# Health & Safety Plan



### **Health & Safety Plan**



☐ Health & Safety is defined in WPN 12-9 as:

Health & safety measures are those actions necessary to maintain the physical well being of both the occupant and/or weatherization workers where the actions MUST be taken to effectively perform weatherization work or the actions are necessary as a result of weatherization work. Grantees are required to identify health and safety procedures and an estimate with rationale for the percentage of costs involved as a part of their own Health & Safety Plan to be approved by DOE.



#### **DOE Guidance**



#### □ WPN 11-6 Weatherization Health & Safety Guidance

- Costs are reasonable as determined by DOE in accordance with the Grantee's approved Grantee Plan; AND
- The actions must be taken to effectively perform weatherization work; OR
- The actions are necessary as a result of weatherization work.

#### Two questions are:

- What must we do within reasonable costs to get the home to a point we can go forward with weatherizing, where the weatherization work will be lasting and effective?
- What must we do to ensure that the weatherization work we conducted does not create a health or safety problem for the occupant?

#### **DOE Guidance**



□ Program Operations or Separate H&S Budget Category

- Regulations do not mandate a separate health and safety budget cost category
- Separate category excludes costs from the average per-unit cost calculation
- If health and safety costs are budgeted and reported under the program operations category, they must be cost-justified through the audit
- DOE encourages separation of these costs

| Section B - Budget Categories |                           |                               |              |                       |                 |                |  |  |  |  |  |
|-------------------------------|---------------------------|-------------------------------|--------------|-----------------------|-----------------|----------------|--|--|--|--|--|
| Object Class                  | Grantee<br>Administration | Sub-grantee<br>Administration | Grantee T&TA | Program<br>Operations | Health & Safety | Total          |  |  |  |  |  |
| <u>Personnel</u>              | \$116,726.00              | \$0.00                        | \$329,408.00 | \$0.00                | \$0.00          | \$446,134.00   |  |  |  |  |  |
| <u>Benefits</u>               | \$45,944.00               | \$0.00                        | \$135,857.00 | \$0.00                | \$0.00          | \$181,801.00   |  |  |  |  |  |
| <u>Travel</u>                 | \$5,456.00                | \$0.00                        | \$86,201.00  | \$0.00                | \$0.00          | \$91,657.00    |  |  |  |  |  |
| <u>Equipment</u>              | \$0.00                    | \$0.00                        | \$0.00       | \$0.00                | \$0.00          | \$0.00         |  |  |  |  |  |
| <u>Supplies</u>               | \$3,000.00                | \$0.00                        | \$7,500.00   | \$0.00                | \$0.00          | \$10,500.00    |  |  |  |  |  |
| <u>Contract</u>               | \$0.00                    | \$345,105.00                  | \$0.00       | \$2,483,915.00        | \$621,600.00    | \$3,450,620.00 |  |  |  |  |  |
| Construction                  | \$0.00                    | \$0.00                        | \$0.00       | \$0.00                | \$0.00          | \$0.00         |  |  |  |  |  |
| <u>Other</u>                  | \$2,900.00                | \$0.00                        | \$61,000.00  | \$0.00                | \$0.00          | \$63,900.00    |  |  |  |  |  |
| Total                         | \$174,026.00              | \$345,105.00                  | \$619,966.00 | \$2,483,915.00        | \$621,600.00    | \$4,244,612.00 |  |  |  |  |  |
| <u>Indirect</u>               | \$31,233.00               | \$0.00                        | \$89,331.00  | \$0.00                | \$0.00          | \$120,564.00   |  |  |  |  |  |
| Object Class Total            | \$205,259.00              | \$345,105.00                  | \$709,297.00 | \$2,483,915.00        | \$621,600.00    | \$4,365,176.00 |  |  |  |  |  |

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### **DOE Guidance**



- ☐ WPN 12-9 WAP Incidental Repair Measure Guidance
  - Defined as: Measures deemed necessary for the effectiveness of one or more ECM.
  - Must identify the EMC that require the installation of the repair
  - Must be included in total costs to determine cumulative SIR
  - List of measures identified as repair
  - Include in H&S Plan
- ☐ Use the H&S Plan Template from WAPTAC website
  - Not required strongly recommended
  - Makes it easier to cover all H&S issues

### **Health & Safety Budget**



- ☐ Typically up to 15% of Program Operations
- □ Can be more than 15%, but that triggers further DOE review
- ☐ Covers:
  - ASHRAE 62.2-2013 Compliance
  - Lead Safe Weatherization
  - Lead Renovate Right
  - Mold Awareness & Moisture
  - Asbestos
  - Knob and Tube
  - Combustion & Carbon Monoxide
- ☐ Must be able to justify cost percentage





### **Health & Safety**





- ☐ Look at the whole house
- ☐ Complete <u>all</u> measures
  - Called for in Audit, AND
  - ALL H&S measures
  - Ability to blend funds or co-fund projects
  - Builds the database to prove actual H&S costs



