

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0009978, State: DE, Program Year: 2022)**

This worksheet should be completed as specified in Section III of the Weatherization Assistance Program Application Package.

**V.1 Eligibility**

**V.1.1 Approach to Determining Client Eligibility**

Provide a description of the definition of income used to determine eligibility

The State of Delaware defines eligibility for weatherization assistance as follows: A dwelling shall be eligible for weatherization assistance if it is occupied by a family whose income is at or below 200% of poverty level as determined and established by the Director of the Office of Management and Budget (OMB), and as specified in 10 CFR 440.22(a). The application eligibility expires 12 months from the certification date if work on the dwelling unit (energy audit) has not been initiated. Work beginning on the unit is the date of the home energy audit. DNREC recognizes clients as being "categorically eligible" for weatherization when they have qualified for Housing and Urban Development (HUD) means-tested programs like LIHEAP and TANF. Catholic Charities provides intake services for the LIHEAP throughout Delaware and places all LIHEAP client eligibility data into the state's ASSIST database. The method of verification of eligibility is placed into the WAP Online system. WAP intake staff access the ASSIST database and contact LIHEAP-eligible clients directly via U.S. mail or telephone. Native Americans are served in the general population and will be eligible to receive benefits equivalent to assistance provided to other low income persons within the State. Interested persons wishing to apply for the program can apply through the Subgrantee, ECA, or apply for LIHEAP through Catholic Charities. The Subgrantee has employed different processes to expedite the application process by receiving some of the documents via email and over-the-phone interviews. Catholic Charities, in all counties, offers weatherization to all LIHEAP clients and affirms their interest in the ASSIST database by marking "Yes" to a field for WAP interest. Verification of eligibility is monitored by the State through an online review of documentation in the State's WAP Online system. Periodic, random reviews occur using the Online system that assesses the client eligibility documents prior to any weatherization work being initiated. This is a link to the Delaware WAP Manual: <http://de.gov/wap> and click on "Info for Professionals"

Describe what household eligibility basis will be used in the Program

As per 10 CFR 440.22 Eligible dwelling units, the dwelling unit is eligible for assistance if it is occupied by a family unit: that is eligible for assistance under HUD means-tested eligibility criteria and under WAP criteria showing that such basis is at or below the 200% of the poverty level determined in accordance with criteria established by the Director of the Office of Management and Budget.

Describe the process for ensuring qualified aliens are eligible for weatherization benefits

Delaware's eligibility criteria are in compliance with Federal requirements. Services are provided only to U.S. citizens or qualified aliens, as defined in section 431 of Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA). Qualified aliens are eligible to receive assistance and services under the WAP program so long as they meet all other WAP program requirements.

**V.1.2 Approach to Determining Building Eligibility**

Procedures to determine that units weatherized have eligibility documentation

DNREC requires that the Subgrantee maintains client files in our WAP OnLine database and tracking system that document client and building eligibility. Client files are available electronically to DNREC for program evaluation and monitoring purposes. The Subgrantee's auditors review the client files and the buildings upon the initial home energy audit to ensure that the structures comply with the WAP federal guidelines. State staff will monitor files and check application dates to ensure that clients received services during the period of eligibility within one year of their application; if work

has not begun, starting with the energy audit.

- Owner documentation website [de.gov/wap](http://de.gov/wap) under Eligibility Guidelines
- Income documentation for renters website [de.gov/wap](http://de.gov/wap) under Required Documentation
- Landlord Agreement is provided as an attachment to the SF424

According to the Consolidation Appropriations Act 2021 amended (42 USC 6865 (c) (2)), allows for weatherization services for previously weatherized homes after a period of 15 years from the date that previous weatherization services were completed. All reweatherized homes are denoted in the WAP Online system along with the completion date of the previous WAP services (final inspection date); ensuring that at least 15 years has passed since the date of previous

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0009978, State: DE, Program Year: 2022)**

services. DNREC maintains a database of previously weatherized units and has included this list into the search mechanism of the WAP Online system. The Subgrantee is responsible for ensuring that all means of checking for already weatherized homes is conducted before proceeding with WAP services.

Describe Reweatherization compliance

DNREC maintains a database of previously weatherized units and has made it available to the Subgrantee, this list is referred to as the "Legacy List". The combination of the Legacy List and the WAP Online database of clients is the comprehensive list of all units weatherized in Delaware. The Subgrantee is responsible for cross-checking all eligible households with the database of weatherized homes in Delaware to ensure that re-weatherization of a home does not occur until at least 15 years has transpired since the home's final inspection date.

