

**STATE OF VERMONT  
PUBLIC UTILITY COMMISSION**

Investigation of the standard-offer contract )  
between Vermont Renewable Gas, LLC and the ) Case No. 24-3359-INV  
Standard Offer Facilitator )  
)

**AGENCY OF AGRICULTURE, FOOD AND MARKETS’ BRIEF RELATED TO  
FEEDSTOCK DERIVED FROM “FARMING” AND AN “AGRICULTURAL  
OPERATION”**

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## I. INTRODUCTION AND SCOPE

The Public Utility Commission (PUC) asked the Parties to brief several issues in the above-captioned matter, including “whether the feedstocks proposed for the Facility meet the statutory definition of agricultural products, byproducts, or wastes[,]” and “how or whether VRG’s proposal to use fiber from timber production as a feedstock constitutes wastes from agricultural operations and is consistent with the definition of farming contained in statute.”<sup>1</sup>

The Agency of Agriculture Food and Markets (AAFM) is responsible for the “supervis[ion]. . . execution and enforcement of all laws relating to agriculture[.]”<sup>2</sup> This brief discusses what constitutes “farming” and/or “an agricultural operation” when evaluating whether a plant is using “feedstock” “derived from an agricultural operation.” AAFM does not address technical questions or energy processes that lie outside AAFM’s expertise.

AAFM respectfully asserts that many “farming” activities generate woody biomass “feedstock” that is “derived from an agricultural operation.” To the extent farming activities generate a majority of Petitioner’s feedstock, AAFM contends the proposed project is eligible for the Standard Offer Program.

AAFM does not consider traditional “logging” or “forestry” activities that are unrelated to farming activities to be a type of “farming” AAFM regulates. However, the question is whether “feedstock” from a farm’s woodlots or forests is derived from “an agricultural operation” when it is not harvested in connection with the farm’s farming activities. “Farming”

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<sup>1</sup> See *Order Requiring Full 30 V.S.A. § 248 Procedure, Staying Case No. 24-2797-PET, Opening an Investigation of the Standard-Offer Contract, and Requesting Information and Briefing*, Docket 24-3359-INV, Order of 11/7/24.

<sup>2</sup> 6 V.S.A. § 1 (a).

and “an agricultural operation” are different terms, and AAFM believes this is a novel question of statutory interpretation for the PUC’s thoughtful judgment.

## II. FACTUAL BACKGROUND

Petitioner proposes to build a “combined electric generation and biochar carbon removal facility,”<sup>3</sup> using woody biomass principally sourced<sup>4</sup> from Vermont agricultural operations.<sup>5</sup> Petitioner states that 30 percent of the majority share of its agricultural feedstocks will be sourced from “wood fiber and wood fiber byproducts from Christmas tree, maple sap, horticultural, and orchard crop production.”<sup>6</sup> Petitioner maintains that the remaining 70 percent of its majority share of agricultural feedstocks will be sourced from “wood fiber from timber grown and harvested as short-rotation tree crops grown for energy production, and wood fiber from timber purposefully harvested from woodlots on farms and grown for energy production, and wood fiber byproducts from timber grown and harvested from woodlots on farms.”<sup>7</sup>

## III. ARGUMENT

In-state generation facilities are required to obtain a certificate “for a plant using methane *derived from an agricultural operation. . .*”<sup>8</sup> The statutory provision contemplates two

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<sup>3</sup> Prefiled testimony of Evan Dell’Olio, 12/12/2024, p. 4, lines 15-16.

<sup>4</sup> AAFM recognizes the PUC has relied on a 51% threshold when interpreting whether feedstock is “principally” from a farm. AAFM’s current position is that “principally” means a “majority” which is more accurately defined as “more than 50%” instead of “51%.” This small distinction is unlikely to have practical impact, and AAFM suspects that “51%” was likely always considered a synonym for “majority” or “principally.” In this filing, AAFM uses “principally,” “majority,” and 51% as equivalent terms, though the Agency believes “principally” is better defined as more than 50 percent.

<sup>5</sup> Prefiled testimony of Evan Dell’Olio, 12/12/2024, p. 20, lines 1-12.

<sup>6</sup> *Id.*

<sup>7</sup> Prefiled testimony of Evan Dell’Olio, 12/12/2024, p. 20, lines 3-7.

<sup>8</sup> 30 V.S.A. § 248(q)(1) (emphasis added).

types of eligible plants: 1) a facility derived from farming pursuant to 10 V.S.A. § 6001(22)(F),<sup>9</sup> and 2) a facility that is not “farming” under the same statutory provision<sup>10</sup> but “receives feedstock from off-site farms[.]”<sup>11</sup> Petitioner proposes to operate under the second prong as a plant that receives feedstock from off-site farms.

**A. The definition of “farming.”**

To determine what feedstocks may be derived from “an agricultural operation,” it is useful to start by evaluating the terms “agriculture” and “farming.”

