PROPOSED RULE # _____

Administrative Procedures – Proposed Rule Filing

Instructions:

In accordance with Title 3 Chapter 25 of the Vermont Statutes Annotated and the "Rule on Rulemaking" (CVR 04-000-001) adopted by the Office of the Secretary of State, this filing will be considered complete upon filing and acceptance of these forms with the Office of the Secretary of State, and the Legislative Committee on Administrative Rules.

All forms requiring a signature shall be original signatures of the appropriate adopting authority or authorized person, and all filings are to be submitted at the Office of the Secretary of State, no later than 3:30 pm on the last scheduled day of the work week.

The data provided in text areas of these forms will be used to generate a notice of rulemaking in the portal of "Proposed Rule Postings" online, and the newspapers of record if the rule is marked for publication. Publication of notices will be charged back to the promulgating agency.

PLEASE REMOVE ANY COVERSHEET OR FORM NOT REQUIRED WITH THE CURRENT FILING BEFORE DELIVERY!

Certification Statement: As the adopting Authority of this rule (see 3 V.S.A. § 801 (b) (11) for a definition), I approve the contents of this filing entitled:

Biomass Renewable Energy Standard

/s/ Julia S. Moore , on 6/3/2021

(signature) (date)

Printed Name and Title:

Julie Moore, Secretary

RECEIVED BY: _____

- ☐ Coversheet
- ☐ Adopting Page
- ☐ Economic Impact Analysis
- ☐ Environmental Impact Analysis
- ☐ Strategy for Maximizing Public Input
- ☐ Scientific Information Statement (if applicable)
- ☐ Incorporated by Reference Statement (if applicable)
- ☐ Clean text of the rule (Amended text without annotation)
- ☐ Annotated text (Clearly marking changes from previous rule)
- ☐ ICAR Filing Confirmed

TITLE OF RULE FILING:
Biomass Renewable Energy Standard

1.

2. ADOPTING AGENCY:
   Agency of Natural Resources; Department of Forests, Parks and Recreation

3. PRIMARY CONTACT PERSON:
   (A PERSON WHO IS ABLE TO ANSWER QUESTIONS ABOUT THE CONTENT OF THE RULE).

   Name: Emma Hanson

   Agency: Agency of Natural Resources; Department of Forests, Parks and Recreation

   Mailing Address: 1 National Life Drive, Davis 2
   Montpelier, VT 05620-3801

   Telephone: 802 622 - 4187 Fax: -

   E-Mail: Emma.Hanson@vermont.gov

   Web URL*(WHERE THE RULE WILL BE POSTED)*:
   http://anr.vermont.gov/forests-parks-rec

4. SECONDARY CONTACT PERSON:
   (A SPECIFIC PERSON FROM WHOM COPIES OF FILINGS MAY BE REQUESTED OR WHO MAY ANSWER QUESTIONS ABOUT FORMS SUBMITTED FOR FILING IF DIFFERENT FROM THE PRIMARY CONTACT PERSON).

   Name: Meghan Purvee

   Agency: Agency of Natural Resources; Department of Forests, Parks and Recreation

   Mailing Address: 1 National Life Drive, Davis 2
   Montpelier, VT 05620-3801

   Telephone: 802 279 - 7870 Fax: -

   E-Mail: Meghan.Purvee@vermont.gov

5. RECORDS EXEMPTION INCLUDED WITHIN RULE:
   (DOES THE RULE CONTAIN ANY PROVISION DESIGNATING INFORMATION AS CONFIDENTIAL; LIMITING ITS PUBLIC RELEASE; OR OTHERWISE EXEMPTING IT FROM INSPECTION AND COPYING?) No

   IF YES, CITE THE STATUTORY AUTHORITY FOR THE EXEMPTION:

   PLEASE SUMMARIZE THE REASON FOR THE EXEMPTION:

6. LEGAL AUTHORITY / ENABLING LEGISLATION:

(THE SPECIFIC STATUTORY OR LEGAL CITATION FROM SESSION LAW INDICATING WHO THE ADOPTING ENTITY IS AND THUS WHO THE SIGNATORY SHOULD BE. THIS SHOULD BE A SPECIFIC CITATION NOT A CHAPTER CITATION).
10 V.S.A. §2751, 3 V.S.A. §801(11) and 3 V.S.A. §2853(5) and 30 V.S.A. §8005(c)(2).