Describe what structures are eligible for weatherization

Single family residential (stick built and mobile homes) are eligible, as are duplexes or other structures with four or less units per building structure. Included in this definition are rowhomes and townhouses and other similar structures. Delaware will be cautious with respect to nontraditional housing stock (shelters, apartments over businesses, nonstationary dwellings, etc.), making sure that all units weatherized meet eligibility requirements. Where any question on eligibility arises, we will consult with our DOE Project Officer. Multifamily structures are eligible under the Delaware program for WAP services where 66% or more of the multifamily unit residents are eligible for services (50% for duplex's and units with four or fewer units) as per 65 Fed. Reg. 77210, Dec. 8, 2000. Delaware may also weatherize multifamily buildings preapproved by HUD and DOE as eligible projects under HUD DOE MOU executed in 2010. In such circumstances where a dwelling unit is located in a disaster area, the Grantee will refer to the procedures contained in WPN 12-7. For Historic Structures, DNREC has an executed agreement with the Delaware State Historic Preservation Office dated December 2020 which is available on the Department of Energy's website: [https://energy.gov/sites/prod/files/2014/01/f7/state\\_historic\\_preservation\\_programmatic\\_agreement\\_de.pdf](https://energy.gov/sites/prod/files/2014/01/f7/state_historic_preservation_programmatic_agreement_de.pdf)

Describe how Rental Units/Multifamily Buildings will be addressed

Rental units are eligible providing that the Subgrantee has obtained written authorization from landlords/building owners and said landlords agree to the stipulation regarding rent increases in the Landlord Agreement form. The Delaware WAP Manual contains the policy for renters and the Landlord Agreement form as an appendix to the manual (which is in adherence to 440.22 (b)(3) and 440.22 (c)(e)). The Landlord Agreement is provided as an attachment to this Plan. The policy for renters is located in the Delaware WAP Manual, Section 2.2.9 at [de.gov/wap](http://de.gov/wap) under Info for Professionals. In situations where Delaware weatherizes rental units, the Subgrantee is required to ensure that the benefits of the weatherization assistance accrue primarily to the low income tenants. No undue enhancement to the property should occur beyond the scope of energy conservation. Owners may not increase rent for a period of two years after completion of the unit's weatherization. Unless increases are demonstrably related to matters other than the weatherization work performed, the owner will have to repay the full cost of weatherization if rent is increased. Any dispute of the circumstances for a rent increase will be reviewed by the Subgrantee. The determination may also be reviewed by DNREC, if requested by the Subgrantee, landlord or tenant. Landlords are not required to contribute toward the cost of weatherization. However, they may do so voluntarily. Work on the unit agreed to by the landlord does not affect any aspect of the unit cost or the program. Landlord financial contributions made to the Subgrantee for weatherization work performed are to be considered by the Subgrantee to be program income and as such, used for weatherization work costs. Beginning in Program Year 2022, Delaware will be undertaking weatherizing multifamily dwellings (as allowed under WPN 11-4) depending on the DOE funding levels for 2022. If Delaware proceeds with this new extension to WAP services, WAP will use a state competitive process to attract a new Subgrantee just to weatherize multifamily units. WAP will be working closely with the DOE Project Officer and the new multifamily Subgrantee to ensure that all DOE approvals and training needs are met. Priority will be given to identifying and providing weatherization assistance to: elderly persons, persons with disabilities, families with children, high residential energy users, and households with high energy burden. Multifamily buildings, because of their size and character, may offer an opportunity to meet many of these priorities. When addressing "significant energy improvement" in multifamily dwellings, WAP will contact the DOE Project Officer and refer to the WPN 16-5 Multifamily Weatherization and WPN 16-6 Weatherization of Rental Units.

Describe the deferral Process

The deferral process is defined in our Deferral Policy which is provided as Section (5) in the Health and Safety Plan, the Health & Safety Plan is attached to this application with the SF424. Since the incorporation of the Pre-Weatherization Program (Pre-WAP) in Delaware in 2016, the Subgrantee tracks all reasons for deferrals in a spreadsheet. In addition the agency, Energize Delaware, who oversees Pre-WAP tracks all deferrals and return rates back into WAP.

**Delaware will use utilizing the new Weatherization Readiness funds toward the same types of repairs to the home to ensure that the home is prepared for receiving weatherization measures. Delaware will adjust to how these funds are used as guidance emerges from DOE.**

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0009978, State: DE, Program Year: 2022)**

**V.1.3 Definition of Children**

Definition of children (below age): **18**

**V.1.4 Approach to Tribal Organizations**

Recommend tribal organization(s) be treated as local applicant?

If YES, Recommendation. If NO, Statement that assistance to low-income tribe members and other low-income persons is equal.

In accordance with 440.16(f) the State requires that low-income members of an Indian tribe receive benefits equivalent to the assistance provided to other low-income persons within the state unless the applicant has made the recommendation provided in 10 CFR 440.12 (b)(5). In such case, the applicant shall provide a recommendation that a tribal organization be treated as a local applicant eligible to submit an application pursuant to 10 CFR 440.13(b).

**V.2 Selection of Areas to Be Served**

The entire State of Delaware is served by our Weatherization Assistance Program as described in this application. As Delaware enters into the program year 2022, DNREC has a sole Subgrantee, the Energy Coordinating Agency, servicing the entire state. DNREC ensures equal distribution of all WAP funds across all of Delaware's three counties (New Castle, Kent and Sussex) through contract provisions to ensure that we provide 50% of services to New Castle County (including the City of Wilmington) and 50% of services to Kent and Sussex counties, which is proportional to the distribution of the Delaware's population across the three counties.

