United States Government   **Department of Energy**

Memorandum

DATE: **August 29, 2023**   **WAP Memorandum 113**

REPLY TO
ATTN OF: **Carrie Smith, Readiness and Retrofit Program Manager, Weatherization Assistance Program**

SUBJECT: **Weatherization Assistant Suite of Tools and Transition Requirement Updates**

   TO: **Weatherization Assistance Program Grantees**

INTENDED
AUDIENCE: **Grantee Program Managers, Grantee Technical Managers, Subgrantee Program Directors, Subgrantee Technical Managers, Weatherization Training Centers**

SUPERSEDES: **Weatherization Memorandum 091: Weatherization Assistant Suite of Tools Update and Transition Requirements**

Background:

The Weatherization Assistant (WA) Suite consists of four audit tools maintained by the Oak Ridge National Laboratory (ORNL) to assist with the implementation of the US Department of Energy's (DOE) Weatherization Assistance Program (WAP). These tools are available for use within WAP and, in certain situations, may be used by utility-based programs and home energy professionals (e.g., in addition to WAP or through previous versions).

WA Suite consists of:
- National Energy Audit Tool (NEAT) for site-built, single-family homes.
- Manufactured Home Energy Audit (MHEA) for manufactured homes.
- Multifamily Tool for Energy Audits (MulTEA) for multifamily buildings.
- Health and Safety Audit for single-family homes (including manufactured homes) and individual dwelling units in multifamily buildings that are being weatherized.

The three energy audit tools identify cost-effective energy-efficiency retrofit measures using site specific weather conditions, construction details, local measure costs, and area fuel costs. The Health and Safety Audit assists in identifying and selecting health and safety measures when a dwelling is evaluated for energy-efficiency retrofits. All four tools are available for use through the Weatherization Assistant web-based (WAweb) platform.

Updated Terminology:

As WA receives updates the version number will change; therefore, DOE provides the following definitions:

WAv8 – Desktop computer application for NEAT and MHEA that works on a local network only; support for WAv8 will cease as of June 30, 2024.

WAweb – Web-based application providing access to NEAT, MHEA, MulTEA, and the Health and Safety Audit; WAweb will receive updates and be supported by DOE and ORNL. Previously referred to as WA version 10 (WAv10).

WAweb-API – An Application Programming Interface is a software intermediary that exchanges information between two applications. A WAweb-API may allow communication between a third-party software and the WAweb NEAT and MHEA calculation engines. The use of a WAweb-API is not the same as entering audit data in WAweb.

Updated Transition Requirements:

Per [Weatherization Program Notice (WPN) 23-6 (Section 2)](#), Grantees with DOE approval for use of NEAT and/or MHEA are required to transition to the web-based version (WAweb) by the start of Program Year (PY) 2024 (April 1 or July 1, 2024). Grantees should begin the transition process as soon as possible, but no later than **6 months** prior to the PY 2024 start date. Flexibility will be provided on a case-by-case basis if technical issues arise; therefore, Grantees should keep their respective DOE Technical Project Officer (TPO) informed of any developments during this process. Grantees approved to use WAv8 that do not transition to WAweb by the beginning of PY 2024, will be out of compliance with [10 CFR 440.21](#) and will receive an action item. Training resources are available as described below.

WAweb-API Release:

ORNL is developing the WAweb-API to facilitate input/output communication between the NEAT and MHEA energy modeling engine and third-party software products. The framework for communication with WAweb-API is available to vendors upon request to ORNL. ORNL has made the current version available to stakeholders for testing and development purposes. The WAweb-API framework will undergo no less than two rounds of testing by third-party developers and will not be available for WAP production until thorough testing has been completed. Target date for WAP production: April 1, 2024.

Grantees seeking to use the WAweb-API either directly or through a third-party software vendor, rather than interfacing with WAweb, must meet additional requirements prior to DOE approval including demonstrating consistent and reliable generation of WAweb-API input files from audit data, and consistent and reliable translation of WAweb-API output files into energy audit recommendation(s) and work scope(s) that align with the measure priority determined by WAweb. Grantees seeking to use the WAweb-API are encouraged to coordinate with their third-party software vendor and ORNL, and actively communicate development status and timeline to their respective DOE WAP TPO.

WA NEAT/MHEA Calculation Engine Source Code (WA Engine):

The source code for WA Engine v10.02 was made available to the public in November 2021 by ONRL. While this source code reflects the first release of WAv10, it is not the current version of WAweb nor WAweb-API. WAweb has been updated since the initial source code release and ORNL will continue to improve and update the program.

Grantees wishing to use a prior version of the WA Engine (e.g., v10.02), rather than WAweb or WAweb-API, are required to submit a full energy audit approval request for a "standard" energy audit tool per WPN 23-6 (Attachment 1). Similarly, tool update requirements (per WPN 23-6) must also be met whenever a newer public version of WA Engine is released.

