SWS Variance Request

According to Section 1 of WPN 14-4: Quality Work Plan Requirement:

> *All tasks performed on client homes must meet the specifications, objectives and desired outcomes outlined in the Standard Work Specifications for Home Energy Upgrades (SWS) where applicable.*

However, as Grantees update and revise their field standards to align with the SWS, they may discover certain specifications that cannot be implemented precisely as described in the relevant SWS. In such cases, Grantees may request a variance from the relevant SWS.

To be granted a variance, the attached request form must be completed in full. Complete one form for each variance requested, which may on occasion include more than one SWS. For example, requested variances from SWS requirements related to installing insulation where knob and tube wiring is present would apply to 2.0601.1 Knob and Tube Wiring (Health and Safety section), and 4.1001.2 Knob and Tube Wiring (Insulation section). Both relevant SWS would be included on a single form.

- Where SWS requirements conflict with state or local codes, include specific code language, or active links to such.
- Where requests are of a technical nature, e.g., altering CO action levels, include supporting technical references.

Variance requests will be assessed:

- Individually, not as a package, so each request must include the necessary signature(s).
- Based on the ability of the Grantee to ensure that the desired outcome and objectives of the relevant SWS will be met.

Forward completed variance requests to your DOE WAP Project Officer (P.O.)

Do not include variance requests in State Application and State Plan materials.

SWS Variance Request Form
(complete one form for each request)

Proposed State Standard	Maine Weatherization Standards 2.2.: Energy auditors shall comply with the rules of the Maine Fuel Board. These rules are reproduced below: 2.2.2b: b. Prior to performing a combustion safety and efficiency test, a limited energy auditor technician shall obtain the manufacturer's installation and operating instructions for the specific equipment to be tested.
Relevant SWS(s)	https://sws.nrel.gov/spec/530032 rows: c,d,e,f,g,and https://sws.nrel.gov/spec/5300314 rows:c.d.e and https://sws.nrel.gov/spec/531042 rows: f,g
Objective of Relevant SWS	Ensure equipment operates as designed Ensure equipment operates safely Ensure equipment operates efficiently Ensure equipment is durable
Difference between Proposed and SWS Language	SWS states that combustion analysis will be conducted inside the combustion appliance vent and various test data reported and acted upon. Maine WAP and the Maine Fuel Board requires any tester who is not a Maine licensed Heating Technician to have a Maine Fuel Board Limited Energy Auditor Technician License, (Oil and Gas) and in addition, to obtain a copy of the Manufacturer's installation and operating instructions (equipment manual) before performing any testing in the appliance vent of an atmospheric or fan-assisted draft combustion appliance. (For sealed combustion appliances, it is permissible to measure vent CO in undiluted flue gas in the outdoor vent, where possible, even if there is no equipment manual.)
Specific Conditions Where Variance will Apply	When an operation manual for an atmospheric or fan-assisted draft combustion appliance is not obtainable.
Reasoning/Justification (Include supporting technical materials as appropriate)	The Maine Fuel Board has jurisdiction over combustion appliance testing: see 3.4.2 and 3.15.2 at http://www.maine.gov/sos/cec/rules/02/chaps02.htm#658 . Maine WAP field staff all carry the required licenses. Energy auditors must make every effort to obtain an equipment manual on site or on line. Occasionally a manual is not obtainable; in this case the assessment will consist of a visual inspection, CAZ pressure test, spillage test and ambient CO measurement. The auditor may order a CTE by a licensed Heating Technician if there is any concern about the heating appliance, whereby vent combustion analysis measurements are provided. In addition, to ensure safe and efficient operation of combustion appliances, Maine WAP policy requires a CTE for combustion appliances that have not been serviced by a licensed Heating Technician within the previous 12 months.

DOE Review Notes:

Required Signatures:

/s/ Elizabeth Moberg (Technical Services Specialist) 10/23/2015

Grantee Representative submitting request *Date*

FLORIS WESTON

Digitally signed by FLORIS WESTON
DN: c=US, o=U.S. Government, ou=Department of Energy, cn=FLORIS WESTON, 0.9.2342.19200300.100.1.1=8900100132162
Date: 2015.11.17 13:42:08 -05'00'

DOE Technical Approval *Date*

Variance Request Instructions

Proposed State Standard - Include specific standards language and references where available.

Relevant SWS(s) - Link to relevant SWS; indicate specific row where appropriate.

Objective of Relevant SWS - Copy text from relevant SWS(s).

Difference between Proposed and SWS Language - Describe difference between proposed standard and SWS.

Specific Conditions Where Variance will Apply - Describe situations where variance would apply, e.g., specific housing types, building details, or circumstances.

Reasoning/Justification *(Include supporting technical materials as appropriate)* - Explain reasoning for requesting the variance, and how Grantee will ensure the desired outcome and objectives of the SWS will still be met.

Sample Completed Table

Proposed State Standard	The (State) WAP Field Standards shall require under-floor grade will be cleared of all vegetation and organic material. Debris that can cause injury or puncture ground covers (e.g., nails, glass, sheet metal screws, etc.) will be removed from the crawl space. Care will be taken to prevent punctures during installation.
Relevant SWS(s)	https://sws.nrel.gov/spec/201113 row a
Objective of Relevant SWS	Minimize punctures in ground liner Minimize habitat for pests (Integrated Pest Management—IPM) and contaminant sources
Difference between Proposed and SWS Language	SWS requires removal of debris greater than 1". We may leave larger debris, but only if there is no danger of such debris puncturing ground liner.
Specific Conditions Where Variance will Apply	Crawl spaces under all housing types
Reasoning/Justification (Include supporting technical materials as appropriate)	Raking the entire crawl space is often time-consuming, difficult, and brings little reward, i.e., if there is no danger of punctures in ground cover to be installed. Would rather invest that time into proper installation and/or other important measures. The intent of the SWS will be met by making sure puncture hazards are removed and ground cover is puncture free at time of final inspection.