical both in homes where dry-cleaned goods are stored and as they wear dry-cleaned clothing. Taking steps to minimize exposure to this chemical is prudent.

No standards have been set for VOCs in non-industrial settings. OSHA regulates formaldehyde, a specific VOC, as a carcinogen. OSHA has adopted a Permissible Exposure Level (PEL) of .75 ppm, and an action level of 0.5 ppm. HUD has established a level of .4 ppm for mobile homes. Based on current information, it is advisable to mitigate formaldehyde that is present at levels higher than 0.1 ppm.

TEXAS WAP crews/contractors shall take every precaution necessary to minimize exposure to air pollutants. When using chemicals and products that may contain any of the pollutants within this category, strict adherence to label instructions and precautions shall be required. Known pollutants must be removed by the client or a contracted professional prior to performance of weatherization work.

For additional information regarding indoor air pollutants, the EPA booklet, "Indoor Air Pollution: An Introduction for Health Professionals," is available at: http://www.epa.gov/iaq/pubs/hpguide.html.

Additional resources are available at http://www.epa.gov/iag/index.html

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols. If the pollutant cannot be removed because the client is unwilling to remove it, or exposure cannot be safely and adequately minimized, weatherization work may have to be deferred to ensure the safety of the crew. Clients must always be informed of potential pollutant hazards.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

A referral should be made when problems are identified that are beyond the scope of the DOE WAP, such as electrical or other code violations, or the presence of hazards that may pose a health risk to workers and occupants. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Guidance on how to recognize potential hazards and when removal is necessary is posted to the Department Website: http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and

safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Always inform the client/occupant/building owner of observed condition and associated health risks. Provide written materials on safety and proper disposal of household pollutants. Such material is often located on the product label. There are additional written materials at the EPA website listed above.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes and regulations must always be adhered to when disposing of toxic household wastes.

Injury Prevention of Occupants and Weatherization Workers – Measures such as repairing stairs and replacing handrails.

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concur with WPN11-6

Workers must take all reasonable precautions against performing work on homes that will subject workers or occupants to health and safety risks. Porch or stair repairs that would be required to make a home safe for weatherization workers are not an allowable measure in the program. Such situations are considered to be beyond the scope of Texas WAP.

X-TDHCA refined guidance

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may not be used, as stipulated above.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

If the crew encounters a situation where a stair case or porch is deemed unsafe and the stair case or porch is necessary to reach the area where the crews/contractors need to perform the weatherization work, and no other access is available, then weatherization work shall be deferred until the home owner has satisfactorily installed the required repair(s).

As part of health and safety, crews and assessors will indentify health and safety hazards according the OSHA method "Focus Four", which includes, electrical, fall protection, caught in and between, and stuck-by hazards. The client will be informed in writing of any hazards and the associated risks that may have been observed.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

See above.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referral should be made when problems are identified that are beyond the scope of the DOE WAP, such code violations or safety issues requiring repairs that go beyond the scope of the DOE WAP. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

During the ARRA WAP, OSHA Training was provided by AEHS Inc. of San Antonio Texas. AEHS holds OSHA Construction Outreach Trainer Certificates, issued US Department of Labor. AEHS is authorized to conduct OSHA 10 and 30 Curricula. The Department required all weatherization crew members to obtain OSHA 10 certificates and supervisors to obtain OSHA 30 certificates. The training included the OSHA method of "Focus Four," which includes Electrical, Fall Protection, Struck By, and Caught In and Between. The Curricula and attendance sheets are available upon request. The regional training plan includes certification training for new staff.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Inform client/building owner of observed hazards and their associated risks.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes and regulations shall always be followed regarding the proper disposal procedures and protocols.

Lead Based Paint

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. **Note:** Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6

Follow EPA's Lead; Renovation, Repair and Painting Program (RRP) rule which was implemented April 21, 2010. In addition to RRP, Weatherization requires all weatherization crews/contractors working in pre-1978 housing to be trained in Lead Safe Weatherization (LSW). Deferral is required when the extent and condition of lead-based paint in the house would potentially create further health and safety hazards.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

In April 2008, EPA published the "Lead; Renovation, Repair, and Painting Program" (RRP) final rule. This rule specifically cites Weatherization activities (in the context of "renovation") in several places and has a direct impact on how the WAP proceeds in implementing LSW. **Note: the EPA Final Rule with an effective date of April**

21, 2010, requires Certified Renovators to be onboard with Subgrantee crews/contractors or contractors, and performing all the EPA required functions on all pre-1978 housing that has not been determined as exempt by approved protocols.

DOE further requires all Grantee Monitors/Inspectors be Certified Renovators in order to effectively monitor against the EPA requirements and trained in LSW in order to effectively monitor against LSW minimum requirements. These requirements are outlined in WPN 11-1. Texas is currently in compliance with the Final RRP rule with most crew members having achieved Certified Renovator status. The Texas WAP training staff members are Certified Renovators. This certification will expire in 2015, and the regional training plan includes recertification.

Texas recommends assuming that lead paint may be present in any house built prior to 1978 and to follow the proper DOE LSW protocols, OSHA regulations and EPA regulations in all pre-1978 homes. Unless they were remodeled and paint and varnish added to mobile homes prior to 1978, mobile homes are exempt because lead was not used in the original manufacture of mobile homes. However, crews/contractors must be alert to any remodels that could have contained lead-based paint or varnish when addressing mobile homes. Subgrantees must not assume that all mobile homes are categorically exempt. Any home built before 1978, or any mobile home remodeled using paints and varnishes prior to 1978, may contain lead-based paint. These paints should be considered "guilty until proven innocent" by way of testing.

Texas has fully implemented the EPA final RRP rule and most crew members are Certified Renovators.

In all pre-1978 homes, crews/contractors must assess the physical condition of the home prior to conducting an audit. Why is this necessary? Air movement from a blower door or duct blaster may disturb and circulate lead dust throughout the home. If the home has noticeable paint damage (flaking) or there is an appreciable amount of dust, the blower door and/or duct blaster tests must not be run until after lead testing per EPA RRP rules has shown that no lead is present in the painted surfaces of the home. If the paint is confirmed to have lead, the blower door test should not be conducted to avoid further distribution of lead dust throughout the home.

Testing is allowed per RRP requirements. Job site set up and cleaning verification is required by a Certified Renovator.

Texas WAP crews/contractors will use LSW work practices that decrease the amount of dust generated. For example:

- ·Working dry will generate a lot of dust.
- ·Containing dust with plastic and using wet methods will generate less dust.
- ·Containing dust with plastic and using wet methods along with HEPA-attached equipment will generate even less dust.