“Agriculture” is a broad concept that is not specifically defined in the controlling statutory framework. The United States has been a member of the Food and Agriculture Organization of the United Nations (FAO) since 1945,<sup>12</sup> and it defines agriculture holistically and describes the global system of food production and distribution as the ‘Agrifood system.’<sup>13</sup> The definition for ‘Agrifood system’ notes that in the FAO constitution, “[T]he term ‘agriculture’ and its derivatives include fisheries, marine products, forestry, and primary forest products.”<sup>14</sup>

The State of Vermont’s most commonly used definition of “farming”<sup>15</sup> similarly includes many activities involving trees, including Christmas trees, maple sap, orchard crops, and the production of maple syrup as specific “farming” activities. In addition, the United States

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<sup>9</sup> 10 V.S.A. § 6001(22)(F) defines “farming” as “the on-site storage, preparation, production, and sale of fuel or power from agricultural products or wastes principally produced on the farm.”

<sup>10</sup> Under 30 V.S.A. § 248(q)(1)(B), the facility may or may not otherwise meet the criteria for “farming” under another type of farming defined in 10 V.S.A. § 6001(22).

<sup>11</sup> 30 V.S.A. § 248(q)(1)(B).

<sup>12</sup> <https://www.fao.org/legal-services/membership-of-fao/en/>.

<sup>13</sup> FAO. 2023. The State of Food and Agriculture 2023 – Revealing the true cost of food to transform agrifood systems. Rome. <https://doi.org/10.4060/cc7724en> (p.xi).

<sup>14</sup> FAO. 2021. Report of the Council of FAO – Hundred and Sixty-sixth Session, 26 April – 1 May 2021. CL 166/REP. Rome. <https://www.fao.org/3/nf693en/nf693en.pdf>.

<sup>15</sup> See 10 V.S.A. 6001(22); see also, 6 V.S.A. § 4802(2).

Department of Agriculture’s (USDA) Natural Resource Conservation Services (NRCS) recently offered new technical and financial assistance programming for Vermont farmers to adopt ‘Agroforestry’ conservation practices on their farms.<sup>16</sup> Agroforestry is the intentional growing of trees and shrubs in combination with crops or forage.<sup>17</sup> It is indisputable that trees are an integral and common part of both Vermont agriculture and farming. As Vermont’s Supreme Court recognized, harvesting lumber and engaging in silvicultural practices on farms “reflects in many respects a larger movement toward a more sustainable agricultural economy.”<sup>18</sup>

While the term “agriculture” is broad, Vermont’s regulation of specific aspects of land use has necessitated definitional distinctions for different regulatory frameworks. For example, Vermont’s most common definition of “farming” is the same in both the Conservation and Development<sup>19</sup> and Agriculture<sup>20</sup> Titles of Vermont Statutes Annotated, but AAFM further defined “farming” to apply distinct regulatory requirements based on a farm’s size and impacts.<sup>21</sup> Other programs define farming and threshold farming activities differently for their own unique purposes. The Use Value Appraisal (UVA) Program has specific threshold criteria to define ‘agricultural land’<sup>22</sup> or ‘farmer’<sup>23</sup> which are different from broadly defining agricultural activity. Those definitions are more related to acreage and the share of economic income attributable to farming than to agriculture. The disparate definitions do not mean people growing food or crops

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<sup>16</sup> USDA NRCS. 2024. NRCS Conservation Practice Standards for Agroforestry. Washington DC. <https://www.fs.usda.gov/nac/practices/conservation-practice-standards.shtml>.

<sup>17</sup> USDA NRCS. 2024. Agroforestry for Farms and Ranches. <https://www.nrcs.usda.gov/conservation-basics/natural-resource-concerns/land/forests/agroforestry-systems>.

<sup>18</sup> *In re Moore Accessory Structure Permit and Use*, 2013 VT 54, ¶ 10, 194 Vt. 159, 75 A.3d 625 (2013).

<sup>19</sup> 10 V.S.A. § 6001(22).

<sup>20</sup> 6 V.S.A. § 4802(2).

<sup>21</sup> VAAFM regulates farms in four categories based on animal numbers as required by 6 V.S.A. Chapter 215: RAP Farms (4 – 49 dairy cows), Certified Small Farm Operations (50-199 dairy cows), Medium Farm Operations (200 – 699 dairy cows), and Large Farm Operations (700+ dairy cows).

<sup>22</sup> 32 V.S.A. § 3752(1).

<sup>23</sup> 32 V.S.A. § 3752(7).

in small backyard gardens are not engaged in traditional “agriculture” or “farming,” but they do mean those people may not be regulated by AAFM’s water quality rules or be eligible for the UVA Program.