### **Justification**



#### ☐ Historical Data

- Database
- Sorted by item and cost category
- Separate H&S measure from EE measure
  - Heating system replacement
  - Water heater replacement

#### ☐ Calculate Costs by Measure

- Total amount spent per measure
- Total number/percent of homes receiving that measure
- Average cost of measure by house
- Calculated cost per house of each H&S measure



# **Justification**



#### ☐ Example of coding used to indicate measure cost category

| SEQ  | WorkItem                                    | CAT    | CostCategory |  |
|------|---|--------|--------------|--|
| 9110 | Furnace replacement - gas/oil - 80%         | H00.00 | Н            |  |
| 9120 | Furnace replacement - gas/oil - 92%         | H00.00 | Н            |  |
| 9121 | Furnace Replacement - gas/oil - efficiency  | F20.00 | F            |  |
| 9130 | Furnace replacement - electric              | H00.00 | Н            |  |
| 9131 | Electric baseboard heater                   | H00.00 | Н            |  |
| 9132 | Furnace replacement - electric - efficiency | F00.00 | F            |  |
| 9140 | Boiler replacement                          | H00.00 | Н            |  |
| 9141 | Boiler replacement - efficiency             | F20.00 | F            |  |
| 9150 | Space heater replacement                    | H00.00 | Н            |  |
| 9160 | Heat pump replacement                       | H00.00 | Н            |  |
| 9161 | Heat pump replacement - efficiency          | F20.00 | F            |  |
| 9170 | Heating System Replacement - Utility Funds  | F20.00 | F            |  |



#### Average Health and Safety Costs - 2014

#### Total 1667 Completions

|                              | # Homes   |            |          | % of Homes      | Health &    |
|------------------------------|-----------|------------|----------|-----------------|-------------|
|                              | Receiving |            | Average  | Receiving       | Safety Cost |
| Work Item                    | Measure   | Total Cost | Cost     | Measure         | per Home    |
| Vapor/moisture barrier       | 733       | 208,486    | 284.43   | 43.971%         | 125.07      |
| Pressure balancing           | 247       | 17,418     | 70.52    | 14.817%         | 10.45       |
| Guttering/grading            | 37        | 13,706     | 370.43   | 2.220%          | 8.22        |
| Electrical repair            | 111       | 35,476     | 319.60   | 6.659%          | 21.28       |
| Dehumidifier                 | 9         | 2,098      | 233.11   | 0.540%          | 1.26        |
| Sumps                        | 20        | 12,671     | 633.55   | 1.200%          | 7.60        |
| Plumbingrepair               | 107       | 33,165     | 309.95   | 6.419%          | 19.90       |
| Minor asbestos removal       | 4         | 4,850      | 1,212.50 | 0.240%          | 2.91        |
| S-fuses K&T wiring           | 9         | 822        | 91.33    | 0.540%          | 0.49        |
| Water heater replacement     | 607       | 710,559    | 1,170.61 | 36.413%         | 426.25      |
| Water heater repair          | 130       | 15,462     | 118.94   | 7.798%          | 9.28        |
| Water heater venting         | 370       | 76,835     | 207.66   | 22.196%         | 46.09       |
| Mechanical ventilation       | 1383      | 1,014,317  | 733.42   | 82.963%         | 608.47      |
| Dryerventing                 | 1011      | 98,641     | 97.57    | 60.648%         | 59.17       |
| COalarm                      | 1468      | 82,831     | 56.42    | 88.062%         | 49.69       |
| Smoke alarm                  | 1037      | 52,059     | 50.20    | 62.208%         | 31.23       |
| LP alarm                     | 54        | 3,117      | 57.72    | 3.239%          | 1.87        |
| Appliance safety checks      | 249       | 31,739     | 127.47   | 14.937%         | 19.04       |
| Misc health & safety repairs | 190       | 44,231     | 232.79   | 11.398%         | 26.53       |
| Heating system replacement   | 417       | 1,042,106  | 2,499.06 | 25.015%         | 625.14      |
| Furnace repairs              | 393       | 194,159    | 494.04   | 23.575%         | 116.47      |
| Furnace venting              | 564       | 137,535    | 243.86   | 33.833%         | 82.50       |
| Heat source damming          | 772       | 37,739     | 48.88    | 46.311%         | 22.64       |
| Gas line repair              | 90        | 14,230     | 158.11   | 5.399%          | 8.54        |
| Lead safe work               | 857       | 237,305    | 276.90   | 51.410%         | 142.35      |
| Total Average H&S Per House  |           |            |          |                 | 2,472.44    |
|                              |           |            |          | \$2472/\$7105 = | 35%         |



### **Justification**



- ☐ H&S measures are not limited except:
  - Plumbing repair
  - Electrical repair
  - Guttering/grading
  - Dehumidifier
  - Sump pumps
  - Pest control
  - Minor asbestos removal
- ☐ Limited to \$1,500 cumulative cost per house

# **Questions?**

Visit www.nascsp.org for more resources and information.