Texas WAP crews/contractors shall avoid creating and spreading dust by following all DOE LSW guidance and training and by following the RRP guidelines and practices. At minimum, Texas crews/contractors will:

- ·Use low-dust work practices (using shrouds on power tools such as drills, misting down surfaces with water before drilling, etc.)
- ·Contain the work area per the RRP rules and regulations (6 mil or greater plastic is recommended)
- ·Keep dust contained to the immediate work area. Do not track dust out of the prepared and contained work area.
- •Thoroughly clean the area after the work is completed per the RRP rules and standards. Pre- and Post-digital pictures are required as part of the LSW compliance documentation.
- ·All occupants must be kept away from the work areas. Warning signs as per the RRP standards must be posted.

·Workers must wear proper respiratory protection for lead dust when working in a leaded work area.

At all times, Texas WAP workers shall:

- ·Follow LSW and RRP and other EPA requirements
- ·Adhere to OSHA standards for worker safety
- ·Follow state and local requirements

As a minimum guideline, the following weatherization activities require lead-safe practices. (Note that this is not a complete list of weatherization activities that may create lead hazards, so it is important to train all workers to follow LSW measures whenever they disturb or could potentially disturb painted surfaces on buildings built prior to 1978.)

- ·Drilling holes in interior walls
- ·Drilling holes in and removing siding from exterior walls
- ·Cutting attic access into ceilings
- ·Removing caulk or window putty (interior)
- ·Removing caulk or window putty (exterior)
- ·Removing weatherstripping
- ·Modifying doors
- ·Planing doors in place
- ·Installing door shoes
- ·Replacing door jambs and thresholds
- ·Replacing windows
- ·Replacing thermostats
- ·Replacing furnace filters
- ·Replacing furnaces
- ·Replacing HEPA filters and cleaning HEPA vacuums at a weatherization facility
- ·Replacing HEPA filters and cleaning HEPA vacuums at the work site

Crews/contractors must follow all client notification requirements:

- ·Homes weatherized before December 22, 2008 "Protect Your Family From Lead in Your Home" EPA pamphlet;
- ·Homes weatherized after December 22, 2008 "Renovate Right: Important Lead Hazard Information for Families, Child care Providers, and Schools" EPA pamphlet.
- •The client file must include signed documentation that the client received the Renovate Right pamphlet. No exceptions.

All Texas WAP Subgrantees shall be monitored for compliance with LSW Minimum Standards and EPA RRP requirements. When a Subgrantee is found to be out of compliance, the Subgrantee shall be given a corrective action plan that will require training crews/contractors to ensure that all requirements are being met and to ensure compliance. TDHCA provides additional guidance through Best Practices, FAQs, forms and flowcharts at: http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm

<u>Digital photo documentation must also be included.</u> <u>Even when a home tests negative for lead, the test form must be completed and placed in the client file.</u>

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

When it is determined that the level of lead present in the home is so high that it presents a hazard to workers, the weatherization work should be deferred until a licensed lead abatement professional has eliminated the health hazard. Clients will always be notified regarding lead-based paint and its potential health hazards. If the lead dust is so wide spread in the home that it would be impossible to contain, the weatherization work should be deferred until a lead abatement professional has removed the health hazard. Deferral is required when the extent and condition of lead-based paint in the house would potentially create further health and safety hazards.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referral should be made when problems are identified that are beyond the scope of the DOE WAP, high levels or extensive lead content or other code violations. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources. In severe lead contamination situations, it may be necessary to make a referral to a lead paint risk assessment and abatement professional through Texas Department of State Health Services at: http://www.dshs.state.tx.us/elp

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Texas has trained and certified 719 crew members/staff as Lead Safe Renovators during ARRA. Texas is in compliance with the RRP stipulation that crews/contractors working on pre-1978 homes be accompanied by an EPA certified renovator. The Texas WAP training staff are all Certified Renovators. The State monitors are also certified renovators as required by the EPA RRP Rule. Each Subgrantee will have one RRP certified person and all contractors doing WAP work will have LSR available to the worksite as per RRP rules. Texas is currently in compliance with the Final RRP rule with most crew members having achieved Certified Renovator status. This certification will expire in 2015, and the regional training plan includes recertification.

In addition, WxTV videos on Lead Safe Practices are available to all crew members and WAP staff at: http://www.tdhca.state.tx.us/community-affairs/wap/wap-training-videos.htm

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Texas WAP crews/contractors will follow all RRP requirements for client education.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Texas WAP crews/contractors will follow all EPA RRP requirements for disposal as well as state and local code requirements.

Lead Based Paint Compliance: Provide a narrative describing how RRP and LSW implementation will be conducted and how the grantee will verify compliance. The explanation should clearly show an understanding that LSW and RRP are separate requirements and both are required to be met.

All Texas WAP Subgrantees shall be monitored for compliance with LSW Minimum Standards and EPA RRP requirements. When a Subgrantee is found to be out of compliance, the Subgrantee shall be given a corrective action plan that will require training crews/contractors to ensure that all requirements are being met and to ensure compliance. Texas created the following Lead Safe Flowchart for the purpose of ensuring that crews/contractors follow all important protocol steps.

REFERENCE: Lead Safe Best Practice is available at: http://www.tdhca.state.tx.us/community-affairs/wap/wap-best-practices.htm

Lead Safe Work resources are available under Lead Safe Work at: http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm

The completion of all required forms and documentation for the client file are posted on-line. A Quality Control Blitz was conducted with agencies to detail all necessary positive and negative documentation required to meet EPA RRP requirements.

Compliance with LSW and RRP requirements are monitored as part of grantee monitoring of the Subgrantees. Texas has already implemented both LSW and RRP requirements. Additionally, Texas monitors compliance by requiring pre- and post- digital photos. It is required that photos be taken of all aspects of LSW and RRP protocols. This best practice provides back up evidence that a test was conducted and shows the result of the test, etc.