**V.3 Priorities**

The State of Delaware's waiting list is comprised of eligible clients who have applied for the WAP program as described previously and is prioritized for families to receive weatherization services and to maximize energy saved. Prioritized categories include one or more of the following: elderly persons, disabled persons, households with children, households with high energy use and/or households with high energy burden as required by 10 CFR 440.16(b). DNREC coordinates a single database of eligible clients and a single, transparent, and objective process is used for prioritizing the client priority list. This process uses an internal algorithm that calculates high energy burden and high energy use. High energy burden is calculated by using the household's annual primary fuel energy usage and multiplies it by the fuel cost (\$), then that value is divided by the total annual household income. The percentage is then compared to the value in the algorithm. The High Energy Use is defined by the household's annual primary fuel energy usage compared to a value that represents high usage for one year. If the usage is larger than the compared value, the home is deemed High Energy Use. The WAP OnLine database system (Hancock Software) algorithm is attached in the documents section.

DNREC closely monitors the Subgrantee for adherence to the client priority list, which is integrated into our WAP OnLine database system. Additionally, DNREC monitors for compliance of intake procedures and client eligibility. The categories of high energy burden and high energy use are being tracked in the WAP Online database and these data will be provided in the Quarterly Performance Reports. Owner occupied and renter occupied dwelling units have equal priority. Reapplication into the WAP is required if the dwelling unit has not begun services within 12 months of the certification date. If a unit is otherwise eligible for WAP services, and is also receiving home services from other social service agencies, DNREC may elect to prioritize services to those units where interagency coordination may be advantageous in leveraging funding sources and where selected units meet Delaware's and DOE's priorities for providing services to the disabled, elderly, households with children and households with high energy use and burden. These leveraged opportunities have the potential to provide more comprehensive solutions to owners.

**V.4 Climatic Conditions**

Delaware's climatic data is based on a formula calculation found in the Statistical Abstract of the United States, published by the U.S. Bureau of the Census (Wilmington, DE 02/2018). The total number of annual heating and cooling degree-days in the State of Delaware is 4,888 and 1,125 respectively, which indicates relatively mild climatic conditions. There are only slight variations in the number of heating and cooling degree-days among the three counties of the State.

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0009978, State: DE, Program Year: 2022)**

**V.5 Type of Weatherization Work to Be Done**

**V.5.1 Technical Guides and Materials**

DNREC ensures homes weatherized in Delaware receive the highest quality of work to maximize energy savings and long term efficiency. The Delaware Weatherization Program accomplishes this by maintaining a well trained staff to monitor work completed, as well as providing trainings for all weatherization staff, contractors, and their employees. To ensure that procedures are being properly applied, the Subgrantee receives administrative and technical training, alongwith field visits and enhanced training at the field site. State staff, Subgrantee staff, and contractors are trained to strictly adhere to the approved energy modeling and the Delaware Standard Work Specifications (SWS). At the beginning of the 2019 program year on April 1, the newly approved SWS also became the Delaware Field Guide. The SWS is provided digitally via a Dropbox account and is also provided to the Subgrantee and their contractor in a hard copy form. Delaware is currently in the process of requesting approval from DOE for the new SWS with a deadline for submission of 01/15/2022. All technical requirements and specifications are included in our SWS, and every worker in the program has direct access to the SWS at every active weatherization site via the Crew Leader copy on site and digital access. Reference to the SWS is included in the contract between DNREC and the Subgrantee and the contract specifically calls for the Subgrantee and all contractors to follow the provisions contained in the SWS. Upon signing the contract between the Subgrantee and the home performance contractor at the beginning of each program year, the contractor is bound to adhere to the Delaware Standard Work Specifications, the Delaware Weatherization Policy Manual (WAP Manual), and all other applicable state and federal weatherization Program Updates and directives. The contract clearly states the requirement to adhere to the SWS for work quality as outlined in WPN 15-4 and WPN 22-4, Section 2, expresses the adherence to the approved energy audit procedures and 10 CFR 440 Appendix A. Homes being weatherized, first receive testing of combustion appliances to ensure family health and safety. Work is then assigned to the unit based on the specific recommendations from an initial energy audit performed on the unit. The Subgrantee selects contractors to complete the weatherization work based on the energy audit recommendations and Delaware's approved Hancock software modeling. The types of work to be done include general air sealing (blower door directed), insulation (attics, crawlspaces/basements/walls/ducts), DHW insulations and some mechanical equipment efficiency or health and safety work. All work is being performed in accordance to the DOE approved energy audit procedures and 10 CFR 440 Appendix A. In addition, all work done is in compliance with the Delaware WAP Manual, available to the general public, clients, the Subgrantee, contractors and others online at: [www.de.gov/wap](http://www.de.gov/wap) DNREC ensures adherence to federal and state requirements through our contracts with the Subgrantee which require that "...VENDOR shall comply with 42 U.S.C. § 6861 et seq.; and 10 CFR Part 440 and 2 CFR 200, the approved U.S. Department of Energy (DOE) Weatherization Assistance Program (WAP) State Plan for the State of Delaware, the Delaware Weatherization Policy Manual (WAP Manual), the Delaware Standard Work Specifications, and all other applicable state weatherization Program Updates or directives." In turn, the Subgrantee's contract with their home performance contractors require that they adhere to all contractual language held between DNREC and the Subgrantee. Besides the contractual agreement, regular monitoring of site activities by the Subgrantee's auditors and the State Monitor assures that adherence is occurring daily. The Subgrantee provides the required documentation to each subcontractor at the time of entry into the WAP and at the beginning of each program year upon signing new contracts. Beginning in PY16, contractors were required to sign acknowledgements that they received the Delaware SWS and the WAP Manual. The State Monitor visits the in-progress sites on a regular basis and reviews all of the WAP subcontractors' work. At the time of an inprogress review, the subcontractor must verify that the SWS is on site and available for use. The State Monitor also accepts the digital access to the required document, and the subcontractor must demonstrate gaining access, if that is the version desired. As per the guidance in WPN 20-1, Section 2.8, the WAP Manual lists the exempt activities and requires the Environmental Questionnaire (EQ1) to be submitted for review.

