

# Connecticut Weatherization Assistance Program (CT WAP) QUALITY WORK PLAN

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*Updated 6/16/2015*

## **Introduction and Purpose**

This Quality Work Plan (QWP) update dated March, 10 2015, describes mandatory requirements to support and verify quality work in the US Department of Energy's (DOE) Weatherization Assistance Program (WAP). It defines what constitutes a quality installation of weatherization measures, outlines how those measures are inspected and validated, and prescribes acceptable training and credentialing of workers.

The requirements outlined in the five sections of the Quality Work Plan (QWP) listed below reflect aspects included in the 2015 Grantee Application submission process.

Section 1: Definition of Work Quality, Guidelines and Standards

Section 2: Communication of Guidelines and Standards

Section 3: Inspection and Monitoring of Work Using Guidelines and Standards

Section 4: Training to Implement and Maintain Guidelines and Standards

Section 5: Exemptions

## **Section 1**

Definition of Work Quality Guidelines and Standards

### **Justification**

The CT WAP State Plan Application identifies the Type of Work to Be Done. This includes "Technical Guides and Materials" – and items such as standards documents, program updates, procedures manuals, field guides and other materials used to direct work in the field.

### **Requirement**

These field standards are designed to meet or exceed the minimum standards outlined in the SWS.

The State of CT contracted the services of Saturn Resource Management, Inc. to produce and publish the CT WAP Weatherization Field Guide SWS Aligned Edition to ensure that the relevant procedures in those guides will result in work that achieves the desired outcomes in the SWS. The Field Guides will reference the appropriate

SWS for the procedure being described and clearly state the required specifications for that procedure.

Note: The CT Weatherization SWS Aligned Field Guide is available in electronic and printed formats for distribution to Subgrantees and Subcontracted resources.

The State of Connecticut Weatherization Assistance Program Operations and Training Manual has also been updated to reflect QWP requirements and other programmatic changes effective beginning in DOE WAP Program year 2015.

Note: This Manual (QWP-15) Edition is available in electronic and printed formats for distribution to subgrantees and subcontracted resources.

### **Beginning of Grantee's Program Year 2015 July 1, 2015 – June 30, 2016)**

CT WAP will distribute field guides and field standards that conform to the SWS to all subgrantees and direct hire contractors. This information will be in the form of published electronic links and printed materials.

The updated CT WAP Operations and Training Manual (QWP-15) will also be distributed in electronic and printed materials formats.

## **Section 2**

### Communication of Guidelines and Standards

#### **Justification**

DOE will pay particular attention during its program monitoring to agreements, procedures manuals, and other relevant materials to ensure Grantees have informed subgrantees of the expectations for work quality.

#### **Requirement**

CT WAP will provide subgrantees and/or contractors with technical requirements for field work including: audits/testing; installation of energy conservation, health and safety and incidental repair measures; and final inspections. Ct WAP will confirm receipt of those requirements and provide follow-up and clarification upon request. A signature on a contract shall serve as proof of receipt. The technical requirements will be clearly communicated and the specifications for work to be inspected must be referenced in subgrantee contracts. Contractors hired by the subgrantee must have agreements that include the same technical requirements referenced above.

The work of the contractor must be consistent with the Grantee standards and field guides.

- The Grantee has implemented work quality standards that align with the SWS.
- All subgrantee staff, contractors, and anyone doing the actual work are made aware of these standards.
- Every home shall be inspected to ensure compliance with the requirements of the SWS.

All subgrantee agreements and vendor contracts, active in Program Year 2015 and beyond, will contain language which clearly documents the specifications for work as outlined in this section.

Scope of work and details of the local agency's contracts shall be complete, i.e. technical and legally binding in accordance with US DOE WPN 15-4

### **Section 3**

Inspection and Monitoring of Work Using Guidelines and Standards

#### **Justification**

A component of the Weatherization Assistance Program Grantee Plan must include Grantee procedures for "Final Inspection" in Section V.5.

#### **Requirement**

Quality Control Inspector:

Quality Control Inspectors (QCI) working for, or contracted by, the WAP must possess the knowledge, skills and abilities in the National Renewable Energy Laboratory (NREL) Job Task Analysis (JTA) for Quality Control Inspectors. This applies to all individuals who perform an evaluation and sign off on work performed in homes, including final inspectors and Grantee monitoring staff.

#### **Single Family:**

- QCI competency is demonstrated by certification as a Home Energy Professional Quality Control Inspector.

Every DOE WAP unit reported as a "completed unit" must receive a final inspection ensuring that all work meets the minimum specifications outlined in the SWS in accordance with 10 CFR 440.

- Units must be inspected using criteria that align with the quality specifications outlined in Section 1 of this guidance.