7. EXPLANATION OF HOW THE RULE IS WITHIN THE AUTHORITY OF THE AGENCY:

   The Department of Forests, Parks and Recreation is required to adopt this rule and establish renewability standards for forest products used to generate energy and to promote the sustainable use of forest resources and to ensure long-term forest health and sustainability through harvesting and procurement of biomass pursuant to Act 56 of 2015.

8. CONCISE SUMMARY **(150 WORDS OR LESS)**:

   Act 56 amended Chapter 87 of Title 10 of the Vermont Statutes Annotated to add a new section 2751, which requires the Commissioner of the Department of Forests, Parks and Recreation to adopt rules that establish renewable energy standards for forest products used to generate energy by distributed renewable generation and energy transformation projects within the Renewable Energy Standard. 10 V.S.A. §2751. This rule establishes biomass renewability standards by setting minimum efficiency standards for Tier III Energy Transformation projects, and sets forester certified standards based on the forest land category of the Use Value Appraisal (UVA) program for material used in Tier II Distributed Renewable Energy projects.

9. EXPLANATION OF WHY THE RULE IS NECESSARY:

   Act No. 56 of the Acts of 2015 established a Renewable Energy Standard and Energy Transformation Program for electric utilities in the State of Vermont which specifically includes biomass to produce electricity. 10 V.S.A. §2751.

10. EXPLANATION OF HOW THE RULE IS NOT ARBITRARY:

    This rule utilizes existing standards established by the EPA and Vermont's UVA program and applies them to this topic.

11. LIST OF PEOPLE, ENTERPRISES AND GOVERNMENT ENTITIES AFFECTED BY THIS RULE:

VT Agency of Natural Resources; Department of Forests, Parks & Recreation; Public Service Department; loggers; foresters; public utilities; and others involved with development of Tier II or Tier III projects.

12. BRIEF SUMMARY OF ECONOMIC IMPACT **(150 WORDS OR LESS)**:

The economic impact of this rule will be minimal. Any limited additional expenditure necessitated by the rule will be offset by the incentives made available via Tier II and Tier III.

13. A HEARING IS SCHEDULED .

14. HEARING INFORMATION

(THE FIRST HEARING SHALL BE NO SOONER THAN 30 DAYS FOLLOWING THE POSTING OF NOTICES ONLINE).

IF THIS FORM IS INSUFFICIENT TO LIST THE INFORMATION FOR EACH HEARING PLEASE ATTACH A SEPARATE SHEET TO COMPLETE THE HEARING INFORMATION NEEDED FOR THE NOTICE OF RULEMAKING.

Date: 7/16/2021

Time: 10:00 AM

Street Address: Teams - Online

Zip Code: n/a

Date:

Time: AM

Street Address:

Zip Code:

Date:

Time: AM

Street Address:

Zip Code:

Date:

Time: AM

Street Address:

Zip Code:

15. DEADLINE FOR COMMENT (NO EARLIER THAN 7 DAYS FOLLOWING LAST HEARING): 7/23/2021

16. KEYWORDS (PLEASE PROVIDE AT LEAST 3 KEYWORDS OR PHRASES TO AID IN THE SEARCHABILITY OF THE RULE NOTICE ONLINE).

Biomass

Renewable

Distributed Generation

Administrative Procedures – Adopting Page

Instructions:

This form must accompany each filing made during the rulemaking process:

Note: To satisfy the requirement for an annotated text, an agency must submit the entire rule in annotated form with proposed and final proposed filings. Filing an annotated paragraph or page of a larger rule is not sufficient. Annotation must clearly show the changes to the rule.

