

Innovative Outstanding Weatherization Assistance News

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From all of us in the
Weatherization Bureau
in Des Moines

Jim, Gwen, Mark, Marcia,
Chris, Mike and Rosemary

Welcome

What is Advocacy? To many of us, the word advocacy seems somewhat mysterious. The word may conjure up visions of a professional lobbyist in Washington, D.C., who is a paid expert on an issue. Alternately, we may envision mass demonstrations or rallies.

Advocacy can actually be quite simple. Much of advocacy is simply seeing a need and finding ways to address that need. In short, advocacy is as basic as speaking on behalf of oneself or others to get something

done or accomplished. (Source: www.empowerment.state.ia.us/common/pdf/tool_kit/part_1.pdf)

Everyday, in Weatherization, not only do we serve as advocates for the low-income of Iowa, but we also save lives. How many people can say that? Now, aren't you glad you have such a fulfilling job!

Statistics

<u>Item</u>	<u>*QTRLY</u>	<u>**YTD</u>
Houses Worked On	522	1981
Completions	486	1817
Closed Incomplete	36	164
Owner-Occupied	444	1736
Rentals	78	245
Elderly-Occupied	164	662
Disabled-Occupied	225	865
Occupied by Young Children	98	315
Furnace Replacements	259	984
Refrigerator Replacements	108	833
Freezer Replacements	88	331
Average Costs per House	\$6,969	\$6,601

Totals for all agencies combined

*QTRLY (December 2006—February 2007)

** YTD (Program Year through February 2007)

Agency Spotlight—Northeast Iowa Community Action Corporation

A Helping Hand

Northeast Iowa Community Action Corporation (NEICAC) is building 5 Rent-to-Own Homes for peoples making less than 60% (2 less than 50%) of the AMI (Average Median Income). These homes are of significant value, especially in terms of cost, insulation, and energy efficiency. Webster's sub-division, being built by Hawkeye REC, was to offer electricity as the lone energy source. NEICAC approached Hawkeye REC about the possibility of building affordable housing in this sub-division (part of an intricate lot search). The resulting partnership turned into a win/win situation for Hawkeye and NEICAC, as their agreement included a donation of 6 lots specifically earmarked for affordable housing. This would allow the Webster's Sub-division to receive Tax Increment Financing (TIF) for infrastructure development. NEICAC applied for project grants to build homes for low to moderate-income level people with the previously mentioned income limits.



NEICAC is building these homes for people who have a track record of compliance with community action, and have shown a willingness to better themselves. They would not qualify for a home purchase or mortgage without assistance from this or other federal or state subsidized programs. Funded with grant dollars from the IDED, IFA, FHLB, and a low interest construction loan from Hawkeye REC, NEICAC is able to offer these homes, after an initial 12-36 month rental period, for less than 50% of their appraised value. The renters will purchase their home with a low interest rate offered through a USDA Rural Development program. This program provides purchasers 33-year loans with interest rates as low as 1%, depending on income.

Once considered a poor choice for efficiency, electric furnaces have improved to a level where community action can install them in affordable housing without the fear of pricing the low-income tenant or purchaser out of an affordable project. The furnace, a Steffes 4120 Comfort Plus, was several grades above what community action could afford and still keep the home's prices within project guidelines. This upgrade was made possible through a donation by Hawkeye REC, realizing the need to keep utility bills in-check for purchasers

who are at these income levels.

This furnace is very heavy due to a middle section that is filled with bricks. These bricks are heated (or cooled) by a heat transfer pump, The heat is stored by the bricks and is distributed throughout the house by forced air. The furnace only needs to heat the bricks periodically as the bricks retain the heat for extended periods of time depending on outside air temperatures, thus saving energy and keeping bills down.