Field guide types approval dates

Single-Family:

Manufactured Housing:

Multi-Family:

**V.5.2 Energy Audit Procedures**

Audit Procedures and Dates Most Recently Approved by DOE

Audit Procedure: Single-Family

Audit Name: HEAT

Approval Date:

Audit Procedure: Manufactured Housing

Audit Name: HEAT

Approval Date:

Audit Procedure: Multi-Family

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0009978, State: DE, Program Year: 2022)**

Audit Name:

Approval Date:

Comments

Delaware received a conditional approval from DOE to use HEAT for single family and manufactured homes beginning 02/04/19. This conditional approval is based on providing a list of items to DOE which were all delivered and approved by October 29, 2020. Delaware had provided three trainings to their auditors for energy modeling competency (February and March 2019 by an inhouse trainer and October 2019 by Community Housing Partners (CHP)). At the conclusion of the October training, the auditors were tested for competency with the approved energy modeling software, Hancock.

DOE was tasked with reviewing the home energy audits in Hancock/HEAT to ensure that the energy modeling is being applied accurately. DOE finalized their review of the Delaware audits and provided approval. Delaware is in compliance with having an approved SWS/Field Guide as of 01/15/19 with a re-approval process underway in 2022. For multifamily situations, Delaware will treat such situations on a casebycase until an approved process is established through DOE in 2022. Delaware is anxious to receive the proposed DOE Priority List for Multifamily in the coming months and anticipates using this proposed tool. In pursuing multifamily weatherization. The 2022 Training Plan contains training esignated for the State Program Monitor to ensure that the state has oversight of the operations of a new multifamily Subgrantee.

#### V.5.3 Final Inspection

DNREC requires Quality Control Inspectors (QCI) working for, or contracted by, the WAP to possess the knowledge, skills and abilities in the National Renewable Energy Laboratory (NREL) Job Task Analysis for Quality Control Inspectors. Every DOE WAP unit reported as a “completed unit” has received a final inspection ensuring that all work meets the minimum specifications outlined in the Delaware SWS. The WAP Manual requires that all final inspections using federal funds must be conducted by a QCI-certified person. In addition, every client file will contain verification that certifies that the unit had a final inspection and that all work met the required standards signed by a certified QCI (providing their name, certification number, date and signature). If a unit has received both a final inspection and has also been monitored by DNREC, there will be evidence in the file to that effect, in addition to the QCI report. The State Program Monitor will affix each formal monitoring with his name, certification number, date and signature. Currently the sole Subgrantee, the Energy Coordinating Agency, uses mostly contractual QCI services. ECA has one QCI on staff as a Field Supervisor who oversees all work in the field and performs final inspections as needed. The Subgrantee's QCI will allow final inspections to act as possible training opportunities for uncertified persons in the process of acquiring the QCI credential. The final inspection ensures that all health and safety issues were addressed in a manner which protects the client. Final Inspections include: post blower door readings at CFM 50 pascals; health and safety checks including Worst Case CAZ and compliance with ASHRAE 62.2; assessment of the intial energy modeling of the home; checks of accuracy of measures charged against measures installed; and evaluations of the appropriateness of all work completed, including air sealing, insulation, client education, duct insulation, pressure differentials, and costs. A dwelling unit may not be reported as completed until a final inspection has been performed and it has been certified that the work is high quality, all materials have been properly installed, and approved procedures have been followed. Standardized forms are used to document the results of the final inspection, and are recorded and maintained in the client file in the WAP OnLine database. Only completed dwelling units with successful final inspections are reimbursed by the State using DOE funds. ECA utilizes a model that contracts for all home energy audits. The contractual auditors perform the audit, creates the work order, and advises the WAP PM on other home repair work needed prior to weatherization services (Pre-WAP work). The contractual auditors are not involved in any of the actual work on the home. DNREC will perform quality assurance reviews of at least 10 percent of all completed DOE units. Given the high experience level of our contractors and our small technical staff, we believe a 10 percent target to be justifiable. We will however be measuring any failure rates or problem areas and may increase the quality assurance target if field work is unsatisfactory. In the event that a QCI is found to have inadequate inspection practices and/or lacks adherence to the SWS and WAP policies and procedures, DNREC will notify ECA of the unacceptable work. ECA must enforce the contractual requirements and determine if the QCI should remain under contract. ECA may also invoke the procedures in the WAP Manual for QCI compliance. The policies and procedures that govern QCI inspection and enforcement are located at [de.gov/wap](http://de.gov/wap) under Info for Professionals - WAP Manual Sections 5.2.1, 5.2.6, and 5.2.8.4.3. A copy of the final QCI inspection form, provided as an attachment to this Plan, is used in concert with the Work Order that lists all of the measures installed. The QCI verifies on the Hancock Final Acceptance Report that all measures havebeen installed and notes if there are any missed opportunities.