When possible, the agency shall file the annotated text, using the appropriate page or pages from the Code of Vermont Rules as a basis for the annotated version. New rules need not be accompanied by an annotated text.

TITLE OF RULE FILING:
Biomass Renewable Energy Standard

1.

2. ADOPTING AGENCY:
   Agency of Natural Resources; Department of Forests, Parks and Recreation

3. TYPE OF FILING (*PLEASE CHOOSE THE TYPE OF FILING FROM THE DROPDOWN MENU BASED ON THE DEFINITIONS PROVIDED BELOW*):

   - **AMENDMENT -** Any change to an already existing rule, even if it is a complete rewrite of the rule, it is considered an amendment as long as the rule is replaced with other text.
   - **NEW RULE -** A rule that did not previously exist even under a different name.
   - **REPEAL** - The removal of a rule in its entirety, without replacing it with other text.

   This filing is **A NEW RULE** .

4. LAST ADOPTED (*PLEASE PROVIDE THE SOS LOG#, TITLE AND EFFECTIVE DATE OF THE LAST ADOPTION FOR THE EXISTING RULE)*:

Administrative Procedures – Economic Impact Analysis

Instructions:

In completing the economic impact analysis, an agency analyzes and evaluates the anticipated costs and benefits to be expected from adoption of the rule; estimates the costs and benefits for each category of people enterprises and government entities affected by the rule; compares alternatives to adopting the rule; and explains their analysis concluding that rulemaking is the most appropriate method of achieving the regulatory purpose.

Rules affecting or regulating schools or school districts must include cost implications to local school districts and taxpayers in the impact statement, a clear statement of associated costs, and consideration of alternatives to the rule to reduce or ameliorate costs to local school districts while still achieving the objectives of the rule (see 3 V.S.A. § 832b for details).

Rules affecting small businesses (excluding impacts incidental to the purchase and payment of goods and services by the State or an agency thereof), must include ways that a business can reduce the cost or burden of compliance or an explanation of why the agency determines that such evaluation isn't appropriate, and an evaluation of creative, innovative or flexible methods of compliance that would not significantly impair the effectiveness of the rule or increase the risk to the health, safety, or welfare of the public or those affected by the rule.

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1. TITLE OF RULE FILING:

Biomass Renewable Energy Standard

2. ADOPTING AGENCY:

Agency of Natural Resources; Department of Forests, Parks and Recreation

3. CATEGORY OF AFFECTED PARTIES:

LIST CATEGORIES OF PEOPLE, ENTERPRISES, AND GOVERNMENTAL ENTITIES POTENTIALLY AFFECTED BY THE ADOPTION OF THIS RULE AND THE ESTIMATED COSTS AND BENEFITS ANTICIPATED:

VT Agency of Natural Resources; Department of Forests, Parks & Recreation; Public Service Department; loggers, foresters; landowners; and others associated with wood harvesting, public utilities.

4. IMPACT ON SCHOOLS:

INDICATE ANY IMPACT THAT THE RULE WILL HAVE ON PUBLIC EDUCATION, PUBLIC SCHOOLS, LOCAL SCHOOL DISTRICTS AND/OR TAXPAYERS CLEARLY STATING ANY ASSOCIATED COSTS:

Wood heat is common in Vermont schools. Schools installing a new wood heating system would have to abide by the efficiency limits listed in the rule in order to be eligible for incentives funded by Tier III programs. This will cause little to no additional cost as most systems installed already meet these standards, and any additional costs would be offset by the availability of the incentive. It is far less likely that a school would install a distributed generation system, but if they did install a co-gen biomass system they would have to follow the sourcing guidelines as described.

5. ALTERNATIVES: *CONSIDERATION OF ALTERNATIVES TO THE RULE TO REDUCE OR AMELIORATE COSTS TO LOCAL SCHOOL DISTRICTS WHILE STILL ACHIEVING THE OBJECTIVE OF THE RULE*.