The basement walls were built with ICF block and have an R-24 rating, the outside walls of the homes have had stabilized cellulose insulation blown into them for a R-24 rating, and the attic has blown cellulose to a depth that rates an R-50 on the scale. These homes are well insulated, the contractor, Upper Iowa Construction out of Cresco, Ia., worked with NEICAC, providing favorable pricing to allow for this upgrade in insulating these homes. Upper Iowa Construction has been a pleasure to work with on the project and has accommodated NEICAC in every aspect of energy efficiency for these homes. This also included Energy Star-rated appliances and double hung/double glazed, thermopane, low E-glass, vinyl Anderson Windows. Compact florescent lighting was used wherever economically feasible. Two of the homes were built according to Universal Design, making them handicap accessible, and all have egress windows in the basement bedroom(s). Midwest Drafting and Design out of Cresco, Ia., designed two separately distinct house blueprints, keeping some variation between the homes in this sub-division.

NEICAC is extremely proud to offer these 5 homes to qualifying families who could not otherwise procure a mortgage for home ownership. We look forward to the prospect of changing five families' lives forever with this exceptional program. We are grateful for the funding received from the IDED, IFA, FHLB, and Hawkeye REC. And we look forward to partnering with the USDA-RD to provide low interest mortgages to these families. Homeownership courses accompany any prospective purchase, offered through NEICAC's property manager, trained through IHOEP (Iowa Home Ownership Education Project).

—Submitted by Mark Kvammen and Jim Perry with NEICAC

Tentative 2007 Fiscal Monitoring Schedule

April	MATURA Community Action of Southeast Iowa
May	New Opportunities, Inc.
June	Upper Des Moines Opportunity, Inc. West Central Development Corporation

Fuel Switching

When to Switch Fuels

Situations may arise when an agency should consider changing fuels for the furnace or water heater that uses a different fuel source. This is referred to as fuel switching. Due to the complaints the agency and program may receive from a fuel vendor who has lost business due to fuel switching, a lot of consideration must be given to this decision. (see Section 5.64 of the *Policy and Procedures* manual, which is also outlined below). The reasons for considering fuel switching are:

- When the client requests it. (Usually when the appliance currently uses oil or propane and now natural gas is available to the house.)
- When it is more cost effective to replace the existing appliance with one that uses a different fuel.
- When it is necessary for health and safety reasons. Usually when a gas water heater is backdrafting or has spillage and the only solution is to install an electric water heater. This may only be done if all other options, such as moving the existing water heater or installing a power-vented water heater, have been considered and will not work.

Client Approval

If fuel switching is being considered, the agency must obtain the client's written approval before installing an appliance that uses a different fuel. The reason for this is to prevent the fuel vendor, who had supplied the fuel that is being replaced, from complaining the program is "taking his/her business away." If a vendor complains, the client request is documented.

If a client requests the replacement appliance using a different fuel, and the reason is not for health and safety reasons, the fuel switch may only be done if it does not cost more. For example, the client's furnace is currently a propane furnace and the client wants a natural gas furnace installed because the house now has access to natural gas lines. If the cost of installing a natural gas furnace would be more than the cost of installing a propane furnace, the fuel switch should not be made, unless the client pays the difference between the cost of installing a propane furnace and the cost of installing a natural gas furnace, or it is more cost-effective based on the

Fuel Switching Request Calculations Worksheet, which can be found in the Weatherization General Appendix or on the weatherization website at www.weatherization.iowa.gov.

If a client insists on switching to a higher cost fuel (i.e. from gas to electric) for other than health and safety reasons, and the installation cost of the new type of system is not greater than the installation cost would be for the same type of system, the fuel switch can be made provided the client signs a statement certifying he/she understands the operational costs of the different system will be higher.

Fuel Switch Approval

When determining whether it is cost-effective to switch fuels, all costs associated with the installation of a heating system using a different type of fuel must be considered. For example, if ductwork would have to be added, the cost of adding the ductwork needs to be included in the cost-effectiveness determination. Also, the cost of hooking up the house to a natural gas pipeline needs to be considered. Program funds cannot be used to pay the cost of LP tanks, running the LP line to the house, or running the gas line from the street. The cost analysis must include estimates of both installation and operation costs.