Mold and Moisture

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6

Limited water damage repairs can be addressed by weatherization workers and correction of moisture and mold creating conditions are allowed when necessary in order to weatherize the home and to ensure the long term stability and durability of the measures. Where severe mold-like substance and moisture issues cannot be addressed, deferral is required.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used as stipulated above.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Visual assessment is required and diagnostics such as moisture meters are recommended pre and prior to final inspection. Per Texas Technical Standards, all units must be inspected for problems associated with excess moisture. Identification of potential moisture problems shall be documented n the client file. Moisture can be addressed as prescribed in the Texas Weatherization Field Guides: http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

When mold or mold like substances are identified deferral is required.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referral should be made when problems are identified that are beyond the scope of the DOE WAP. Health and safety issues such as severe mold cannot be adequately addressed within the scope of the DOE WAP. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

The DOE power-point presentation training on Mold and Moisture given by Michael Vogel of MSU Weatherization Training Center is available to all Subgrantees through TDHCA's website:

http://www.tdhca.state.tx.us/community-affairs/wap/wap-training-videos.htm. Other resources available: www.healthyindoorair.org , www.affordablecomfort.org , www.buildingscience.com , www.homemoisture.org

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees, etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Provide client notification and disclaimer on mold-like substances and moisture awareness. The unified weatherization form that identifies if there are mold-like substances, must be included in the client files, regardless of whether there is mold-like substance in the home or not. A *Mold -Like Substance Notification and Release Form for Texas Weatherization Programs* must be filled out if mold or mold-like substances are found in the home. Texas Department of State Health Services, *Consumer Mold Information Sheet* is required to be given to clients who have moisture problems or mold-like substances, as part of client education.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes and regulations must always be followed to ensure proper disposal procedures and protocols.

Mold Protocols: Provide a narrative describing protocols for addressing mold found in the client's homes. The protocol should include a method of identifying the presence of mold during the initial audit or assessment, notification to the client, and crew training on how to alleviate mold and moisture conditions in homes.

The primary method of detecting mold and moisture issues shall be visual assessment and diagnostics such as moisture meters, infrared imaging, etc. Visual inspection of moisture creating conditions shall be conducted as part of the whole house energy audit.

The assessment shall assure existing mold-like conditions are noted, documented and disclosed to the client; and, shall assure existing building envelope conditions do not contribute to mold-like growth when weatherization measures are applied. Mold-like substance assessment means a visual assessment combined with certain allowable diagnostics. It does not mean testing for mold. **DOE funds may not be used to test for mold-like substances.**

Texas WAP crews/contractors shall follow the Mold/Moisture Assessment Checklist when conducting the mold-like substances assessment at the time of the audit.

Assessment shall include a general examination of the building, to include:

- ·Examine structure, maintenance activities, occupancy patterns
- ·Visually look for mold-like substances and water staining
- ·Look for evidence of standing water
- ·Look for evidence of condensation
- ·Check basement or crawl space and attic for proper venting and exhaust

Outdoors:

- ·Soil grade or drainage toward foundation
- ·Standing water adjacent to foundation
- ·Wall and roof damage allowing water intrusion

- ·Missing or blocked rain gutters
- ·No downspout extensions
- ·Firewood stacked adjacent to house
- ·Excessive shrubbery around foundation

Heating/cooling systems:

- ·Air intakes: debris (organic) vs. clean air
- ·Filters: dirty, damp, poor type
- ·Heat exchangers: dirty & damp coils, condensate pans, drainage, stagnant water
- ·Ducts: contamination, moisture

Occupied Space:

- ·Plumbing leaks
- ·Water stains on walls, ceilings and around windows
- ·Musty odor
- ·Surface Condensation (especially during mild weather)
- ·Mold-like substances on carpeting
- ·Humidifiers
- ·Window air conditioners
- ·Lack of bathroom, kitchen exhaust
- ·Clothes dryer not vented to outside
- ·Firewood stored indoors
- ·Wet clothes drying indoors

Occupant Preexisting or Potential Health Conditions

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concur with WPN 11-6

X-TDHCA refined guidance

When a person's health may be at risk and/or the work activities could constitute a health or safety hazard, the occupant at risk will be required to take appropriate action based on severity of risk. When relocation of a client is needed the client shall make all reasonable attempts to relocate; if the client is unable to make such arrangements, then the agency should request authorization from the Department for relocation. Failure or the inability to take appropriate actions must result in a deferral.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may not be used as stipulated above.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Texas WAP is incorporating a brief client health survey to be taken during the application process (this may be done in person, mail, or by phone) and verified during the energy audit. That survey information shall be given to the auditor prior to the audit visit. The auditor will at the time of audit interview the client in more depth regarding any occupant pre-existing or potential health conditions or concerns (such as allergies).

Occupant pre-existing or potential health conditions shall be documented in the client file. Crews/contractors will advise client of the above policy and take the appropriate actions. If client refuses relocation, proper referral and deferral protocols shall be followed and documented.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

The failure or inability of at-risk occupants to take appropriate actions must result in deferral.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referral should be made when problems are identified that are beyond the scope of the DOE WAP, such as health risks to workers, or high CO levels or exposure to VOCs or mold-like substances. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

A Health & Safety Questionnaire/ Checklist for use by Subgrantees can be found under Client and Field Assessment Forms on the Department Website: http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Provide client information of any known risks. Provide worker contact information so client can inform of any issues.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes and regulations shall be followed to ensure proper disposal procedures and protocols.

Occupational Safety and Health Administration (OSHA) and Crew Safety

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6

Workers must follow OSHA standards and Material Safety Data Sheets (MSDS) and take precautions to ensure the health and safety of themselves and other workers. MSDS must be posted wherever workers may be exposed to hazardous materials.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

OSHA 10-hour training for all crew level WAP employees

OSHA 30-hour training for all crew leaders

All OSHA training shall be updated as required and kept current. MSDS must be present at the work sites.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Weatherization work may be deferred if doing the work would put crews/contractors at undue health and safety risk.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referral should be made when problems are identified that are beyond the scope of the DOE WAP, such as electrical or other code violations, or conditions that pose a health or safety risk to crews/contractors and/or clients. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

N/A

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Follow MSDS guidelines and all state and local codes.

OSHA and **MSDS Compliance:** Provide a narrative describing procedures for implementation of OSHA and MSDS requirements related to crew and worker safety, how the 10 and 30 hour training requirements will be met, and what the process is for determining if crews/contractors are utilizing good safe work practices according to all requirements (EPA, OSHA, etc.).

OSHA 10-hour training for all crew level WAP employees

OSHA 30-hour training for all crew leaders

All OSHA training shall be updated as required and kept current

Consistent posting of MSDS wherever crews/contractors may be exposed to hazardous materials

Webinars will be explored as an additional training opportunity

The process for determining whether crews/contractors are utilizing good safe work practices relies on visual assessment when monitoring crews/contractors on the job site. Lack of injury and incident reports is also a valuable indicator that crews/contractors are following safe work practices. Ask to see MSDS when monitoring at

the job site if hazardous materials are being used. Check for posting of MSDS in WAP facilities when monitoring.