The Rule was designed to avoid impacts on schools while providing an incentive to promote sustainable forestry practices and purchase of EPA certified and efficient combustion equipment. If a school wished to install a system that does not meet the requirements of the Rule, it may without penalty, but it will not be eligible to receive the incentive funding for either Tier II or Tier III for that system. There was no other alternative that FPR found that could achieve a negligible impact while providing a Tier II or Tier III incentive.

6. IMPACT ON SMALL BUSINESSES:

INDICATE ANY IMPACT THAT THE RULE WILL HAVE ON SMALL BUSINESSES (EXCLUDING IMPACTS INCIDENTAL TO THE PURCHASE AND PAYMENT OF GOODS AND SERVICES BY THE STATE OR AN AGENCY THEREOF):

The impact to small businesses is minimal. Licensed foresters will need to understand the rule as they may be asked to certify that a harvest meets the standard. Small businesses looking to install an automated wood heating (AWH) system with a Tier III incentive will have to select from models that meet the minimum efficiency standard, or not qualify for the incentive. This will cause little to no additional cost as most

systems installed already meet these standards, and any additional costs would be offset by the availability of the incentive.

7. SMALL BUSINESS COMPLIANCE: *EXPLAIN WAYS A BUSINESS CAN REDUCE THE COST/BURDEN OF COMPLIANCE OR AN EXPLANATION OF WHY THE AGENCY DETERMINES THAT SUCH EVALUATION ISN'T APPROPRIATE.*

The impact of this Rule on small businesses is negligible. Most systems installed by small businesses already meet these standards, and any additional cost would be subsidized by the Tier II or Tier III incentive. There is no penalty for not meeting the standards developed in the Rule. Small businesses may choose to install a system that does not meet the standards or use biomass from a harvest that is not certified as compliant with the standards, but they will not be eligible for the Tier II and Tier III incentives. This would result in the businesses being in the same situation that they are in without the Rule in place.

8. COMPARISON:

COMPARE THE IMPACT OF THE RULE WITH THE ECONOMIC IMPACT OF OTHER ALTERNATIVES TO THE RULE, INCLUDING NO RULE ON THE SUBJECT OR A RULE HAVING SEPARATE REQUIREMENTS FOR SMALL BUSINESS:

The Proposed Rule was developed as an incentive to encourage sustainable forestry practices and use of efficient wood combustion equipment. The Rule was designed to avoid impacts on all small businesses. There is no requirement to comply with the Rule and there is no penalty for not complying. The incentive is available to those small businesses that do comply with the Rule's requirements, and therefore, there is really only a negligible, if any impact on small businesses because they can choose to operate as they currently are operating with no change. The incentive provides an opportunity for a benefit for small businesses with only a negligible, if any, impact since any logging operations must comply with the water quality rules and avoid discharges, and the AMPs are the existing and longstanding method designed to protect against erosion and discharges from logging operations, and the UVA Program requirements are

mandatory for all properties enrolled in UVA, so these requirements are not new. With respect to wood combustion equipment, small businesses can choose to purchase the equipment meeting the EPA certification and receive the incentive, or choose to purchase something else at no penalty and not receive the incentive. Some small businesses may see an increase in sales of the EPA certified equipment, which could result in a benefit. Therefore, the impact is negligible because lack of compliance with the Rule results in the same situation as presently occurs without the Rule in place and compliance should result in benefits from the incentive.

9. SUFFICIENCY: *EXPLAIN THE SUFFICIENCY OF THIS ECONOMIC IMPACT ANALYSIS.*
This analysis provides a sufficient explanation of the costs to consumers, schools, and small businesses that may be associated with adoption of this rule, and provides detail on the limited to no impact that is likely to take place.