The agency must also receive approval from the DCAA. This is done through the use of the Fuel Switching Request Form and the Fuel Switching Request Calculations Worksheet (if applicable). Both forms are available on the State of Iowa Weatherization website www.weatherization.iowa.gov in the Members Only section as well as in the Weatherization General Appendix. Once the fuel switch is approved by the DCAA, a copy of the forms are to be inserted into the client file.

"Thank you so very much for weatherizing our house. You are most kind and I am so truly grateful. Thanks again...God Bless..."

—HACAP Client

News

Program Year 2007 Changes—Listed below are program changes for April 1, 2007—March 31, 2008 (PY'07).

1. The expenditure limit for power-vented and direct-vent water heaters has been increased from \$1,000 to \$1,200.
2. The PY2007 DOE average expenditure per home limit is \$2,885 and the DOE average health and safety expenditure per home limit is \$721. These new limits will be reflected in the WAMS changes Gwen will be sending you to be implemented by April 1, 2007.
3. The new fuel prices for the NEAT Audit are:

Propane	1.48/gal
Fuel Oil	2.39/gal
Natural Gas	12.00/mcf
Electricity	.11/kWh

The NEAT Audit needs to be updated with these new fuel prices. This is done in the Set-up section of the audit. The updates must be done by April 1, 2007.

4. We have made several changes to the Work Standards Manual. Those changes were reviewed with agencies at the March 7-9 Evaluators' Meeting. A copy of the Power-Point used for the meeting has been emailed to the coordinators. We will be sending each agency a revised Work Standards Manual when it is printed.

Weatherization Blog—The National Association of State and Community Services Program (NASCSPP) has developed a Weatherization Assistance Program "blog". The blog will serve as a resource for the latest developments in funding, partnerships, administration, and other issues concerning the WAP. You can access the blog at: www.wxprogram.blogspot.com/.

"I wish to let you know how much your weatherization of our home has helped with the cost of our bills as well as our comfort. The usage of both gas and electricity are down considerably. The workmanship and professionalism was excellent and a good example of how government programs can work. May the sun shine brightly on all your future endeavors."

—North Iowa Client

Weatherization Program Cut—In FY08, the Weatherization Assistance Program is once more slated to receive a cut in the President's Budget. The Administration has asked for \$144 million- a \$98 million (41%) cut from the FY06 level. In response, NASCSPP will provide testimony to both the Senate and House Energy and Water Appropriations Subcommittees in support of a \$275 million in WAP funding for FY08.

Furnace Lab—We (the DCAA) are in the process of constructing a furnace lab at MICA that will be used for furnace and combustion health and safety training. The lab will be valuable in that there will be several different types of furnaces that will allow each participant an opportunity to gain hands-on experience conducting a detailed furnace inspection and diagnostic testing. There will also be a water heater available for hands-on diagnostic training.

2007 Weatherization Training Schedule—The 2007 Weatherization Annual Training Schedule can now be found on the weatherization website at www.weatherization.iowa.gov under Upcoming Events/Trainings. Please note that the posted training schedule is for informational purposes. To allow all agencies an equal opportunity to sign up for the trainings, no one will be allowed to sign up for a training until the training announcements have been released. Every effort will be made to email the announcements the first week of the month for the following month (April email for May training).

File Retention—Good news! In case you haven't heard, you may now dispose of weatherization files relating to PY 2003 and earlier. So, be sure to keep anything from PY 2004 to-date. And remember, just because you *can* toss files doesn't mean you *have to*. Be sure to check with your management staff before disposing of any documentation that may be in your agency's best interest to keep. You never know when a client may need to contact your agency about work that was done.

Revised State Forms—We recently revised a few of our state forms/waivers; Release of Liability, Fuel Switch Request, Fuel Switch Request Calculation Sheet, \$8,000 Expenditure Limit Waiver, and Client Refrigeration Appliance Agreement. The revised forms are now on the Members Only page of the weatherization website. Please note that the two-part forms will not be reprinted and distributed until the old forms are exhausted.

Equipment Maintenance

The Importance of Equipment Maintenance

Equipment maintenance is very important in a weatherization practitioner's line of work. Armed with a variety of instruments, their decisions can affect the lives of those they serve.