#### V.6 Weatherization Analysis of Effectiveness

For three years (2019, 2020, and 2021), Ecometric delivered a report to the DNREC Energy Section that evaluated and verified the energy savings reported by WAP and customer satisfaction. Ecometric provided a revision to the energy savings methodology being used prior to PY19. The revised Ecometric methodology provides more accurate results for reporting energy savings due to WAP services. This revised methodology has been used to calculate

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0009978, State: DE, Program Year: 2022)**

anticipated energy savings in the Annual File. In addition, the 2020 report quantified the non energy benefits gained by WAP clients due to the WAP services received as being \$264 per household per year and a benefit cost ratio of 1.22 showing that the program is cost effective. In addition, continuous Program improvement is being achieved through the Annual Administrative Review (AAR), Annual Technical Review (ATR), regular meetings with the Subgrantee, formal field monitorings, training, formal corrective actions, and auditor quarterly meetings. Management mechanisms being used are Corrective Action Plans for findings during the AAR and ATR, semiannual meetings with the Program Managers to discuss production goals, auditor shortfalls, staffing challenges, contractor retention, and contractor procurement. Another mechanism is regular meetings with the Subgrantee; DNREC meets monthly with ECA. The findings from the final inspections are included in an ongoing evaluation of quality of the subcontractors that feed directly into the procurement and selection process. Contractors found to have substandard quality work do not continue in the Program, the goal being to create specialized experts in weatherization. The next level of oversight comes from the quality assurance inspections performed by the DNREC staff. The quality assurance inspections assess all the elements of the final inspectors, as well as detailed inspections of the energy audit itself and adherence to the SWS. The quality assurance inspections also include detailed review of the full documentation of the client file, procedures followed by the Subgrantee, procurement, documentation, competency of energy modeling, and the invoicing. DNREC staff performs quality assurance inspections on 10% of completed units. One on one interactions with the Subgrantee's home performance contractors and contractual auditors prove to be effective in reviewing quality workmanship on a daily basis. Training needs are quickly identified and addressed by pertinent training. Currently the Subgrantee is contracting for third-party home energy auditors and QCIs. The only on-staff QCIs are the Field Supervisor at ECA and the State Program Monitor. The quality of final inspections conducted by QCIs is an on going process that is reviewed by the State Monitor. Any lack of quality is addressed by informing ECA and ECA must handle corrective action through their contractual process with their QCIs. The State Monitor performs a biannual market analyses that tracks weatherization prices in the region. He also compares the Delaware Price List to other states in the region to ensure that Delaware pricing is fair and reasonable. The State Monitor stays abreast of new products and includes them on the revised Delaware Price List which is reviewed twice a year. The most recent Price List was provided to ECA in early December 2021.

## V.7 Health and Safety

The Health and Safety (H&S) Plan is attached. Find on pages 24-25 the Health and Safety survey that is filled out by the client at intake. A second part of the survey is later filled out by the home energy auditor as part of the initial home energy audit of the home.

On page 2 of the H&S Plan, there is an explanation of the maximum percent for the H&S costs of 14.9% per unit when figured across the total number of DOE units weatherized. In addition, Delaware removes H&S from calculating the average cost per unit because we elect to have a separate H&S cost category. When the new H&S guidelines were provided to the WAP network, training for the auditors was provided and all the WPN 22-7 information was sent to the Subgrantee. To ensure the continuation of H&S training, each Subgrantee provides a new contractor with an orientation that includes the Delaware H&S training. Every two years, DNREC holds an All-Hands mandatory H&S training for all persons in the WAP; September 8, 2021 was the last one held which ensured that all changes to H&S in WPN 22-7 were covered.

