



**Department of Energy**  
Washington, DC 20585

**WEATHERIZATION PROGRAM NOTICE 09-04**  
**EFFECTIVE DATE: November 14, 2008**

**SUBJECT:** UPGRADED VERSION OF THE WEATHERIZATION ASSISTANT ENERGY AUDIT SOFTWARE

**PURPOSE:** To provide States with information on how to obtain the latest version of the Weatherization Assistant (Version 8.4), which includes significant revisions to the Manufactured Home Energy Audit (MHEA) that improve the accuracy of its energy savings predictions and the validity of its weatherization recommendations.

**SCOPE:** This guidance applies to the distribution of Version 8.4 of the Weatherization Assistant energy audit software.

**LEGAL AUTHORITY:** Title IV, Energy Conservation and Production Act, as amended, authorizes the Department of Energy to administer the Low-Income Weatherization Assistance Program. All grant awards made under this program shall comply with applicable law including regulations contained in 10 CFR Part 440 (most recently issued June 22, 2006), and other procedures applicable to this regulation as DOE may from time to time prescribe for the administration of financial assistance.

**BACKGROUND:** The Weatherization Assistant is an energy audit program developed and maintained by the Oak Ridge National Laboratory (ORNL) that contains the National Energy Audit Tool (NEAT) for site-built single-family houses and MHEA for mobile homes. ORNL completed a field validation of MHEA in 2007. ORNL also recently completed other analyses that examined the accuracy of MHEA's engineering algorithms as compared to other computer models and methods for improving MHEA's accuracy as compared to field measured data. Based on these studies, ORNL has made important changes to MHEA that improves its ability to accurately predict the energy savings of mobile home weatherization measures and enhances the validity of its weatherization recommendations. The MHEA Steering Committee worked closely with ORNL throughout the field validation and subsequent analyses. The committee concurred that the revisions made to MHEA improves its accuracy and the validity of its recommendations, and recommended that the revised version of MHEA should be issued to the weatherization community as soon as possible.

In addition to the changes made to MHEA to increase its accuracy, ORNL has made other modifications to the Weatherization Assistant to expand its capabilities and improve its ease of use. A focus of these improvements has been on making the inputs and capabilities within NEAT and MHEA more consistent with each other.

**PROCEDURES:** DOE is pleased to announce the availability of the updated version of the Weatherization Assistant (Version 8.4) with a MHEA revision that is significantly improved and field-validated. The Weatherization Assistant is licensed and copyrighted, but it is still available at no cost to state and local weatherization agencies. Version 8.4 of the Weatherization Assistant is posted to the Weatherization Assistance Program Technical Assistance Center (WAPTAC) website provided below. The installation file, as well as instructions for obtaining and installing the new version of the software, can be downloaded from this website.

[http://www.waptac.org/sp.asp?mc=techaids\\_audits](http://www.waptac.org/sp.asp?mc=techaids_audits)

**TRAINING AND IMPLEMENTATION:** The changes made to MHEA to improve its accuracy were implemented by altering the algorithms in the MHEA software which are not seen by the user. Other improvements made to the Weatherization Assistant were usually simple and consistent with inputs or implementation approaches used in other parts of the program. Therefore, relatively brief instruction should suffice current users in upgrading to Version 8.4 of the Weatherization Assistant. However, states may determine that more extensive training is needed either to implement the updated version of the software, to refine their understanding of NEAT or MHEA, or to use some of the optional features of the software that they are not currently using. DOE is committed to assisting in every way to help facilitate this training. States should contact their Project Management Center representatives or ORNL directly with their training needs so that this training can be scheduled.

**RELATED MATERIALS AND DOCUMENTS:**

Ternes, Mark P. *Validation of the Manufactured Home Energy Audit (MHEA)*. ORNL/CON-501. Oak Ridge National Laboratory, Oak Ridge, TN. November, 2007.  
[[https://home.ornl.gov/~pts/prod/pubs/ldoc8463\\_con\\_501.pdf](https://home.ornl.gov/~pts/prod/pubs/ldoc8463_con_501.pdf)].

Ternes, Mark P. and Michael B. Gettings. *Analyses to Verify and Improve the Accuracy of the Manufactured Home Energy Audit (MHEA)*. ORNL/CON-506. Oak Ridge National Laboratory, Oak Ridge, TN. December 2008.  
[[https://home.ornl.gov/~pts/prod/pubs/ldoc13359\\_con\\_506.pdf](https://home.ornl.gov/~pts/prod/pubs/ldoc13359_con_506.pdf)].



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