



Department of Energy
Washington, DC 20585

WEATHERIZATION PROGRAM NOTICE 14-4
EFFECTIVE DATE: December 2, 2013

SUBJECT: Quality Work Plan Requirement

PURPOSE: This guidance describes requirements to support and verify quality work in the Department of Energy (DOE) Weatherization Assistance Program (WAP). It defines what constitutes a quality installation of weatherization measures, outlines how those measures are inspected and validated, and defines acceptable training and credentialing of workers.

The quality work requirements are being implemented during the 2013, 2014 and 2015 Program Years. The requirements outlined in the 5 sections of the Quality Work Plan listed below will be included in the 2014 and 2015 State Plan Application Submission process.

SCOPE: The provisions of this guidance apply to Grantees applying for financial assistance under the DOE WAP.

LEGAL AUTHORITY: Title IV, Energy Conservation and Production Act, as amended, authorizes the DOE to administer the WAP (42 U.S.C. § 6861, *et. seq.*). All grant awards made under this program shall comply with applicable law and regulations including the WAP regulations contained in 10 CFR 440.

BACKGROUND: 10 CFR 440.2(b)(6) requires each Grantee application to include a monitoring plan which shall indicate the method used by the State to insure the quality of work and adequate financial management control at the subgrantee level. Pursuant to the above section, the Department of Energy's Weatherization Assistance Program (DOE WAP) is instituting a Quality Work Plan (QWP) that will establish benchmarks for energy efficiency retrofits in the Program.

The QWP defines specifications for work quality, workforce training and the qualifications required for individuals performing inspections of WAP work. The requirements are based on the resources developed under the Guidelines for Home Energy Professionals project. Adopting these benchmarks for quality allows the WAP to leverage the institutional knowledge, developed over 30 years and set the standard for quality in the program.

Guidance:

There are 5 required sections of the Quality Work Plan (QWP):

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 State Plan Application submission must advise DOE of the type of Work to Be Done (per the Application Package). 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

All tasks performed on client homes must meet the specifications, objectives and desired outcomes outlined in the Standard Work Specifications for Home Energy Upgrades (SWS) where applicable.

- “Applicable tasks” are those tasks that are addressed in the Standard Work Specifications for Home Energy Upgrades for Single Family, Multifamily and/or Manufactured Homes.
- Tasks that are not listed in the SWS are not subject to this requirement.
- Grantees will make available to subgrantees comprehensive field standards outlining grantee expectations of work scope and quality. These field standards must meet or exceed the minimum standards outlined in the SWS where applicable.
- Grantees must review their field guides and ensure that the relevant procedures in those guides will result in work that achieves the desired outcomes in the SWS. Field guides will reference the appropriate SWS for the procedure being described and clearly state the required specifications for that procedure.
- The field guides and standards may be maintained in one or more documents.

Time Line

By July 1, 2014

Grantees will submit to DOE an implementation plan for complying with all components of this section in the State Plan Application.

By April 1, 2015

Grantees will distribute field guides and field standards that conform to the SWS to all subgrantees.

Section 2 **Communication of Guidelines and Standards**

Justification Weatherization Program Notice (WPN) 12-5 includes a list of materials grantees shall provide to their designated DOE Project Officer (PO) as part of the monitoring process. DOE will pay particular attention to agreements, procedures manuals, and other relevant materials to ensure grantees have informed subgrantees of the expectations for work quality.

Requirement Grantees must provide subgrantees and/or contractors with technical requirements for field work including, but not limited to, audits/testing; installation of energy conservation, health and safety and incidental repair measures; and final inspections. The grantee must confirm receipt of those requirements and provide follow-up and clarification upon request. The technical requirements must 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 goal is to ensure:

- The grantee is implementing work quality standards that align with the SWS.
- All subgrantees staff, contractors, and anyone doing the actual work are aware of these standards.
- Every home is inspected and complies with the SWS.

Time Line **Beginning of the Grantee's Program Year 2014**
All subgrantee agreements and vendor contracts will contain language which clearly documents the specifications for work as outlined in this section. Grantees will provide the communication verification for this item with the State Plan application submission.

Section 3 Title **Inspection and Monitoring of Work Using Guidelines and Standards**

Justification As part of the WAP State Plan/Application Package submission, grantees must describe procedures being followed for "Final Inspection" under Section V.5 of the Application Package.

Requirement **Quality Control Inspector:**

Quality Control Inspectors (QCI) working for, or contracted by, the WAP possesses the knowledge, skills and abilities in the National Renewable Energy Laboratory (NREL) Job Task Analysis 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.

- QCI competency is demonstrated by certification as a Home Energy

Professional Quality Control Inspector.

- Quality Control Inspectors can be employed by third party organizations or subgrantees; however, the grantee is ultimately responsible for ensuring that every unit reported to DOE meets the work quality guidelines required by the WAP.
- The grantee must have a policy for validation of the Quality Control Inspectors' credentials.
- The grantee must have policies and procedures in place to address situations when the QCI is not inspecting units using the standards adopted by the state and consistent with the SWS. This policy must include monitoring of the QCI and procedures for disciplinary action if the grantee inspection protocols are not consistently followed.