Pests

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concur with WPN 11-6
Pest removal is allowed only where infestation would prevent weatherization or poses a health and safety concern for workers. Infestation of pests may be cause for deferral where it cannot be reasonably removed or poses health and safety concern for workers.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used as stipulated above.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Initial assessment of presence and degree of infestation and risk to workers.

Determine whether the pest infestation would prevent or hamper the weatherization work. If yes, and removal is a viable and cost-effective option, take the necessary steps to remove the pest infestation problem so that the weatherization work can proceed. If yes, and removal is not a viable and cost-effective option or significant health and safety risks exist, defer the weatherization work and provide client with appropriate referral information. If no, proceed as usual.

Inform client of observed pest condition and associated risks. Document in client file.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Infestation of pests may be cause for deferral where it cannot be reasonably removed or poses health and safety risks for workers.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referral should be made when problems are identified that are beyond the scope of the DOE WAP, such as infestations or hazardous pests (Texas has many poisonous snakes). Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

See "Pests" Best Practice posted to Department Website: http://www.tdhca.state.tx.us/community-affairs/wap/wap-best-practices.htm

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Inform client of observed condition and associated risks.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes and regulations shall be followed to ensure proper disposal procedure and protocols.

Radon

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6 Whenever site conditions permit, exposed dirt must be covered with a vapor barrier except for mobile homes. In homes where radon may be present, precautions should be taken to reduce the likeliness of making radon issues worse.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used.

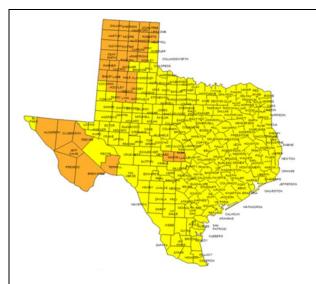
Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Testing may be allowed in locations with high radon potential. Texas does NOT have any "high radon potential" areas. SEE map of Radon Zones for Texas below. This information may be located at: http://www.epa.gov/radon/states/texas.html

The purpose of this map is to assist National, State and local organizations to target their resources and to implement radon-resistant building codes.



What do the colors mean?

Red = zone 1 = highest potential = counties have a predicted average indoor radon screening level greater than 4pCi/L (picocuries per liter). A curie is a unit quantity of any radioactive nuclide in which 3.7×10^{10} disintegrations occur per second. A Pico equals one trillionth (10^{-12}) part of; very small. Thus a picocurie is one trillionth of a curie. A picogram is one trillionth of a gram.

Orange = zone 2 = moderate potential = counties have a predicted average indoor radon screening level between 2 and 4 pCi/L.

Yellow = zone 3 = low potential = counties have a predicted average indoor radon screening level

Texas will ensure that all Subgrantee crews/contractors are trained regarding radon. The following remedies shall be followed:

In all instances where site conditions permit, exposed dirt must be covered with 6 mil plastic sheeting with seams well-taped and sealed to act as a vapor barrier against radon gases. This should not be done under mobile homes, however.

Precautions should always be taken to reduce the likeliness of making radon issues worse.

Seal cracks and other openings in the foundation. This limits the flow of radon into the home and can make other radon reduction techniques more effective and cost-efficient. This type of sealing can be done in all types of homes.

Further remedies may be added as additional guidance is provided by DOE.

Discounted test kits are available from the National Radon Program Services at Kansas State University. Go to: http://sosradon.org/test-kits

Some home improvement stores sell radon test kits. Follow directions on packaging for the proper placement of the device and where to send the device after the test to get the reading.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral should be exercised when existing code violations are present and correcting them would be beyond the scope of the DOE WAP, and/or when there are problems affecting the heat system/furnace that are beyond the scope of the DOE WAP, such as certain electrical problems. For additional deferral criteria, see deferral section above.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

The EPA recommends fixing homes if the radon level is confirmed to be 4 pCi/L or higher. This is considered the action level. Radon levels less than 4 pCi/L still pose a risk, and in many cases may be reduced. Provide the EPA Consumers Guide to Radon Reduction booklet to clients living in homes with confirmed radon levels of 4 pCi/L or higher. This guide can be found at: http://www.epa.gov/radon/pubs/consguid.html

Texas State Radon Officer:

Kay Soper Texas Department of State Health Services P.O. Box 149347, Mail Code 1987 Austin TX, 78714 (800) 293-0753

(512) 834-6787

kay.soper@dshs.state.tx.us

Additional referral resources: http://www.epa.gov/radon/states/texas.html or www.epa.gov/region8 Radon publications in print can be downloaded, most are in HTML and as PDF files. Go to: www.epa.gov/radon/pubs

Radon Hotlines:

- National Radon Hotline at 1-800-SOS-RADON* (can purchase test kits by phone);
- National Radon Helpline 1-800-55RADON (1-800-557-2366)*;
- National Radon Fix-It Line 1-800-644-6999* (general information on fixing or reducing the radon level in a home;
- Safe Drinking Water Hotline 1-800-426-4791 (operated under contract with EPA.

Visit www.epa.gov/iaqtribal for information specifically presented for Tribal Partners.

* = Operated by Kansas State University in partnership with EPA.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Provide client with EPA consumer's guide to radon, at minimum.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes and regulations shall be followed to ensure proper disposal procedures and protocols.

Refrigerant

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6 Reclaim refrigerant per Clean Air Act of 1990, section 608, as amended by 40 CFR 82, 5/14/93

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Texas WAP Subgrantees shall ensure that sub-contractors who would be charged with refrigerant reclamation (e.g. removal of old refrigerators or air conditioning units) follow all EPA testing protocols; in accordance with the Clean Air Act of 1990, section 608, as amended by 10 CFR 21. Refrigerants shall be pumped into a recovery tank and disposed at an EPA approved site. Go to www.epa.gov for details.