Because testing results are so critical to the decisions that are made, it is extremely important that the tools the practitioner uses are in good working condition. Below, are some general guidelines about calibration and maintenance schedules. Be sure to check the owners' manuals for specific manufacturers guidelines.

Combustion Analyzers (once every six months)

- O₂ Sensors will only last about two years.
- CO Sensors will only last between three to five years.

Digital Gauges (yearly)

Thermometer (once every six months)

TIF8800 (replace tip yearly)

Gas Leak Detector (occasionally)

- Test occasionally using the gas from a lighter. If it does not alarm with the gas, it needs to be repaired.

Analog Gauges (once every six months)

- This includes blower door and draft gauges.
- Check against a known calibrated digital gauge. You may find beneficial to use digital gauges instead of analog.

Insulation Blower (weekly)

- Check blower pressure weekly and chart pressures for future reference. If the pressure is dropping, so is the throughput.

Blower Door (every six months, minimum)

- Most problems with blower doors will be the gauges, however, the fan housing, which is a calibrated hole, can be damaged over time. Any fan unit that is cracked is likely to cause problems with accurate readings. Errors can also be caused if the fan motor shifts in its bracket. To ensure your fan is functioning properly, test the unit against a known good unit to assure they produce the same readings.

- Information from Ohio Weatherization
(Previously run in the January 2004 edition of the IOWAN)

Radiant Barriers

Foil Radiant Barriers

If you have been to the State Fair in the last couple of years, you probably encountered a vendor selling foil products to serve as radiant barriers in the attic. The vendor touts the foil product as saving the homeowner money by significantly decreasing energy loss through the attic. The vendor demonstrates the reflective qualities of the product under a heat lamp. This demonstration is very convincing and has enticed many a homeowner to ante up their savings for this product. Unfortunately, this product is not effective in our climate nor is it an approved measure by the DOE. In a DOE issued memorandum, it was stated that DOE had determined that radiant barriers do not qualify as an allowable measure. DOE determined that radiant barriers are likely not cost-effective or are not as cost-effective as cellulose insulation for heating savings. If any of your clients approach you about this item,

please inform them that the product is not an approved measure for the Weatherization Program and will not be installed. Should you encounter a home with this product already installed, do not disturb it as it may void the homeowners' warranty. Instead, install insulation measures everywhere else it is needed, as per the NEAT Audit.

"We could learn a lot from crayons: some are sharp, some are pretty, some are dull, some have weird names, and all are different colors...but they all exist very nicely in the same box."

—Author Unknown

Tidbits

Heat Tape—Beginning with PY'07 we will be allowing (not recommending) the installation of heat tape. An agency evaluator found a great website that explains the proper installation of various types of heat tape. Feel free to check it out too at www.mygreathome.com in the "Fix-It" section.

Members Only—As you know, we have a Members Only section of our webpage dedicated to the needs of local agency personnel. Should you like to see any changes or additions made to this section, please let Chris Taylor know at Christine.Taylor@iowa.gov. And remember, when you enter the UserID and Password, it is case-sensitive; meaning, only use capitol and lowercase letters as directed. If you are having trouble logging on, give Chris a call at 515-281-4565.

Priority Lists—Do you find that every year, you encounter the names and/or addresses of previously weatherized clients on your *new* priority list and wonder *why*? Well, first of all, clients who were weatherized before 1999 will not be in the database because the database didn't exist before then. So, naturally, those clients may show up on your list. But, what about the clients who had their homes weatherized since 1999? How do you get them off the list? All you have to do is compile a list of all of the previously weatherized homes that are on your priority list and send it to Gwen at the DCAA. She will remove those homes from the database so they will not be included in the next priority list you receive. It's that easy.

Duplicate Files in WAMS—Have you ever gotten an error about having a duplicate file in WAMS and thought "no, I don't". Well, you *do* have a duplicate file. At some point, two files were created for one house, each with different AFN numbers. What you need to do is keep the old file but change the AFN number to the "newer" AFN. It is to be done this way because the old file has all of the house data entered, whereas, the new file does not.