Administrative Procedures – Environmental Impact Analysis

Instructions:

In completing the environmental impact analysis, an agency analyzes and evaluates the anticipated environmental impacts (positive or negative) to be expected from adoption of the rule; compares alternatives to adopting the rule; explains the sufficiency of the environmental impact analysis.

Examples of Environmental Impacts include but are not limited to:

- Impacts on the emission of greenhouse gases
- Impacts on the discharge of pollutants to water
- Impacts on the arability of land
- Impacts on the climate
- Impacts on the flow of water
- Impacts on recreation
- Or other environmental impacts

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1. TITLE OF RULE FILING:

Biomass Renewable Energy Standard

2. ADOPTING AGENCY:

Agency of Natural Resources; Department of Forests, Parks and Recreation

3. GREENHOUSE GAS: *EXPLAIN HOW THE RULE IMPACTS THE EMISSION OF GREENHOUSE GASES (E.G. TRANSPORTATION OF PEOPLE OR GOODS; BUILDING INFRASTRUCTURE; LAND USE AND DEVELOPMENT, WASTE GENERATION, ETC.):*

This rule would reduce greenhouse gas emissions because it requires that wood fuels must come from forests that are not converted to non-forest. Forest conversion is a significant source of carbon dioxide emissions from both the loss of carbon storage capacity as well as the loss of continued carbon sequestration from living trees. When disturbed, forest soils, which contain about 60% of the carbon in Vermont's forests, emit carbon dioxide; it can take decades or centuries for the soils to recuperate. The rule does not permit the inclusion of wood harvested from forestland conversion to non-forest.

4. WATER: *EXPLAIN HOW THE RULE IMPACTS WATER (E.G. DISCHARGE / ELIMINATION OF POLLUTION INTO VERMONT WATERS, THE FLOW OF WATER IN THE STATE, WATER QUALITY ETC.):*
   This rule would have a positive impact on water quality by requiring that wood fuels come from forests that are managed by a licensed forester who ensures that the UVA Program requirements and the Acceptable Management Practices for Maintaining Water Quality on Logging Jobs (AMPs) are complied with and implemented appropriately. While all logging jobs in Vermont are subject to the AMPs, the implementation of the AMP practices are not mandatory; compliance with and implementation of the AMPs provides a rebuttable presumption that the logging operation is in compliance with the Vermont Water Quality Standards. Unfortunately, for lands not enrolled in UVA and other land not managed by a forester, the AMPs are not always implemented. This renewability standard would require implementation of and compliance with UVA Standards and the AMPs, thus increasing the implementation of these protective measures and reducing the potential for discharges, which ultimately will benefit water quality in the State.

5. LAND: *EXPLAIN HOW THE RULE IMPACTS LAND (E.G. IMPACTS ON FORESTRY, AGRICULTURE ETC.):*
   This rule requires that biomass material used in Tier III projects follow the high standards established in the UVA program and follow AMP standards. It does not allow for the use of material from land being converted from forest to non-forest which promotes the continuation of active forestland. This rule would support the forestry sector by requiring that Tier II projects have a licensed forester work with loggers in timber operations. Licensed foresters are trained in scientifically-based silviculture to achieve long-term management of the forest. For Tier II programs it makes the most of biomass material by setting minimum efficiency standards.

6. RECREATION: *EXPLAIN HOW THE RULE IMPACT RECREATION IN THE STATE:*
   While there is no direct impact to recreation from this Rule, the standards in the Rule incentivize keeping

forests as forests, and thus this protects forest-base recreation also.

7. CLIMATE: *EXPLAIN HOW THE RULE IMPACTS THE CLIMATE IN THE STATE:*
   This rule would reduce climate change causing GHG emissions from wood-fired appliances for Tier III projects. This rule would permit wood fuels to come only from forests that remain forests. Intact forests are important natural climate solutions because they sequester and store atmospheric carbon – a leading cause of climate change -- as well as having a net cooling effect through a number of different pathways (evapotranspiration, sunlight interception, soil shading, etc.).