Clients should not disturb refrigerant.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

N/A

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

www.epa.gov Clean Air Act of 1990, section 608, as amended by 40 CFR 82.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

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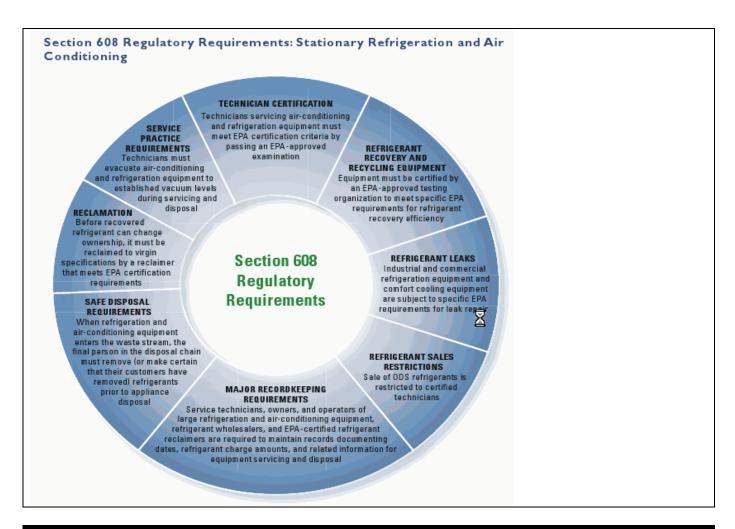
Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Clients should not disturb refrigerant.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

Follow all EPA, state and local regulations, including but not limited to the Clean Air Act of 1990 section 608, as amended by 10 CFR 21.



Smoke, Carbon Monoxide Detectors, and Fire Extinguishers

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6

Installation of smoke/CO detectors is allowed where detectors are not present or are inoperable. Replacement of operable smoke/CO detectors is not an allowable cost. Providing fire extinguishers is allowed only when solid fuel (such as wood) is present

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used as stipulated above.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Check any existing smoke/CO detectors for functional/accurate operation.

Install smoke/CO detectors when accurately operating units do not already exist. Must follow all local codes

when installing smoke/CO detectors.

At minimum, all homes should have at least one smoke alarm on each level, including one near the combustion zone and at least one near the bedrooms. Ceiling-mounted smoke alarms must be mounted at least 6 inches from any wall. Wall-mounted smoke alarms must be installed at least 6 but less than 18 inches from the ceilings. They should always be installed according to applicable local codes or ordinances.

Don't install smoke alarms in these cases:

- In a home that already has a functioning smoke alarm
- Within 12 inches of exterior doors and windows
- With an electrical connection to a switched circuit
- With a connection to a ground-fault interrupter circuit (GFCI)

A CO alarm should also be installed near any combustion appliances. CO alarms should be installed in all homes with unvented space heaters (all unvented space heaters must comply with ANSI Z21.11.2) and in all homes where backdrafting could occur in a furnace, space heater, wood stove, fireplace, or water heater. Always install CO alarms according to the manufacturer's instructions. Don't install CO alarms in these cases:

- In a room that may get too hot or cold for alarm to function properly
- Within 5 feet of a combustion appliance, vent, or chimney
- Within 5 feet of a storage area for vapor-producing chemicals
- Within 12 inches of exterior doors and windows
- Within a furnace closet or room
- With an electrical connection to a switched circuit
- With a connection to a ground-fault interrupter circuit (GFCI)

A fire extinguisher may be provided in homes whose primary heat source is wood. The fire extinguisher must be installed according to manufactures standards and local code in vicinity of the primary heating source.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral should be exercised when existing code violations are present and correcting them would be beyond the scope of the DOE WAP, and/or when there are problems affecting the heat system/furnace that are beyond the scope of the DOE WAP, such as certain electrical problems. For additional deferral criteria, see deferral section above.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referrals should be made when problems are identified that are beyond the scope of the DOE WAP, such as electrical or other code violations. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

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Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

The client will be provided with the manufacturer's information sheet on use of smoke/CO detectors.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes and regulations shall be followed to ensure proper disposal procedures and protocols.

Smoke/CO Detector Installation: Provide a narrative describing smoke/CO Detector installation parameters and procedures.

Check any existing smoke/CO detectors for functional/accurate operation.

Install smoke/CO detectors when accurately operating units do not already exist.

All homes should have at least one smoke alarm on each level, including one near the combustion zone and at least one near the bedrooms. Ceiling-mounted smoke alarms must be mounted at least 6 inches from any wall. Wall-mounted smoke alarms must be installed at least 6 but less than 18 inches from the ceilings. They should always be installed according to applicable local codes or ordinances.

Don't install smoke alarms in these cases:

- In a home that already has a functioning smoke alarm
- Within 12 inches of exterior doors and windows
- With an electrical connection to a switched circuit
- With a connection to a ground-fault interrupter circuit (GFCI)

A CO alarm should also be installed near any combustion appliances. CO alarms should be installed in all homes with unvented space heaters and in all homes where backdrafting could occur in a furnace, space heater, wood stove, fireplace, or water heater. Always install CO alarms according to the manufacturer's instructions. Don't install CO alarms in these cases:

- In a room that may get too hot or cold for alarm to function properly
- Within 5 feet of a combustion appliance, vent, or chimney
- Within 5 feet of a storage area for vapor-producing chemicals
- Within 12 inches of exterior doors and windows
- Within a furnace closet or room
- With an electrical connection to a switched circuit
- With a connection to a ground-fault interrupter circuit (GFCI)

Crews/contractors are required to provide the client with the manufacturer instructions.

CO detectors must be installed in all homes when fuel-fired equipment or an attached garage exists (if functional CO detectors do not already exist). This includes: cook stoves, furnaces, water heaters, wood and coal burning stoves. Crew members must demonstrate to the client how the CO detectors work and what actions to take if the CO detector alarm sounds. The CO detector must be installed per manufacturers recommendation and be compliant with local codes.

Solid Fuel Heating (Wood Stoves, etc.)

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6	Maintenance, repair, and replacement of primary indoor heating units is allowed
	where occupant health and safety is a concern. Maintenance and repair of
	secondary heating units is allowed.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used as stipulated above.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

When a fireplace inspection is required, Texas WAP crews/contractors shall in most instances, sub-contract chimney inspection, repair and/or replacement work to a qualified solid fuel heating system vendor. Crews/contractors may conduct minor maintenance activities where warranted as allowed.

Any judgments should be performed by a licensed professional. A cursory visual inspection by an assessor should be able to determine if a professional is needed. If a formal assessment is warranted, this would be a health and safety issue requiring photo documentation and receipt of services by the professional with a description of what services were performed.

If there is a traditional open masonry fireplace in the unit verify that it is operating safely. If so, then assess if a cleaning would increase efficiency. If it is not operating safely (as evidenced by backdrafting of smoke or complaints of itchy eyes or respiratory issues by the client) it should be first assessed for repair before considering replacement with a vented code-compliant heating system. An assessment by a licensed professional may be billed under *Health and Safety*, since it is being inspected for Health and Safety concerns. If maintenance or repair is determined then the maintenance or repair measures would fall under *Repairs*. If a replacement is determined then this would fall under *Health and Safety* reasons. Unless a wood burning stove/pellet stove has been maintained on a regular basis, along with annual chimney cleanings, it is unlikely that it is efficient and safety must be evaluated.