Frequently Asked Questions (FAQ):

Frequently Asked Questions (FAQs) answering the most common questions received by DOE and ORNL are posted here: https://www.energy.gov/node/4832592.

Transition Process:

- Initial Contact: Grantees must contact ORNL (eckmanwe@ORNL.gov), and copy their DOE TPO, to begin coordinating the technical aspects of the transition to WAweb. Initial contact should include the proposed transition date and planned training period. This should be done as soon as possible, but no later than 6 months prior to the proposed transition date.

- Notification: Grantees must notify their TPO of changes to their approved annual plan. These changes include:

    o Transition to WAweb, with timeline and target dates.
    o Projected training and technical assistance (T&TA) for Grantee and Subgrantee staff with timelines and target dates.

        ▪ See projected training schedule below.

- Documentation Submittal: Grantees need to demonstrate that set-up libraries, supply libraries, and fuel costs have been properly updated. Grantees must notify their TPO, via email, once it has confirmed access to its Grantee specific WAweb site and all associated statewide libraries (e.g., Measure Costs, Economic Parameters, etc.) have been appropriately modified and are ready for review. DOE staff will work with Grantees to review library information and provide final approval for Grantees to use WAweb for WAP production.

        ▪ No additional audit documentation is required regarding a Grantee's transition to WAweb unless the transition results in changes to audit procedures formally approved by DOE.

- Import of existing databases: DOE is supporting a one-time import of historical audit data, for record retention purposes, from Grantee's WAv8.9 database(s) into a new WAweb archival database allowing future access and report generation from historic data. Additional import requests will be available to Grantees with the use of Grantee T&TA funding. These imported files are for recordkeeping purposes only and cannot be altered once imported to WAweb.

- o ORNL will provide direct support to Grantees during this process.
  - ▪ Grantees may contact ORNL (eckmanwe@ORNL.gov) to receive the requisite details to complete this import (e.g., file format, upload process, naming conventions).
  - ▪ This one-time import, if desired, is recommended for completion within two-to-six months following the transition to WAweb.

Implementation Timeline:

Grantee Task	Due Date
Grantees may begin transition to WAweb	November 1, 2022
Grantees must begin transition to WAweb	6 months prior to start of Grantee PY 2024 (April 1st or July 1st, 2024)
Grantees must complete transition to WAweb, including any updates to annual plans	Beginning of PY24

Training Opportunities:

To assist Grantees and Subgrantees with the transition to WAweb, DOE has commissioned ORNL to provide materials for training development and support to Grantees and Training Providers. A basic timeline of activities is shown below. The timeline provides for the release of material focused on supporting WAP Grantees and Training Providers, training existing WAv8 users to use WAweb (shown as "WAweb Materials for Training Development - Existing User Conversion"). ORNL will then release a second round of training materials and guidance focused on training new WAweb users (shown as "WAweb Materials for New User Training Development"). Additional details will be available to the WAP network via GovDelivery.

Training Resources:

Training Event or Resource	Description	Target Date
Training Event: WAweb Preview	Live demonstration of WAweb for users and trainers prior to release	August 2022 - Completed
Listening Session: WAweb Materials for Training Development	User feedback on training development items to be provided by ORNL for existing user conversion (from WAv8)	August 2022 - Completed
Resource: WAweb Materials for Training Development – Existing User Conversion Release	Publish foundational training materials for trainers supporting user conversion from WAv8	November 2022 - Completed

Listening Session: WAweb Materials for Training Development	User feedback on the WAweb Materials for Training Development provided by ORNL	January 2023 - Completed
Resource: WAweb Materials for Training Development - New User Release	Publish training materials and guidance for trainers supporting new WAweb users	May 2023 - June 2024 - Completed
Listening Session: WAweb Materials for Training Development	Trainer feedback on PY23 implementation WAweb user preparation training	October 2023
Resource: WAweb Materials for Training Development and/or WA Trainer Webinar	Publish new materials for training development or trainer support webinar based upon listening session	Quarterly – Starting December 2023

Optional Resources:

DOE provides the following resources to assist Grantees in implementing the transition to WAweb.

- [WAweb Transition Checklist for WAP Grantees](#)
- [WAweb Example Conversion Timeline](#)

Conclusion:

DOE's commitment to improvement has driven the implementation of this update to the WA suite. Throughout this process DOE will keep the WAP network informed of updates, resources, and training opportunities as available.

For questions, or concerns, about implementation regarding Grantee approved plans, please contact your DOE TPO, and copy Ray Judy (ray.judy@hq.doe.gov). For questions, or concerns, that are technical in nature specific to WAweb or its API interface, please contact ORNL (eckmanwe@ornl.gov) and include your respective DOE TPO.