8. OTHER: *EXPLAIN HOW THE RULE IMPACT OTHER ASPECTS OF VERMONT'S ENVIRONMENT:*
   Because wood fuels must come from forest operations overseen by a licensed forester, there may be other ecosystem benefits that arise from sound forest management, like wetland and vernal pool protection.

9. SUFFICIENCY: *EXPLAIN THE SUFFICIENCY OF THIS ENVIRONMENTAL IMPACT ANALYSIS.*
   This environmental impact analysis is sufficient because it describes how the rule will positively impact the environment by reducing greenhouse gas emissions from fossil fuels and keeping forests as forests, one of the biggest tools we have to sequester and store carbon.

Administrative Procedures – Public Input

Instructions:

In completing the public input statement, an agency describes the strategy prescribed by ICAR to maximize public input, what it did do, or will do to comply with that plan to maximize the involvement of the public in the development of the rule.

This form must accompany each filing made during the rulemaking process:

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1. TITLE OF RULE FILING:

Biomass Renewable Energy Standard

2. ADOPTING AGENCY:

Agency of Natural Resources; Department of Forests, Parks and Recreation

3. PLEASE DESCRIBE THE STRATEGY PRESCRIBED BY ICAR TO MAXIMIZE PUBLIC INVOLVEMENT IN THE DEVELOPMENT OF THE PROPOSED RULE:

Outreach to date has included collaboration with staff at the Department of Forests, Parks, and Recreation, the Agency of Natural Resources, the Department of Public Service, and the Biomass Energy Resource Center at VEIC. Additional outreach will include soliciting feedback from forest industry professionals and the public utilities. Outreach actions will include: publishing the rulemaking notice in newspapers; posting the rulemaking materials, hearing and public comment information on the FPR and ANR websites; distributing the aforementioned materials via forestry and wood energy newsletters and listserves; and direct outreach to the utilities.

4. PLEASE LIST THE STEPS THAT HAVE BEEN OR WILL BE TAKEN TO COMPLY WITH THAT STRATEGY:

Outreach to date has included collaboration with staff at the Department of Forests, Parks, and Recreation, the Agency of Natural Resources, the Department of Public Service, and the Biomass Energy Resource Center

at VEIC. Additional outreach will include soliciting feedback from forest industry professionals and the public utilities. Outreach actions will include: publishing the rulemaking notice in newspapers; posting the rulemaking materials, hearing and public comment information on the FPR and ANR websites; distributing the aforemention materials via forestry and wood energy newsletters and listserves; and direct outreach to the utilities.

5. BEYOND GENERAL ADVERTISEMENTS, PLEASE LIST THE PEOPLE AND ORGANIZATIONS THAT HAVE BEEN OR WILL BE INVOLVED IN THE DEVELOPMENT OF THE PROPOSED RULE:

   This rule was developed in coordination with colleagues from the Department of Forests, Parks, and Recreation, the Agency of Natural Resources, and the Department of Public Service. Outside of State government, Adam Sherman of the Biomass Energy Resource Center at VEIC was also consulted. EPA regulations were consulted as reference material. During the outreach process we expect to receive feedback from the forestry and wood energy industry and from the public utilities.

Administrative Procedures – Scientific Information

THIS FORM IS ONLY REQUIRED WHEN INCORPORATING MATERIALS BY REFERENCE. PLEASE REMOVE PRIOR TO DELIVERY IF IT DOES NOT APPLY TO THIS RULE FILING:

Instructions:

In completing the Scientific Information Statement, an agency shall provide a brief summary of the scientific information including reference to any scientific studies upon which the proposed rule is based, for the purpose of validity.

1. TITLE OF RULE FILING:

Biomass Renewable Energy Standard

2. ADOPTING AGENCY:

Agency of Natural Resources; Department of Forests, Parks and Recreation

3. BRIEF EXPLANATION OF SCIENTIFIC INFORMATION:

While no specific reports were referenced in these forms or the rule, there is extensive scientific research supporting the environmental and carbon benefits of keeping forests as forests, as well as research on the greenhouse gas benefits of utilizing wood for thermal energy. This rule also leans on the AMP's and their benefits to water quality in forest management.