An unsafe, unrepairable open masonry fireplace would be treated similarly to that of an unvented space heater if it is the primary source of heat, it must be replaced with a vented heating unit. The type of existing fuel will dictate the replacement. If the client has a combustion fuel source (i.e. - gas, propane, etc) than seal up the fireplace and add a vented gas heater. Assess if an electric furnace would rank as a replacement for the wood burning stove by entering all the information and seeing if it ranks in MHEA/NEAT. If the furnace does not rank and the client only has electric, this may be a deferral situation since we cannot install electric space heaters as a replacement for the existing fireplace/stove. A vented stove would be handled the same as an unsafely operating furnace—you would need to assess for CO or replace, if it ranks, as an energy efficiency measure.

When replacing a wood stove in a mobile/manufactured home the new unit must be listed for use with manufactured homes and must be installed in accordance with their listings. Units that are not manufacturer approved, discovered during an initial assessment, should be replaced with an approved manufactured home appliance, under H&S.

All state and local codes must be followed.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral should be exercised when existing code violations are present and correcting them would be beyond the scope of the DOE WAP, and/or when there are problems affecting the Heating/cooling systems that are beyond the scope of the DOE WAP, such as certain electrical problems. For additional deferral criteria, see deferral section above.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referrals should be made when problems are identified that are beyond the scope of the DOE WAP, such as electrical or other code violations. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

CAZ Testing: worst case depressurization testing is outlined in the Texas Weatherization Field Guide Chapters 2 and 3, located under the Weatherization Tools and Guides section on the Department's Website http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

In addition the Texas Mechanical Systems Field Guides have been distributed to all Subgrantees and posted on the Department's website.

Best Practices addressing worst case depressurization testing are posted on the website. http://www.tdhca.state.tx.us/community-affairs/wap/wap-best-practices.htm

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Provide safety information including how to recognize depressurization.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes and regulations shall be followed to ensure proper disposal procedures and protocols.

Space Heaters, Stand Alone Electric

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6 Repair, replacement, or installation is **not** allowed. Removal is recommended.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may not be used for repair, replacement or installation of these types of space heaters.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety

categories, like combustion gases, require testing.

Removal is strongly recommended.

Inform client of hazards and collect a signed waiver if removal is not allowed.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral should be exercised when existing code violations are present and correcting them would be beyond the scope of the DOE WAP, and/or when there are problems affecting the heating systems that are beyond the scope of the DOE WAP, such as certain electrical problems. For additional deferral criteria, see deferral section above.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referrals should be made when problems are identified that are beyond the scope of the DOE WAP, such as electrical or other code violations. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Testing will be required to assure adequate supply of electricity is available for existing stand alone electric space heaters. This will be accomplished through the use of 3 wire circuit testers, GFI electrical outlet testers, and line voltage testers.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

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Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Inform client of hazards and collect a signed waiver if removal is not allowed.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes and regulations shall be followed to ensure proper disposal procedures and protocols.

Space Heaters, Unvented Combustion

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6

Removal is required, except as secondary heat where the unit conforms to ANSI Z21.11.2. Units that do not meet ANSI Z21.11.2 must be removed prior to weatherization but may remain until a replacement heating system is in place.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Check units for ANSI Z21.11.2 label

Inform client of dangers of unvented space heaters – CO, moisture, NO², CO can be dangerous even if the CO detection alarm does not sound.

Removal is required if unit does not meet ANSI Z21.11.2. This must be done prior to weatherization work or in conjunction with weatherization work, however the old unit may be left in place until a replacement heating system has been installed.

If client will not allow removal, provide client education, document client refusal, and defer the weatherization work to the home.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

If client will not allow removal Subgrantee must defer the weatherization work to the home.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referrals should be made when problems are identified that are beyond the scope of the DOE WAP, such as electrical or other code violations. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

Units that do not meet ANSI Z21.11.2 must be removed prior to weatherization but may remain until a replacement heating system is in place. Testing for air-free carbon monoxide (CO) is to be performed. All units must have an ANSI Z21.11.1 label. The client must be informed of the dangers of unvented space heaters — CO, Moisture, NO2, CO can be dangerous even if CO alarm does not sound.

Assessors must calibrate the CO tester outside the home and test the ambient air in the home; following the standards in the Texas Mechanical Systems Field Guide:

Perform an inspection of the heater. Any of the following conditions are grounds for repair or replacement.

- Carbon monoxide (CO) test in the ambient air indicates CO levels above 25 PPM
- Bad burners (missing, broken, or otherwise un-repair-able)
- Crossfueled (between NG and LPG) and the orifices and/or pressure regulator have not been changed
- Missing radiants
- Open flame burners
- Rubber supply lines
- Charring or scorching

If cause cannot be determined, calibrate equipment and re-test. If still indeterminable, refer to local gas company.

Any time replacement is deemed necessary, first consider performing the replacement as an EMC (energy saving measure) before replacing as a Health & Safety measure.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

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Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Inform client of removal requirement prior to completing any weatherization work.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes and regulations shall be followed to ensure proper disposal procedures and protocols.

Space Heaters, Vented Combustion

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6 Shall be treated as furnaces.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

A complete mechanical systems audit is required to be completed on every home. All relevant information must be recorded on the Heating/cooling systems and Appliance Worksheet. The procedure includes collecting general information; collecting and recording mechanical systems information; visual and diagnostic inspection of the venting and distribution system; and, combustion analysis and diagnostic testing of gas/propane fired equipment, and post-installation safety tests for CO.

Combustion safety testing is required when combustion appliances are present. The combustion appliance safety inspection includes all of the following: carbon monoxide testing, draft measurement, spillage evaluation, and worst case depressurization of the combustion appliance zone (CAZ). Combustion safety test results must be acted upon appropriately according to the combustion safety tables. Testing protocols can be found in Chapter 2 and 3 of the Texas Mechanical Systems Field Guide which has been distributed to the entire weatherization network and is located on the Department's website http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm

As applicable, every combustion appliance will be checked for a safe flue pipe, chimney or vent, adequate combustion air, and gas leakage.

Weatherization Assessors and Final Inspectors must test naturally drafting appliances for draft and spillage under

worst case conditions before and after air tightening is performed.

