



Department of Energy
Washington, DC 20585

WEATHERIZATION PROGRAM NOTICE 22-4
EFFECTIVE DATE: December 13, 2021

SUBJECT: Quality Work Plan Requirement Update

INTENDED AUDIENCE: WAP Grantee Program Managers, WAP Subgrantee Managers

PURPOSE: The Quality Work Plan (QWP) includes the requirements provided in this guidance that support and verify quality work in the 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.

Substantive updates to the WAP QWP requirements include:

- **Refinement of required sections of the QWP.**
- **Clarification on requirement to submit a revised Field Guide at least 6 months prior to the expiration date.**
- **Additional option to utilize a mentorship model while uncertified inspectors are completing training and Quality Control Inspector (QCI) certification.**

SUPERSEDES: Weatherization Program Notice (WPN) 15-4 and Weatherization Memorandums 070, 050, 036, and 034.

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 must comply with all applicable laws and regulations including the WAP regulations contained in [10 CFR 440](#).

BACKGROUND: WAP Grantee applications, as required by [10 CFR 440.12\(b\)\(6\)](#), are to include a monitoring plan which indicates the method used by the Grantee to ensure the quality of work and adequate financial management control at the Subgrantee level.

Pursuant to the above section, the DOE WAP instituted a QWP under WPN 14-4 starting in December 2013 that established benchmarks for energy efficiency retrofits in the Program and outlined specifications for work quality, workforce training and individuals performing inspections of WAP work.

[10 CFR 440.12\(b\)\(7\)](#) requires each Grantee application to include a training and technical assistance (T&TA) plan which indicates how funds for T&TA will be used. The QWP defines the training activities and specifies the WAP workforce training and certification requirements.

[10 CFR 440.16\(g\)](#) requires the Subgrantee, or its authorized representative, to perform a final inspection and certify that the work has been completed in accordance with the energy audit procedures required by [10 CFR 440.21](#), prior to reporting the dwelling unit to DOE as a completed unit. The QWP provides the specificity of the qualifications required of the individual completing the final inspections.

Energy audits, comprised of field site data collection and energy modeling using an approved energy modeling software tool, are also a critical aspect of ensuring quality WAP work. See [WPN 19-4, Revised Energy Audit Approval Procedures, Related Audit, and Material Approvals](#), for detailed requirements regarding the use of energy audits in the WAP.

Previous WPNs have outlined the requirements of the QWP in sections. This guidance condenses and refines the historical sections from five to four without losing, but further enhancing, emphasis on quality.

GUIDANCE:

SECTION 1: STANDARD WORK SPECIFICATIONS (SWS)

The [Standard Work Specifications](#) (SWS) define the minimum acceptable outcomes for home energy upgrades installed on single-family, multifamily, and manufactured housing. These specifications provide objective based outcome requirements for energy efficiency measures installed by the home performance industry. The SWS is maintained by the National Renewable Energy Laboratory (NREL) on a five-year cycle and since 2014 has provided the WAP with a consistent definition of work quality to assist in meeting the goal of increased WAP effectiveness by increasing standardization of installations and technical monitoring outcomes.

SWS-Aligned Field Guides

- Field guides provide Grantee-specific comprehensive field standards outlining expectations of work quality and the installation of WAP measures. Field guides shall be maintained by the Grantee and must be approved by DOE prior to implementation.
- Grantees must update their field guides on a five-year cycle. Grantees must submit their revised field guide to their respective DOE Project Officer for review and approval at least 6 months prior to the expiration date.
 - When submitted, installation standards contained in Grantee field guides must meet or exceed the minimum standards outlined in the current SWS and when submitted, reference or include a companion document which identifies/crosswalks the appropriate SWS for the procedure being described for review and approval. Tasks that are not listed in the SWS are not subject to this requirement.
 - A request for a variance from individual specifications may be processed by submitting the request via the online [SWS Variance Request Form](#) or by utilizing the Attachment and submitting the request to your respective Project Officer. All variances, even those previously approved, must be resubmitted each approval cycle for review and approval.

- Grantees are encouraged to engage Subgrantees and relevant stakeholders in the revision of a technical policy including the field guide.
- Within a Grantee's five-year approval cycle, editorial changes are allowed without further approval unless the changes lead to a variance from the SWS. At that time Grantees would need to re-submit their field guide for review and re-approval and/or submit a variance request.
- Grantees shall have approved field guide(s) for each building type they have an approved energy audit for.
- Grantees must provide Subgrantees and/or contractors with all technical requirements (e.g., field guide(s), building diagnostic and combustion safety procedures) for field work. The Grantee must confirm receipt of those requirements and provide follow-up and clarification upon request. A signature on a contract can serve as proof of receipt.
 - Crew and Contractor work orders need to demonstrate the performance requirements (e.g., R-value, U-values, equipment efficiency values, etc.) from the energy audit.