4. CITATION OF SOURCE DOCUMENTATION OF SCIENTIFIC INFORMATION:

Supporting documentation can be found in the following:

Buchholz, Thomas, and Gunn, John S, and Saah, David S. "Greenhouse gas emissions of local wood pellet heat from northeastern US forests." Energy 15 December 2017: 483-491. Science Direct 11 January 2021.

Catanzaro, Paul, and D'Amato, Anthony. "Forest Carbon, An Essential Natural Solution for Climate change." University of Massachusetts, 2019.

Haussman, R.F. and Pruett, E.W. Permanent Logging Roads for Better Woodlot Management, 1973, USDA Forest Service, State and Private Forestry, Upper Darby, Pennsylvania.

Kochenderfer, J.N., Erosion Control on Logging Roads in the Appalachians, Research Paper NE-158, 1970, USDA Northeastern Forest Experiment Station, Upper Darby, Pennsylvania.

Lawlor, Sean M., Determination of Channel-Morphology Characteristics, Bank full Discharge, and Various Design-Peak Discharges in Western Montana, 2004, U.S. Geological Survey, Reston, Virginia.

Landowner's Guide to Building Forest Access Roads; Richard L. Wiest; USDA Forest Service, Northeastern Area State and Private Forestry; NA - TP - 06 - 98, Radnor PA July 1998

Filter Strip Widths for Forest Roads in the Southern Appalachians, 1986, Lloyd W. Swift, Jr., USDA Forest Service, Revised July 1, 2015, Southeastern Forest Experiment Station, Coweeta Hydrologic Laboratory, Otto, NC 28763.

5. INSTRUCTIONS ON HOW TO OBTAIN COPIES OF THE SOURCE DOCUMENTS OF THE SCIENTIFIC INFORMATION FROM THE AGENCY OR OTHER PUBLISHING ENTITY:

Contact Vermont Department of Forests, Parks and Recreation, Forestry Division: (802) 828-1531

Biomass Renewable Energy Standard

SECTION 1: Introduction

Act No. 56 of the Acts of 2015 established a Renewable Energy Standard and Energy Transformation Program for electric utilities in the State of Vermont which specifically includes biomass to produce electricity. Act 56 amended Chapter 87 of Title 10 of the Vermont Statutes Annotated to add a new section 2751, which requires the Commissioner of the Department of Forests, Parks and Recreation to adopt rules that establish renewability standards for forest products used to generate energy by distributed renewable generation and energy transformation projects within the Renewable Energy Standard. 10 V.S.A. §2751. These standards may include minimum efficiency requirements for wood boilers and requirements for harvesting and procurement. In developing these rules, the Commissioner shall consider differentiating the standards by type of forest product and scale of forest product.

SECTION 2: Policy and Purpose

The policy and purpose of the Biomass Renewable Energy Standard is to promote the sustainable use of forest resources and to ensure long-term forest health and sustainability through harvesting and procurement of biomass.

SECTION 3: Authority

This rule is adopted pursuant to 10 V.S.A. §2751, 3 V.S.A. §801(11) and 3 V.S.A. §2853(5).

SECTION 4: Applicability

The Biomass Renewability Energy Standard applies to all utilities that: offer incentives on wood-fired appliances as part of their Tier III programming; or all generation from biomass electric generation facilities; or combined heat and power (CHP) facilities that utilities claim towards their Tier II requirements.

SECTION 5: Definitions

5.1 "AMPs" *shall mean the rule entitled "Acceptable Management Practices for Logging Jobs in Vermont" adopted by the Department of Forests, Parks and Recreation.*

5.1 "Combined heat and power (CHP) facility" shall have the same meaning as in 30 V.S.A. §8015(b)(2).