Weatherization Assessors and Final Inspectors must conduct CO testing and check flame quality.

Subgrantees must test for high carbon monoxide (CO) levels and bring CO levels to acceptable levels before weatherization work can start. The Department has defined maximum acceptable CO readings as 100 parts per million for vented combustion appliance

Investigate and correct a steady state CO reading >100 ppm in the following appliances: vented space heater.

CO detectors should be installed in all homes when fuel-fired (combustion) appliances exist.

REFERENCE: "Combustion Safety & Efficiency Testing" in the Texas Mechanical Systems Field Guide

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral should be exercised when existing code violations are present and correcting them would be beyond the scope of the DOE WAP, and/or when there are problems affecting the furnace system that are beyond the scope of the DOE WAP, such as certain electrical problems. For additional deferral criteria, see deferral section above.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referrals should be made when problems are identified that are beyond the scope of the DOE WAP, such as electrical or other code violations. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

N/A

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes and regulations shall be followed to ensure proper disposal procedures and protocols.

Spray Polyurethane Foam (SPF)

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. **Note:** Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X-Concur with WPN 11-6

Use EPA recommendations available online at:

http://www.epa.gov/dfe/pubs/projects/spf/spray polyurethane foam.html when working within the conditioned space or when SPF fumes become evident within conditioned space. When working outside the building envelope, isolate the area where foam will be applied, take precautions so that fumes will not transfer to inside conditioned space, and exhaust fumes outside the home.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Check for penetrations in the building envelope.

Sensory inspection inside the home for fumes during foam application.

Follow guidelines on MSDS and post MSDS during use.

Spray polyurethane foam (SPF) is a highly-effective and widely used insulation and air sealant material. However, exposures to its key ingredient, isocyanates, and other SPF chemicals in vapors, aerosols, and dust during and after installation can cause:

- ·Asthma, a potentially life-threatening disease
- ·Sensitization, which can lead to asthma attacks if exposed again
- ·Lung damage
- ·Other respiratory and breathing problems
- ·Skin and eye irritation

Whether an applicator, helper, or building occupant where this product is applied, the following tips should be followed:

- ·Review label and product information for ingredients, hazards, directions, safe work practices, and precautions
- ·Ensure health and safety training is completed and safe work practices are followed to prevent eye, skin, and inhalation exposures during and after SPF installation
- •Exercise caution when determining a safe re-entry time for unprotected occupants and workers based on the manufacturer recommendation

If a crew member experiences breathing problems or other adverse health effects from weatherizing with SPF, seek immediate medical attention.

Use the appropriate protection and best practices suited for each type of SPF product.

Only workers wearing appropriate personal protective equipment should be present during SPF application.

SPF is made by mixing and reacting chemicals to create foam. The mixing and reacting materials react very quickly, expanding on contact to create foam that insulates air seals and provides a moisture barrier. SPF insulation is known to resist heat transfer extremely well, and it offers a highly effective solution in reducing unwanted air infiltration through cracks, seams, and joints. There are different types of SPF. The two main types

that are typically installed by professional contractors, such as weatherization workers, include either high pressure foam and/or low pressure foam.

Refer to the MSDS for both the "A" and "B" side chemicals used in SPF. These should be posted whenever working with this product.

SPF is Temperature sensitive. Cold temperatures affect the chemistry that causes the foaming action. It's critical to keep spray foam cans or (with two-part foam) canisters within a specific temperature range for successful application. Review the manufacturer's directions for storage.

Wear appropriate protective equipment.

Discuss project scope and safety measures with occupants. A checklist is available at http://www.spraypolyurethane.org/checklist

Provide notification to the client of plans to use two-part foam and the precautions that may be necessary.

Consult with the product manufacturer to determine appropriate re-occupancy times for the particular job and SPF in use.

Employ EPA recommendations when working within the conditioned space or when SPF fumes become evident within conditioned space. When working outside the building envelope, isolate the area where foam will be applied, take precautions so that fumes will not transfer to inside conditioned space, and exhaust fumes outside the home.

The Department conducted 17 workshops across the state of Texas.

Review and understanding of how to read MSDS was provided by AEHS Inc. of San Antonio Texas License # 000068 issued by the Texas Department of State Health Service. The course covered the following MSDS information:

- 1. Chemical Product and Company Information
- 2. Composition and Information on Ingredients
- 3. Hazard Identification
- 4. First Aid Measures
- 5. Fire Fighting Measures
- 6. Accidental Release Measures
- 7. Exposure Controls and Personal Protection
- 8. Physical and Chemical Properties
- 9. Stability and Reactivity Data
- 10. Toxicological Information
- 11. Ecological Information
- 12. Disposal Considerations
- 13. Transport Information
- 14. Other Regularity Information and Pictograms

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral should be exercised when existing code violations are present and correcting them would be beyond the scope of the DOE WAP, and/or when there are problems affecting the Heating/cooling systems that are beyond the scope of the DOE WAP, such as cost prohibitive electrical problems. For additional deferral criteria, see deferral section above.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referrals should be made when problems are identified that are beyond the scope of the DOE WAP, such as electrical or other code violations. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Provide notification to the client of plans to use two-part foam and the precautions that may be necessary.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes as well as manufacturer and EPA guidelines shall be followed.

Ventilation

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

Concur with WPN	I11-6	ASHRAE 62.2-2013 is required to be met to the fullest extent possible, when
		performing weatherization activity. Implementing ASHRAE 62.2-2013 is not required
		where acceptable indoor air quality already exists as defined by ASHRAE 62.2-2013.
TDHCA r	efined	Existing fans and blower systems should be updated if not adequate.
guidance		

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

The Department will implement ASHRAE 62.2-2013 for Program Year 2014. As of November 1, 2014 the State of Texas adopted WAP Memorandum 007, where additional mechanical ventilation is not required for existing buildings that require 15 CFM or less per the mechanical ventilation rate.