SECTION 2: INSPECTIONS

A component of the annual WAP Grantee Plan must include Grantee procedures for "Final Inspection," as directed in the annual DOE Application Instructions. Final inspections must be led by a QCI.

Final Inspection

Every DOE WAP unit reported as complete must receive a Final Inspection documenting that all work meets the minimum specifications outlined in the Grantee's DOE-approved field guide.

- Units are to be inspected using criteria that aligns with the requirements outlined in Section 1 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 form must contain the QCI's printed name, signature, certification number and date.
 - If a unit has received both a Final Inspection and has also been monitored by the Grantee, the client file must include both the certified QCI's (Subgrantee and Grantee) printed name, signatures and certification number and date - one for each inspection.
- The Final Inspection must include an assessment of the energy audit that confirms the accuracy of the field site data collection, energy audit software inputs, and that measures called for on the work order were appropriate and in accordance with the Grantee energy audit procedures and protocols approved by DOE.
- Grantee technical monitoring of Subgrantee dwelling units shall not be completed by the same QCI certified individual that had completed the Subgrantee's energy audit or Final Inspection of the same dwelling unit. Each Grantee shall specify their policy in the Monitoring Activities (Section V.8.3) of the annual DOE Application.

Quality Control Inspectors

A QCI is a residential energy-efficiency expert who ensures the completion, appropriateness, and quality of energy upgrade work by conducting a methodical inspection of the building including performing safety and diagnostic testing. The individual with QCI certification is essential to the quality production of weatherization units. It is required that individuals who approve Subgrantee Final Inspections and Grantee technical monitoring, must have an active QCI certification and possess skills outlined in the [NREL Job Task Analysis \(JTA\) for QCIs](#).

Single Family

- The Grantee must follow a written policy/procedure for verifying final inspectors approving completed units are certified QCIs.
- The Grantee must have written policies and procedures to address situations where a QCI approves work which is not consistent with the standards adopted by the Grantee and the DOE-approved Field Guide. The policy must include increased monitoring of the Subgrantee where the inspector is employed/contracted and procedures for disciplinary action if the Grantee inspection protocols are not followed.

Multifamily

- Grantee Training Plans must include requirements to ensure that individuals signing off on work in multifamily buildings have an active QCI certification and successfully complete a comprehensive training program based on the [NREL Multifamily Quality Control Inspector JTA](#).

QCI Mentorship Option

To support recruitment, efficient onboarding, and career advancement at the Grantee and Subgrantee levels, Grantees may elect to allow a mentorship model. Individuals working toward QCI certification (mentee) under the mentorship of a certified QCI may perform work aligned with the QCI Job Task Analysis, including Final Inspections, monitoring, and the collection of field site data and/or conducting reviews of energy models, but all work must be reviewed and approved by a certified QCI.

If a Grantee chooses to develop a mentorship program, the policy must be submitted to their respective DOE Project Officer for approval and contain the following elements:

- The mentee is a Subgrantee/Grantee employee or contractor pursuing QCI certification.
- A timeline and the number of dwelling units for the mentees to complete training and obtain QCI certification.
- At least one designated mentor, agreed upon by the Grantee and Subgrantee, who can review field inspections, provide on-the-job training and coaching. The use of video or virtual technology is encouraged.
- All work performed by the mentee is reviewed and attested by a certified QCI which includes the printed names, signatures, certification number (for the mentor) and dated by both the mentor and mentee.

Grantee Monitoring

Grantee monitoring policies and procedures must align with WPN 20-4, which allows using either DOE's prescribed monitoring policy or a Grantee-developed monitoring policy. If a Subgrantee is utilizing the QCI mentorship option, then the Grantee must perform quality assurance reviews of at least 10 percent of all completed units. Grantee monitoring of a Subgrantee dwelling unit shall not be completed by the same QCI certified individual that completed the Subgrantee energy audit or final inspection of the same dwelling unit. If the Grantee chooses to develop a monitoring policy that differs from the standard options defined in WPN 20-4, the policy must be submitted to the Grantee's respective DOE Project Officer for approval and contain the following elements:

- Description of the relationship between the certified individuals performing the Final Inspections and the installed work - i.e., are they independent, did they audit the home, did they work on the crew, etc.
- Grantee process for ensuring that monitoring is performed in an impartial and complete manner. This must include review of the energy modeling inputs and outputs as described above.
- Grantee process for reviewing the success of the monitoring policies and resolving any issues that affect the quality and impartiality of the inspection process.