### **Multifamily:**

- CT WAP does not plan to engage in Weatherization of multifamily buildings during DOE Program Year 2015.
- Until such time that an approved audit tool becomes available. At such time CT WAP will conduct training and seek approval to conduct audits and procure multifamily QCI training based on the NREL Multifamily Quality Control Inspector job task analysis.

### **Quality Control Inspection:**

Every DOE WAP unit reported as a “completed unit” to CT WAP must receive a final Inspection ensuring that all work meets the minimum specifications outlined in the SWS in accordance with 10 CFR 440.

- All CT WAP reported units shall be inspected using criteria that align with specifications outlined in Section 1.
- Every client file must contain documentation in the form of a Completion Certificate that certifies that the unit has unit had a final inspection and that all work met the required standards. The Completion Certificate must be signed by a certified QCI as well as the client. If a unit has received both final inspection and also been monitored by CT WAP personnel, two certificates will be available in the client or building file- one for each inspection conducted.
- The quality Control Inspection must include an assessment of the original audit and confirm that the measures called for on the work orders were appropriate and in accordance with CT WAP audit procedures and protocols approved by DOE.
- A copy of the original NEAT or MHEA audit must be utilized in all CT WAP QCI Final Inspections and or QCI quality assurance site monitoring inspections.
- CT WAP Quality Control Inspection Policies are developed in accordance with DOE prescribed QCI policy as follows:

CT WAP anticipates that Subgrantees will utilize components of the both of the DOE prescribed standard options to conduct Quality Control Inspections as defined in WPN 15-4.

The Grantee developed Quality Control Inspection process will provide for increased flexibility and effectiveness in conducting all QCI and monitoring activities as follows:

- Each QCI Inspection will document the relationship between the individual performing the quality control inspection to the work to include; independent status, role in audit process and role in any measures installations.

- Each QCI inspection will contain documentation and verification that each quality control inspection is performed in an impartial and complete manner.
- Each QCI inspection is subject to Grantee level assessment of effectiveness and compliance with program inspection policies and contain documentation of any findings related to the quality of the inspection and impartiality of the inspection process.
- The Grantee will maintain tracking of all Grantee QCI activities to include all aspects of the Grantee developed QCI process, subsequent corrective actions and final outcomes.

Note: CT WAP will conduct ongoing assessments of effectiveness to ensure that any individual who is acting as an auditor and QCI is able to consistently perform both tasks. In the event that this capacity is found to be compromised, CT WAP will direct corrective actions and supplemental resources.

#### **Section 4**

Provide Training to Implement and Maintain Guidelines/Standards

##### **Justification**

Pursuant to Section V.8.4 of the Grantee Application Package submission, Grantees must submit a proposed training plan with milestones to ensure the training plan is on pace to be accomplished.

##### **Requirement**

Beginning in Program Year 2015, CT WAP training plans shall include comprehensive training for all WAP workers that is aligned with the NREL (JTA) for the position in which the worker is employed.

The CT WAP Training Plans address two distinct categories:

1. **Tier 1 Training:** Comprehensive, occupation-specific training which follows a curriculum aligned with the JTA for that occupation
2. **Tier 2 Training:** Single-issue, short-term, training to address acute deficiencies in the field such as dense packing, crawlspace, ASHRAE, etc. Tier 2 training can be provided on an as-needed basis.

Note: See CT WAP State Plan/Master File for additional training information.

## **Section 5**

Exemptions –Not Applicable

### **Resources**

Further information to carry out the requirements set forth above can be found in the following links or by contacting the U.S. Department of Energy Weatherization Assistance Program, [wapinfo@nrel.gov](mailto:wapinfo@nrel.gov) (Please use the subject line: Quality Work Plan):

- The Standard Work Specifications for Home Energy Upgrades for Single Family, Manufactured Housing, and Multifamily Homes <http://sws.nrel.gov>
- The IREC ISO 17024 Accreditation Program for Energy Efficiency Training Programs <http://www.irecusa.org/credentialing>
- The NREL Job Task Analysis for Quality Control Inspector <http://www1.eere.energy.gov/wip/pdfs/51670.pdf>
- Home Energy Professional Quality Control Inspector Certification <http://www.bpi.org>
- The NREL Job Task Analysis for Multifamily Quality Control Inspector <http://www.nrel.gov/docs/fy14osti/60537.pdf>
- A list of accredited training providers, including the JTAs for which they are accredited
- [http://www2.eere.energy.gov/wip/guidelines\\_accredited\\_training.html](http://www2.eere.energy.gov/wip/guidelines_accredited_training.html)
- The WAP Training and Technical Assistance Clearinghouse will provide a central location to access materials and resources related to the Quality Work Plan
- [http://www.eere.energy.gov/wip/guidelines\\_quality\\_work\\_plan.html](http://www.eere.energy.gov/wip/guidelines_quality_work_plan.html)