Delaware has been implementing the radon-safe practice of ensuring that sump pump pits have no bare earth exposed. The measure used is a sump pump pit cover that encapsulates all bare earth areas. The revised H&S Plan (attached as a document) has been updated to reflect the recent requirements in WPN 22-7. The Radon Release Form used for WAP has been attached in the Documents Section.

### **Delaware will be allowing the use of DOE funds for air sealing measures that do not meet the SIR of 1.0.**

DNREC tracks all training of the Subgrantee's staff and their weatherization contractors. DNREC and auditors ensure that the installing crews have an RRP-certified individual on-site. Contractors are required to have access to their copy of Firm Status and their RRP certification. The Subgrantee must obtain the Firm Status and copies of all valid RRP certifications for their Crew Leaders at the beginning of each program year for signing new contracts. In addition, these certifications are reviewed for validity during the annual administrative review of the Subgrantee.

Delaware does not repair/replace air conditioning (AC) systems. The only instance when an AC unit is part of a repair/replace is when the AC unit is intrinsic to the primary heating system (heat pump). If AC of the home is necessary for health & safety purposes, the client is referred to another state run program to assist with specific AC.

The Training Plan for this grant cycle will include the ASHRAE 62.2 refresher training to ensure that there is consistency in how auditors are applying the 2016 standard. The deferral checklist is provided at page 23 in the H&S Pln (attached to the SF-424). When a home is deferred at the time of the audit, the client is notified by mail, the reason(s) for deferral is cited, and the right to appeal information is provided. The Energy Coordinating Agency implements a program that is funded through the Delaware Sustainable Energy Utility that provides home repairs for the sole purpose of having deferred WAP homes placed back into the Weatherization Program; called the Pre-Weatherization Program (Pre-WAP). In implementing this program, a home that is deferred through WAP may be returned to the WAP to proceed with weatherization sometimes homes are deferred because they are out of scope for even this Pre-WAP program - these units will have Small Measures installed to reduce their baseload energy usage and be counted as a completed unit. These clients will not be funded using federal funds so that they may return to the WAP once their homes has been fixed. If these homes come back into the WAP . The synergy of the Pre-WAP and WAP programs is proving to be tremendously successful in weatherizing more homes that may have remained in a deferral status indefinitely. A rate of 85% of the homes deferred to the Pre-WAP come back into WAP to complete services.

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0009978, State: DE, Program Year: 2022)**

In DOE's guidance, each state is required to define what major and minor repairs constitute. In Delaware, the WAP follows the use of incidental repairs, those repairs employed to support successful installation of ECMs, with a maximum cost of \$400. All other minor and major repairs necessary that fall outside of the definition of an IRM are deferred to a sister program called Pre-WAP and that program provides the necessary repairs within their funding limits. Delaware WAP can also defer homes to other programs for heating system repair/replacements and major home repairs like a complete roof replacement. If the home requires immediate assistance (like a heating system in the dead of winter or major electrical repairs), other WAP state funds are used for these occurrences.

## **V.8 Program Management**

### **V.8.1 Overview and Organization**

The Delaware Weatherization Assistance Program is administered by the Delaware Department of Natural Resources and Environmental Control's (DNREC) Division of Climate, Coastal and Energy. The Division includes other key energy and climate policy staff for DNREC. The role of the Subgrantee has been fulfilled for 4 years in New Castle County by the Energy Coordinating Agency (ECA), and fulfilled in Kent and Sussex Counties in late PY2020. The RFP process will be initiated in September 2022 and new contracts awarded before the beginning of PY2023 on April 1, 2023.

The Division of Climate, Coastal and Energy in DNREC also administers the State Energy Program (SEP) grant under DOE. The Division is the lead state agency in development of energy policy and plans related to renewable energy systems, energy efficiency and utility policies. We work in concert with the State Public Service Commission, Energize Delaware and other state agencies having an interest in energy issues, including the Department of Transportation, the Division of Historical and Cultural Affairs, the Delaware State Housing Authority, the Division of Air Quality in DNREC and many affected electric and gas utilities across the State. DNREC also works closely with the Department of Health and Social Services, the lead agency for the LIHEAP program in Delaware.

In addition, Delaware is expanding their Green Energy Program (installing renewable energy systems in Delaware homes) to include low-to-moderate income solar program. This new program will provide free PV solar installations on eligible low-income homes and incentivized installations on moderate income homes (using the 80% median area income) with the state paying 70% of the solar system and installation.

The WAP has undertaken a relationship with the platform called Unite Delaware. This platform acts as a direct referral software for acquiring referrals from other programs in Delaware and placing referrals for clients to other services. This platform has proven to be effective in coordinating other agencies and services for WAP clients as part of the Energize Delaware Pre-Weatherization Program and partner agencies that provide free home repairs.

DNREC has created a regular meeting (every 6 weeks) of the Delaware energy efficiency and home repair programs. These meetings discuss how the coordination between organizations can improve and increase the quality of services for low-income households.