SECTION 3: WORKFORCE TRAINING

Pursuant to the annual Grantee Application Package submission, Grantees must submit a proposed training plan with 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.

Definitions and Training Guidelines

- **Comprehensive Training:** Occupation-specific training which is part of an overall curriculum aligned with the topics within the given JTA being trained. Comprehensive training must be administered by, or in cooperation with, a training program that is accredited by a DOE-accepted credentialing body for the JTA being taught.
- **Specific Training:** Single-issue, short-term training to address technical skills or knowledge gaps. Conference trainings and any training not aligned with a Home Energy Professional JTA are included in this category.
- **Home Energy Professionals:** An umbrella term for those working in the residential retrofit industry with a focus on energy efficiency improvements.
- **Job Task Analyses (JTAs):** JTAs define and catalogue the knowledge, skills, and abilities a practitioner needs to perform a given job effectively and safely. JTAs are used by training providers to develop coursework that can be verified and accredited by a third-party organization.
- **Retrofit Installer/Technician (RIT):** A residential energy efficiency professional who installs energy efficiency upgrades in dwelling units.
- **Crew Leader:** A Crew Leader is responsible for supervising and assisting in the retrofitting activities specified in the scope of work. The Crew Leader is responsible for quality control, interacting with the client, managing personnel and materials, and ensuring a safe and efficient job site.

- **Energy Auditor:** An experienced professional who evaluates the health and safety issues, durability, comfort, and energy use of a residential building. The Energy Auditor (EA) conducts advanced diagnostic tests, gathers and analyzes data, and creates energy models to draw conclusions and make recommendations to the client for improvements.
- **Quality Control Inspector (QCI):** A certified residential energy-efficiency expert who ensures the completion, appropriateness, and quality of energy upgrade work by conducting a methodical inspection of the building and performing safety and diagnostic tests.
- **Installer Badges Toolkit:** The Installer Badges Toolkit provides a flexible, customizable, and voluntary approach to training and skills recognition for WAP RITs and Crew Leaders.

Training and Technical Assistance (T&TA) Planning Requirements

Grantee T&TA plans must ensure WAP field workers receive comprehensive training on a regular basis, as defined by the Grantee, for the position in which the worker is employed. DOE encourages flexibility in designing comprehensive and specific curricula to ensure trainings are customized to meet the needs of the weatherization workforce and unique energy efficiency programs.

Each Grantee will decide on the schedule and type of trainings for each profession based on workforce needs and availability of funds. The Grantee shall develop methods to complete Training Needs Assessments (TNA) which identify and assess training needs and plan for meeting those needs over a defined period, which can span multiple Program Years. The TNA shall be based on the weatherization analysis of effectiveness (Master File V.6), DOE and Grantee monitoring recommendations, Subgrantee input, and other available performance data.

Use of the optional [WAP T&TA Planning & Reporting template](#) is recommended. See the annual Application Instructions for additional detail and T&TA Plan requirements.

SECTION 4: EXEMPTIONS

Programs which do not install envelope measures are exempt from the QCI certification requirement. Those Grantees are:

- Hawaii,
- American Samoa,
- Guam,
- Northern Mariana Islands,
- Puerto Rico, and
- US Virgin Islands,

These Grantees must comply with Sections 1 and 3 above. Individuals performing inspections in these locations must be adequately trained and skilled to inspect in accordance with the SWS and DOE-approved Field Guide, Energy Audit Tool or Priority List. Grantees should work with their DOE Project Officers to ensure that all aspects of the training plan meet the overall intent of this WPN.

CONCLUSION:

DOE and the Weatherization network continually examine the performance of the Program with the shared goal of providing consistent cost-effective energy efficiency retrofits to income eligible clients. The QWP has served as the foundation of providing consistency within the WAP which is implemented in every State of the United States, Territories and Tribal Nations. DOE appreciates the efforts and commitment that the WAP network has provided in the 45 years which continue to make Weatherization Work!

Grantees with specific questions related to this Program Notice should contact their respective DOE Project Officer.

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Attachment:

SWS Variance Request Form