5.2 ***"Distributed renewable generation"*** shall have the same meaning as in 30 V.S.A. §8005(a)(2).

5.3 ***"Distribution Utilities or DUs"*** refers to the 17 electric distribution utilities in Vermont, as authorized by the Public Utility Commission.

5.4 ***"Energy transformation project"*** shall have the same meaning as in 30 V.S.A. §8002.

5.5 ***"Micro CHP Facility"*** means a system with 5kw or less of electric generating capacity.

5.5 ***"Renewability"*** means capable of being replaced by natural ecological processes or sound management practices.

5.6 ***"RES"*** means the Renewability Energy Standard established in 30 V.S.A. §8004 and §8005.

5.7 ***"Tier II"*** means the distributed renewable generation RES category as defined in 30 V.S.A. §8005.

5.8 ***"Tier III"*** means the energy transformation RES category as defined in 30 V.S.A. §8005.

5.10 **"UVA"** shall mean the Use Value Appraisal Program established by 32 V.S.A. §§375- - 3777.

SECTION 6: Biomass Renewable Energy Standard

6.1 Tier II Distributed Renewable Energy Projects

To qualify as a Tier II Energy Transformation Project for the purposes of this Rule and Chapter 89 of Title 30 of the Vermont Statutes Annotated, biomass electric generation facilities and combined heat and power (CHP) facilities shall comply with the following:

1. Forestland located within the State of Vermont:
   a. Wood fuels shall be sourced from forests that are currently enrolled and in good standing in UVA; or
   b. For wood fuels sourced from forestland in Vermont but not enrolled in UVA, a licensed forester shall certify that the harvest area that is producing the wood fuel complies with the Vermont UVA Management Plan standards applicable to the harvest, the AMPs and all applicable Vermont forestry related laws.

2. Forestland located outside of the State of Vermont:

   a. Wood fuels that are sourced from forestland outside of Vermont may qualify as fuel for a Tier II Energy Transformation Project provided a licensed or SAF certified forester in the state in which the forestland is located certifies that the harvest area that is producing the wood fuel complies with the Vermont UVA Management Plan standards applicable to the harvest, and all applicable state and local forestry and water quality related laws within that jurisdiction.

3. Requirements for all forestland within or outside of the State of Vermont:

a. **Land Conversion:** Wood sourced from forestry operations on land being converted from forest to non-forest does not qualify as renewable.
b. **Certification:** The certification required in 1.b. and 2 of this section shall be a document which: identifies the requirements applicable to the harvest producing the wood fuel; certifies that the harvest producing the wood fuels complies with the requirements of this Rule; and is signed by the forester making the certification. The biomass electric generating facility shall maintain a copy of the forester certification and shall make the certification available upon request by the Commissioner of the Department of Forests, Parks and Recreation or the Commissioner of the Department of Public Service. These records shall be kept for a minimum period of four years.

6.2 Tier III Energy Transformation Projects

To meet the renewability standard for the purposes of Chapter 89 of Title 30 of the Vermont Statutes Annotated, wood-fired appliances shall meet the minimum performance requirements set forth in Table 1. The Table 1 performance requirements apply to all wood fuel types, including cord wood, wood pellets, green wood chips, dry wood chips.

Table 1

Appliance	Performance Requirement
Pellet Stove	Must be EPA Certified on date of installation
Wood Stove	Must be EPA Certified on date of installation
Automated Pellet Boiler or Furnace	≥85% efficiency**
Wood Chip Boiler	≥78% efficiency***
Cordwood Boiler – Up to 350,000 Btu's	Must be EPA Certified on date of installation
Cordwood Boiler – Over 350,000 Btu's	Not Eligible
Micro CHP Facility	≥85% efficiency**

**Meaning a higher heating value or gross calorific value of 85 percent or more on a peak efficiency basis and as measured by an accredited lab or organization.

*** Meaning a higher heating value or gross calorific value of 78 percent or more on a peak efficiency basis and as measured by an accredited lab or organization.