### **V.8.2 Administrative Expenditure Limits**

Delaware has traditionally received relatively small federal WAP appropriations, so the increase from 10% to 15% has greatly improved the funding to cover the overhead expenditures at the Subgrantee level. In this grant application Delaware allocates the allowable 15% for administrative expenses with a split of 50/50. The total amount for administrative expenses for this grant cycle is split almost equally between the two Subgrantee territories because the 2022 State Plan states that 50% of the funds are to be placed in the lower two counties and the other 50% is to be used in New Castle County. The two contracts for the Subgrantee are aligned with the county territories as prescribed in the State Plan.

### **V.8.3 Monitoring Activities**

The monitoring approach is to assist the Subgrantee in providing high quality energy conservation weatherization services to low income individuals and to comply with all Program Rules and Guidance. In addition, monitoring ensures that high quality comprehensive services are consistently applied throughout the state. Monitoring will ensure adherence to new program policies and procedures at the State level and effective implementation of the Program at the local level.

The State has one statewide technical monitor referred to as the State Program Monitor. The Grantee also pays for staff time to monitor the Subgrantee on the

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0009978, State: DE, Program Year: 2022)**

administrative and financial portions as well. Our State Program Monitor position is required to be QCI and BPI certified and have a minimum of 5 years of experience in weatherization and home energy performance. The WAP State Manager and a Planner II are the other staff at the Grantee level which provide monitoring at the administrative and financial levels. They participate in the technical monitoring portion of the Annual Administrative/Technical Review yet yield to the technical expertise of the State Program Monitor. During the technical monitoring of the Subgrantee, only the State Program Monitor provides the technical review of homes and he has no other participation in the initial home energy audit or final inspection. The WAP State Manager received the BPI Building Analyst training and has significant experience in building science, which aids in program performance overall.

The goal of the Subgrantee monitoring approach is for constant communication, coordination, assistance, and constructive evaluation between DNREC and the Subgrantee; it is monitored regularly. Onsite monitoring of the Subgrantee includes the following: client file review; most recent organization audit; procurement procedures review; fiscal review; review of Liability & Pollution Occurrence Insurance (POI); review of compliance with all DOE and State regulations and procedures; and production management review. The Subgrantee must provide a copy of their most recent financial audit as part of the annual monitoring. DNREC staff review the client files for completeness, accuracy, and appropriateness of forms and signatures. Monitoring staff also review timelines of vendor payments as well as evaluation of appropriateness of cost for services. Delaware utilizes a monitoring checklist that is based upon Program Guidance 16-4 which includes all provisions in the Subgrantee checklist and applicable programmatic and financial checklists found on EERE. If the Subgrantee has deficiencies, a Corrective Action Plan will be created with deadlines for the deficiencies to be corrected. If the Subgrantee fails to correct the deficiencies as outlined in the Plan, the language in the State Professional Services contract and the WAP Manual provide the vehicle through which to terminate the Subgrantee from the Program. Both of the 2021 Subgrantees were formally monitored in PY21.

In compliance with the Quality Work Plan and SWS goals, DNREC will conduct random quality assurance evaluations of 10% of all completed dwelling units (6 units). We use the 10% minimum because we have opted to allow final QCI inspectors to inspect units on which they conducted the initial audit. The State Monitor is required to conduct 6 formal monitorings in PY 2022; these will be scheduled at approximately one monitoring every other month. The unit being monitored has not received final payment and will not until all issues are completed as per the monitoring report. The travel necessary for the State Monitor is conducted within the standard work day, Delaware is quite small and special travel arrangements and budgets are not necessary. DNREC conducts multiple site visits during weatherization activities (referred to as informal monitorings) to ensure that weatherization services are provided in a professional and workmanlike manner in compliance with all standards, regulations and policies set forth by DNREC in the Delaware SWS and DOE rules and guidance. The State Monitor ensures that all work is being conducted by fully trained contractors and installers (the state is small; the Monitor knows all of the contractors and their crews by name). The field inspection includes: base load measures installed, air sealing, insulation, mechanical ventilation review, CAZ testing etc. The monitor must verify that the work being performed is appropriate and effective, and in compliance with all DOE and State regulations. Monitoring staff also gather feedback from subcontractors and program participants to better understand strengths, weaknesses and opportunities for improvement, training and technical assistance. In the event a unit has a weatherization issue after being deemed complete, the Subgrantee auditor is responsible to conduct an investigation of the issue. If the issue is not resolved, the State Monitor will investigate the issue and make a determination of how to resolve.

The QCI final inspections will verify that the SWS has been followed for each measure installed in the home. QCI certifications will be monitored by the Grantee and records kept on when each final inspector attains his QCI certification and its expiration (DNREC receives electronic notifications from an automated database when credentials are ready to expire). When the State Monitor discovers a lapse in a QCI's credentials or when inspectors are not following established SWS guidelines, such lapses will be brought to the Subgrantee's attention and an additional QCI inspector will be required to redo the inspection. Further, QCI inspectors found not following SWS or other programmatic guidelines in a consistent fashion are subject to programmatic consequences (WAP Manual, Section 5.4.1 and 5.4.2). Similarly, the State Monitor, who is a contractual entity, if found to be disregarding standard work specifications or other standards under the program, or if he fails to maintain the proper credentials, will be subject to disciplinary action and/or dismissal provisions; the same as other QCI professionals.