Projections and Work-in-Process—You have heard the terms "Projection" and "Work-in-Process", but do you know what they mean? A projection is what the project will have to pay within the next 30 days. Work-in-process is when some of the work for the project has already been paid.

Water Heater Turndown and Type—Does it seem pointless to report the water heater turndown and type? It isn't pointless, in fact, it is necessary. This is the reporting mechanism that tells Greg Dalhoff what kind of water heater the client has in their home, which makes the SLICE report more accurate for your agency.

Client Refrigeration Appliance Agreement Forms—If you attended the Evaluator Meeting held on March 7—8, you heard that we will be changing the Client Refrigeration Appliance Agreement Form from a two-part document to a three-part document; one copy will go to the client, one to the vendor, and one for the agency's file. Please note that the new forms will not be printed until the two-part forms are exhausted, which could be a few months. If you are in need of additional forms, please let Chris know at Christine.Taylor@iowa.gov.

Resources

www.MichaelsEngineering.com

Michaels Engineering is a Wisconsin-based corporation providing engineering consulting services in the Midwest.

www.propanecost.com/index.html

Cost Management Solutions (CMS) provides you, the propane marketer, tools and information to make the best possible propane supply decisions.

www.betterinsulation.com

The Association for better insulation.

www.USA.gov

All sorts of things relating to the federal government that you can do online.

www.GobiernoUSA.gov

The Spanish version of www.USA.gov.

www.waptac.org/sp.asp?id=1989

Client education documents from other states. Includes materials in Spanish.

Approval for Additional Insulation Measures—If you find you could use additional funding for insulation measures, be sure to ask for a waiver from the clients' investor-owned utility company. This may allow more insulation work to be done to a home, and will help you expend your utility funds a little quicker. The waiver is available on the Members Only page of the weatherization website at www.weatherization.iowa.gov.

Weatherization Evaluators Meeting

The weatherization staff recently held their annual Weatherization Evaluators Meeting at the Best Western in Marshalltown on March 7 and 8. Evaluators/Inspectors and Coordinators were invited to attend this meeting to discuss a host of issues. Some of the items discussed were:

- Changes to the state forms and waivers for the program
- Changes to the Work Standards
- Proposed changes to the Work Standards
- How to deal with foil radiant barriers
- Insulating walls, attics and kneewalls

- Issues relating to mobile homes
- Furnace and water heater issues
- Duct leakage and duct sealing

There was active participation by the entire group, which produced a fruitful discussion. The revised Work Standards will soon be printed and distributed to the agencies.



Tentative 2007 Program Monitoring Schedule

April	MATURA Action Corporation Operation Threshold
May	Upper Des Moines Opportunity, Inc.
June	South Central Iowa Community Action Program

Extreme Photos



So, what is this?

- A. An armadillo
- B. Dead buzzard
- C. State inspectors report
- D. Lint Trap



Not too shabby...

Upcoming Events

April 2007

- 3—5 **Basic Evaluator** training to be held at MATURA Action Corporation, 203 West Adams, Creston, Iowa. For more information or to sign up, contact Marcia Thompson at Marcia.Thompson@iowa.gov or 515-281-3861.
- 10—11 **Lead and Slate Safe Work Practices** training to be held at Polk County offices, 5885 NE 14th Street, Des Moines, Iowa. For more information or to sign up, contact Marcia Thompson at Marcia.Thompson@iowa.gov or 515-281-3861.
- 17—18 **NEAT Audit/NEATShell** training to be held at MATURA Action Corporation, 203 West Adams, Creston, Iowa. For more information or to sign up, contact Marcia Thompson at Marcia.Thompson@iowa.gov or 515-281-3861.
- 23—27 **ACI Home Performance Conference** to be held in Cleveland, Ohio. For more information, visit www.affordablecomfort.org.