Subgrantees are required to use the Alternative Compliance Path for Existing homes and obtaining and

infiltration credit using the blower door. Subgrantees must use the blower door data captured on the Department's Blower Door data sheet item number 11 to perform an ASHRAE calculation through certified software such as RedCalc. Both the output of the software and a copy of the blower door data sheet must be placed in the client file. The Blower Door Data sheet is posted on the Department's website under Client and Field Assessment Forms at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm

The protocol for Measuring Ventilation Performance is as follows:

- 1. Indentify the local inventory of existing exhaust fans (measure flow using a Exhaust fan flow meter device and a pressure gauge)
 - a. Requirement for local fans
 - i. Bathrooms (50 CFM on-demand, or 20 CFM continuous).
 - ii. Kitchen (100 CFM on-demand, or 5 ACH, based on kitchen volume).
- 2. Determine the maximum ventilation amount required
 - a. From simple equation or corresponding chart, plus
 - b. Alternative Compliance Supplement based on post-weatherization conditions.
- 3. Conduct as-is blower door test to find CFM₅₀ of dwelling.
- 4. Post-weatherization modeling
 - a. Estimate post-weatherization CFM₅₀.
 - i. 10% of volume is \sim 6 ACH₅₀.
 - ii. 15% of volume is \sim 10 ACH₅₀.
 - b. Estimate post-weatherization depressurization.
 - i. Are existing combustion appliances affected under continuous operation? Intermittent operation? (Depressurization will be greater under intermittent operation.)
- 5. After weatherization is completed, measure actual CFM₅₀ and set required CFM of whole-building ventilation fan with variable-speed control to meet ASHRAE 62.2-2013.
- 6. Perform combustion safety testing.
- 7. Verify proper operation of all local and whole building ventilation equipment and controls (commissioning).
- 8. Job completed.
- 9. Measure airflows for all installed ventilation equipment.

Selection of Equipment

1. Select equipment with performance certified by AMCA or HVI

Very quiet: 1 sone or less

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral should be exercised when existing code violations are present and correcting them would be beyond the scope of the DOE WAP, and/or when there are problems affecting the heating and cooling systems that are beyond the scope of the DOE WAP, such as certain cost prohibitive electrical problems. For additional deferral criteria, see deferral section above.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referrals should be made when problems are identified that are beyond the scope of the DOE WAP, such as electrical or other code violations. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The updated Health and Safety Presentation (updated for PY 2014) is posted on the Department's website under Webinars and Workshops at http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

The Department will implement ASHRAE 62.2-2013 in its 2014 program year. Training for Subgrantees was provided via webinar on October 29, 2014 and included a refresher on ventilation requirements and instruction on changes from ASHRAE 2010 to 2013, including but not limited to:

- 1. Local exhaust exceptions
- 2. Flow measurement
- 3. Different air flow calculation: The Department will use the updated calculator provided by Residential Energy Dynamics at http://www.residentialenergydynamics.com/REDCalcFree/Tools/ASHRAE6222013.aspx. This tool has been updated to apply the changes in the air flow calculation from 2010 to 2013.
- 4. Infiltration credit
- 5. Newly added carbon monoxide alarm and pressure drop requirements
- 6. Use with Multifamily units

In addition, the new ASHRAE standards are incorporated into the Standard Work Specifications published by NREL, which the Department is currently incorporating. Additional training for Subgrantees will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc. Training for program monitors so that they can monitor for compliance with all requirements will be handled via the webinar and in-house on an as-needed basis. Training and Technical Assistance staff will ensure compliance with ASHRAE 62.2-2013 during technical assistance visits to Subgrantees, and Monitors will ensure compliance with ASHRAE 62.2-2013 when they review completed units.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Subgrantees who install ventilation must educate the clients on effective use of the exhaust ventilation equipment by:

- 1. Leaving owner's manual with client
- 2. Demonstrating how to use the exhaust fans.
- 3. Providing client education information on ventilation systems installed.
- 4. Providing client education on proper operation and maintenance.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes and regulations shall be followed to ensure proper disposal procedures and protocols.

ASHRAE 62.2 Compliance: Provide a narrative describing implementation of ASHRAE 62.2, which will be required during the 2014 program year. Grantees must provide justification if making changes to ASHRAE 62.2 specific to their housing stock and local considerations.

Texas has updated technical standards to meet ASHRAE 62.2-2013 requirements.

Window and Door Replacement, Window Guards

Concurrence or Alteration: Check if you concur with existing guidance from WPN 11-6 or if you are using an alternative action/allowability. Include the guidance action/allowability from WPN 11-6 or alternative guidance in the space provided. Alternatives must be explained and comply with DOE guidance. Note: Where an Action/Allowability or Testing is "required" or "not allowed" through WPN 11-6, the grantee must concur or choose to defer all units where the specific issue is encountered. Allowable items under WPN 11-6 leave room for determining if the issue or testing will be addressed and in what circumstances.

X Concur with WPN 11-6

Replacement, repair, or installation is <u>not an allowable health and safety cost</u> but may be allowed as an incidental repair or an efficiency measure if cost justified.

Funding: State that DOE funds are being used or indicate that alternate funding sources will be used to address this particular health and safety category.

DOE funds may be used per the above stipulations.

Beyond Scope of DOE WAP: Describe how the issue will be treated if beyond the scope of DOE WAP.

If the issue is determined to be beyond the scope of DOE WAP, crews/contractors shall follow all Texas Referral and Deferral policies and protocols.

Standards for Remedy: Describe the standards for remedy of the health and safety category, including testing protocols. Also include when partial weatherization would be appropriate. **Note:** Some health and safety categories, like combustion gases, require testing.

Windows may only be performed as an incidental repair or ECM. When working on windows **follow lead safe** work practice requirements for pre-1978 homes.

Standards for Deferral: Describe when deferral should take place for the specific health and safety category.

Deferral should be exercised when existing code violations are present and correcting them would be beyond the scope of the DOE WAP. For additional deferral criteria, see deferral section above.

Standards for Referral: Describe when referral should take place for the specific health and safety category. If possible, include associated referral agencies.

Referral should be made when problems are identified that are beyond the scope of the DOE WAP, such as code violations. Examples of referral agencies include, but are not limited to, LIHEAP-WAP, CEAP, CSBG, HPG, Utility Companies, and other state or local resources.

Training Provision: Discuss how training will be provided for the specific health and safety category. **Note:** Some health and safety categories, like OSHA, require training.

On-going Health & Safety training will continue via regional training, Q&As, and postings of FAQs to Department Website. http://www.tdhca.state.tx.us/community-affairs/wap/guidance.htm.

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Additional training will be handled on an ongoing and as-needed basis as identified by new requirements, new staff hires, results of monitoring reports, requests by Subgrantees etc.

Client Education: Discuss what specific steps will be taken to educate the client, if any, on the specific health and safety category if this is not explained elsewhere in the State Plan. **Note:** Some health and safety categories, like mold and moisture, require client education.

Provide information on lead risks.

Disposal Procedures: Provide disposal procedures or indicate where these procedures can be found in the Plan or Field Standards.

State and local codes and regulations shall be followed to ensure proper disposal procedures and protocols.