Programmatic monitoring occurs at least annually. DNREC uses such monitoring to determine whether a Subgrantee is deficient in its procedures. If a Subgrantee is found deficient they will be required to remedy all deficiencies and will be offered training specific to the agency's needs as per WPN 16-4. A deficient Subgrantee will also be subject to increased frequency and monitoring by the State if deficiencies are not addressed in a timely fashion.

Within thirty (30) days of each formal field monitoring, the State prepares a written report on its findings and sends it to the Subgrantee for corrective action. The Subgrantee has thirty (30) days to respond in writing with a Corrective Action Plan in response to each state monitoring report. Deficiencies found in the process of the formal monitorings and reporting will give reason for Subgrantee suspension or termination through the Delaware WAP Manual, Section 4.2.3 Failure to Meet Program Goals.

#### **V.8.4 Training and Technical Assistance Approach and Activities**

The State of Delaware's Training and Technical Assistance (T&TA) is intended to increase the efficiency and effectiveness of the weatherization program at all levels. T&TA activities are also designed to help maximize energy savings; minimize production costs; improve the quality of workmanship; and reduce the potential for waste, fraud and mismanagement. All stakeholders in the Program including the state, the Subgrantee, and the weatherization contractors/subcontractors receive T&TA. Each stakeholder engages in training and/or receives technical assistance to replicate best practices and adhere to DOE standards of excellence throughout the entire project. Agencies receive T&TA consultations from the DNREC staff as appropriate. These visits assist local agency staff with issues relating to program operations, fiscal management, procurement procedures, and the technical aspects of the program. The State Monitor quickly addresses deficiencies in the field with training.

**U.S. Department of Energy**  
**WEATHERIZATION ASSISTANCE PROGRAM (WAP)**  
**STATE PLAN/MASTER FILE WORKSHEET**

**(Grant Number: EE0009978, State: DE, Program Year: 2022)**

The Subgrantee holds retention agreements with their subcontractors to ensure that the subcontractors remain in the Program for a period of at least 6 months after receiving the training. If a subcontractor leaves the Program, the Subgrantee must reimburse the Program for the training received.

**Assessment of Training Needs**

The State assesses the training needs of the Subgrantees and contractors through quality assurance monitoring in the field, observations of performance, discussions, regularly scheduled management meetings, and monitoring visits. Through close monitoring of contractors' work, the Subgrantee is able to further assess areas for improvement and provide robust feedback to the State for additional training needs of their contractors.

**Maintaining Workforce Credentials**

DNREC and the Subgrantee require all new weatherization contractors coming into the WAP to provide all credentials for their crews as part of submitting their business documents. As a minimum, the Crew Leader must have OSHA 30, Lead-Safe Weatherization, Renovate/Repair/Paint certification and a BPA Energy Auditor certification. Installing crew members must have OSHA 10 and Leaf-Safe Weatherization. Before performing any WAP work on homes, the installing crew must prove competency on installing weatherization measures through credentials and/or close oversight by the Field Supervisor representing the Subgrantee. In addition, at the beginning of each program year the Subgrantee requires all credentials (the company and all individuals) to be submitted as part of their contracting process. All credentials are scanned and maintained in a training database held at DNREC and made available to administrative Subgrantee staff. The database provides monthly notifications of any expiring credentials contained within. DNREC informs the Subgrantee of expiring credentials and then individuals are notified by the Subgrantee to pursue refresher courses and/or recertifications. Once the renewed credentials are obtained, the new certificates are scanned into the DNREC system.

**Training Plan**

The training plan for 2022 shows the implementation of comprehensive and specific levels of training. All WAP workers will be provided with JTA training provided by an IREC-accredited training facility for comprehensive trainings, as required by DOE. Delaware's program currently employs three staff at the Grantee and six staff at the Subgrantee level.

**TRAINING AND TECHNICAL ASSISTANCE PLANNING**

Total 5 Year Allocation: \$1,817,076

Comprehensive Training: \$465,775

Specific Training: \$688,310

Client Education: \$12,850

Grantee Monitoring Including In-House Tech. Training Consultant - MH: \$345,000

Program Evaluation/IT - Including In-House Program Evaluation Consultant - MH: \$115,000

Other - Apprentice Sign-on bonus; Trainee Retention bonus; YCC/Youth recruitment; Intern: \$190,141

T&TA Budget Total: \$1,817,076

**V.9 Energy Crisis and Disaster Plan**

Delaware does not include any disaster or energy crisis plans in our WAP application. If the circumstance arises in Delaware, WAP will follow the appropriate procedures defined in WPN 12-7.