May 2007

- 8—9 **Basic Furnace** training to be held at Mid-Iowa Community Action, 1001 S. 18th Avenue, Marshalltown, Iowa. For more information or to sign up, contact Marcia Thompson at Marcia.Thompson@iowa.gov or 515-281-3861.
- 22—23 **Mold/Moisture/Ventilation/BTL** training to be held at North Iowa Community Action Organization in Mason City, Iowa. For more information or to sign up, contact Marcia Thompson at Marcia.Thompson@iowa.gov or 515-281-3861.

June 2007

- 5—6 **Mold/Moisture/Ventilation/BTL** training to be held at Community Action of Southeast Iowa, 2850 Mt. Pleasant Street, Burlington, Iowa. For more information or to sign up, contact Marcia Thompson at Marcia.Thompson@iowa.gov or 515-281-3861.
- 19—20 **Advanced Blower Door/Zonal Pressure Diagnostics (Garage Leakage)** training will be held at Mid-Sioux Opportunity, 418 Marion Street, Remsen, Iowa. For more information or to sign up, contact Marcia Thompson at Marcia.Thompson@iowa.gov or 515-281-3861.
- 25—27 **ICAA Conference** to be held in West Des Moines, Iowa as in previous years. Information will soon be available on the ICAA website at www.iowacommunityaction.com.

July 2007

- 10—11 **Advanced Furnace** training to be held at Mid-Iowa Community Action, 1001 S. 18th Avenue, Marshalltown, Iowa. For more information or to sign up, contact Marcia Thompson at Marcia.Thompson@iowa.gov or 515-281-3861.
- 24—25 **Combustion Health & Safety** to be held at Mid-Iowa Community Action, 1001 S. 18th Avenue, Marshalltown, Iowa. For more information or to sign up, contact Marcia Thompson at Marcia.Thompson@iowa.gov or 515-281-3861.

September 2007

- 18—21 **2007 NASCSP Annual Conference** to be held in Boise, Idaho. For more information, email the Gove Group at chomol@gove.org.

The new 2007 Training Schedule is now on our website www.weatherization.iowa.gov under Current Events !

Speed Bumps

I have had a couple of homes that have a problem with the condensate line having water from a clothes washing machine back up into the condensate line. This usually occurs when the furnace and washer are close to each other and the condensate line connects to the washer drain, fairly close to the washer. In one instance, the condensate line from the furnace had an open cup alongside the furnace, so the water overflowed onto the floor by the furnace. In the other case, it was a closed-system and the water backed up to the induced fan. I understand a condensate pump would stop this as it has a check valve that won't allow water to back up into the condensate line.

Many items were discussed during the Evaluator's meeting, some of which are listed below.

1. PVC pipe can be drilled to make safety checks. Foil tape may be used to seal the hole. I would recommend that you go all the way around the pipe so the tape can stick to itself. B-vent is still not to be drilled.
2. Water heater size should be determined by the number of

the occupants. We still recommend that a 30 or 40 gallon water heater be installed in most cases.

3. Mobile home exhaust fans may exceed the some requirement but one as close to the limit of 1.0 some as possible should be installed. Wall mounted fans should also be considered.

4. At this time, our policy concerning vermiculite hasn't changed. We are continuing to work on the procedures and policy for this material.

5. Plywood will no longer be acceptable for grade entrance doors.

6. We are still recommending that a two-pipe system be used for combustion air on high efficiency furnaces. Drawing combustion air from the attic is not acceptable.

7. Two-part foam may be used if it is listed in Appendix A, meets the conformance standard listed, and can be cost justified by NEAT.

Please feel free to copy and distribute.

Iowa Bureau of Weatherization

Department of Human Rights
Community Action Agency
Lucas State Office Building, 2nd Floor
Des Moines, Iowa 50319

We're on the Web!!!
www.weatherization.iowa.gov

Contact us at:

Iowa Bureau of Weatherization, Department of Human Rights, Community Action Agency
Lucas State Office Building, 2nd Floor, Des Moines, Iowa 50319

Christine Taylor, Editor-In-Chief

Email: Christine.Taylor@iowa.gov

Phone: 515-281-4565

Fax: 515-242-6119