Quality Control Inspection:

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 found in the specifications outlined in the *Work Quality* section of this guidance.
 - Every client file must have a form that certifies that the unit had a final inspection and that all work met the required standards. The certification must be by a certified QCI. Signatures would meet the requirement. If a unit has received both a final inspection and has also been monitored by the grantee, two certification forms will be available in the client file - one for each inspection.
 - Grantees must include in their annual WAP Grantee Application specific protocols that will ensure that the work performed by the WAP meets the criteria outlined under the Work Quality section of this guidance.
 - The Quality Control Inspection must include an assessment of the original audit and confirm that the measures called for on the work order were appropriate and in accordance with the grantee audit procedures and protocols approved by DOE.
- Grantee Quality Control Inspection Policies can be developed in two ways:

1. DOE Prescribed QCI Policy: DOE has developed two standard options for administering quality control inspections:

- Independent QCI: The 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 grantee or a DOE approved representative (for example, a third party HEP certified Quality Control Inspector) must perform quality assurance reviews of at least 5 percent of all completed units.
- Independent Auditor/QCI: The Auditor performs the audit, creates the work order, and performs the final quality control inspection. The auditor is not involved in any of the actual

work on the home. Because this model does not allow for an independent review of the audit on every home, the grantee must increase their percentage of quality assurance reviews to ensure that audits are being performed consistently and correctly. The grantee must perform quality assurance reviews of at least 10 percent of all completed units. The final percentage of inspections will be defined by the grantee and justification provided to DOE supporting the final number. The grantee must also develop a quality assurance plan that ensures that the individual who is functioning as both the auditor and the quality control inspector is able to consistently perform both tasks.

2. Grantee Developed QCI Policy: The grantee may choose to develop a quality control inspection policy that differs from the standard options defined by DOE. The policy must be presented to DOE for approval and must contain the following elements:
 - Description of the individuals performing the quality control inspections and their relationship to the work - i.e. are they independent, did they audit the home, did they work on the crew etc.
 - Grantee process for ensuring that quality control inspections are performed in an impartial and complete manner. This must include audit review as described above.
 - Grantee process for reviewing the success of the QC Policy and resolving any issues that affect the quality and impartiality of the inspection process.

Time Line

2014 Grantee Plan

Grantees must develop a training and certification plan to ensure that there are a sufficient number of certified individuals available to meet the requirements of this Section.

April 1, 2015

All units reported to DOE as completed will be inspected to ensure compliance with the specifications outlined in the SWS.

Beginning of Grantee's Program Year 2015

All quality control inspections, including final inspections and monitoring inspections, must be conducted and signed off by a certified QCI as outlined in this section.

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 to DOE a proposed training plan and milestones to ensure the training plan is on pace to be accomplished. The Grantee Application submission instructions provide elements that should be addressed as part of the submission. These include how the grantee training plan reflects feedback from DOE Project Officer visits and grantee field monitoring visits. In 2014 and 2015, this list will be expanded to include items outlined in this section.

Requirement

Beginning in Program Year 2014, grantee Training Plans must include comprehensive training for all WAP workers that is aligned with the NREL Job Task Analysis (JTA) for the position in which the worker is employed.

- Training Plans must address two distinct categories:
 1. **Tier 1 Training:** Comprehensive, occupation specific training which follows a curriculum aligned with the JTA for that occupation. Tier 1 training must be administered by a training program that is accredited by IREC for the JTA being taught.
 2. **Tier 2 Training:** Single issue, short-term, training to address acute deficiencies in the field including dense packing, crawlspace, ASHRAE, etc. Conference trainings are included in this category.
- Training Plans must ensure that all workers receive regular Tier 1 training.
- Tier 2 training can be provided on an as-needed basis, however, the majority of worker training should occur in Tier 1.

Time Line

Beginning of Grantee's Program Year 2014

Grantees must provide a grantee training plan to ensure that all training meets the requirement outlined in this section. Where available, all DOE funded Tier 1 training will be provided by IREC accredited training programs. Where IREC accredited training is not available, the grantee must provide a plan to access IREC training or to meet the alternate requirements by the beginning of PY 2015.

Beginning of Grantee's Program Year 2015

All Tier 1 training paid for with WAP T&TA funds must meet the requirements of this section.

Section 5

Exemptions

Section 3 Exemptions:

Grantees whose service territory climate and DOE-approved energy audits limits the allowable measures to *baseload only* are exempt from the Quality Control Inspector requirement. Grantees must submit an alternate training and evaluation plan to ensure that the individuals performing

quality control inspections in these locations are adequately trained and skilled to inspect in accordance with the SWS. All other requirements outlined in “Work Quality” above still apply. The installed work must meet the specifications outlined in the SWS.

Further information to carry out the requirements set forth above can be found:

- 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>

For more information please contact, U.S. Department of Energy Weatherization Assistance Program, WAPInfo@nrel.gov (Subject line: Quality Work Plan).

Annalucia Garcia

Program Manager

Office of Weatherization and Intergovernmental Program

Energy Efficiency and Renewable Energy

Superseded By WPN 15-4 Dated 10-21-14