To contextualize the close association between farming and forestry, trees and forestland are major constituent parts of Vermont farms. According to the 2022 USDA National Agricultural Statistics Service (NASS) Agricultural Census for Vermont, our farmers manage 569,494 acres of total woodland and 524,873 acres of total cropland and permanent pasture.<sup>24</sup> As Vermont continues to rapidly lose its farms and farmland, USDA’s Census demonstrates—for the first time in its recorded history—that Vermont farmers now manage more forestland than cropland or pasture.<sup>25</sup> Analyzed at the parcel level, individual farms often balance different land uses. An examination of the 226,000 acres of agricultural land that the Vermont Housing and Conservation Board (VHCB) conserved, shows that 56% of the parcels are actively used for farming (127,000 acres), while 44% of the parcels are forested (34%, 75,000 acres) or classified as wetlands (10%, 23,000). The principal point is that trees are often used directly in farming and are almost always a part of Vermont agriculture.

“Farming” activities—including those defined by 10 V.S.A. 6001(22)—regularly generate wood products and/or waste. Relevant farming activities include managing, cleaning up, and harvesting orchards, Christmas trees, and sugarbushes. Vermont produces more maple than the rest of the country combined, and maple production revolves around trees. Vermont also has thriving orchards and berry crops, and many Christmas tree farms. Even when farmers are not

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<sup>24</sup> USDA NASS. 2022. 2022 Census of Agriculture – Vermont, [https://www.nass.usda.gov/Publications/AgCensus/2022/Full\\_Report/Volume\\_1,\\_Chapter\\_1\\_State\\_Level/Vermont/st50\\_1\\_007\\_008.pdf](https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Vermont/st50_1_007_008.pdf).

<sup>25</sup> US Secretary of the Interior. 1870. The Statistics of The Wealth and Industry of The United States. <https://agcensus.library.cornell.edu/wp-content/uploads/1870c-01.pdf>.

directly utilizing trees to grow crops, they clear trees and other woody biomass from farm fields and ditches so they can grow food and crops, manage trees to shelter or protect animals, and harvest wood for fuel to boil maple sap. “Farming” creates many types of woody agricultural products and agricultural waste that is properly considered “feedstock” from “agricultural operations.”

Indeed, the definition of farming includes all the following activities:<sup>26</sup>

- (A) the cultivation or other use of land for growing food, fiber, Christmas trees, maple sap, or horticulture and orchard crops; or
- (B) the raising, feeding, or management of livestock, poultry, fish, or bees; or
- (C) the operation of greenhouses; or
- (D) the production of maple syrup; or
- (E) the on-site storage, preparation, and sale of agricultural products principally produced on the farm; or
- (F) the on-site storage, preparation, production, and sale of fuel or power from agricultural products or wastes principally produced on the farm; or
- (G) the raising, feeding, or management of four or more equines owned or boarded by the farmer, including training, showing, and providing instruction and lessons in riding, training, and the management of equines; or
- (H) the importation of 2,000 cubic yards per year or less of food residuals or food processing residuals onto a farm for the production of compost, provided that:
  - (i) the compost is principally used on the farm where it is produced; or
  - (ii) the compost is produced on a small farm that raises or manages poultry.

Most farming activities may result in byproducts or wastes that could be used for “plant[s] using methane derived from an agricultural operation.”<sup>27</sup> As the PUC stated in Docket

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<sup>26</sup> 10 V.S.A. § 6001(22)(A)-(H).

<sup>27</sup> 30 V.S.A. § 248(q)(1).

7533, “it is possible that a centrally located digester could be located on a non-farm site,” while maintaining the required 51% of the feedstock derived from agricultural operations.<sup>28</sup>

In addition, many farming activities otherwise rely on wood and/or timber and are properly incorporated into the “farming” definition. As Vermont’s Supreme Court recognized, “ample evidence supports the trial court’s finding that processing lumber from timber harvested on site and using it for farm related purposes are practices long and intimately associated with farming in Vermont.”<sup>29</sup> Accordingly, to the extent farms harvest trees and use the resulting products and/or waste for their farm operations, AAFM believes the resultant “feedstock” is necessarily derived from an “agricultural operation.” Similarly covered activities on a farm could include cutting and splitting wood to heat farm structures and infrastructure, harvesting wood to build farm structures or fences, chipping wood for animal bedding, and managing riparian forest buffers important to protect farm water quality. AAFM believes many farming activities create significant wood products and/or wood waste, and that those feedstocks are plainly ‘derived from an agricultural operation’ and properly subject to regulation under 30 V.S.A. § 248(q)(1).

#### **B. Defining “agricultural operation.”**

The more difficult question is whether timber harvested from a farm for activities not directly related to “farming” activities is derived from “an agricultural operation.” As noted above, most farms are heavily forested, and farms own large parcels of forestlands and trees. The question is whether “an agricultural operation” refers to the farm business entity, or exclusively

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<sup>28</sup> *Second Order Re Implementation Issues*, Docket 7533, Order of 10/28/09 at 6.

<sup>29</sup> *In re Moore Accessory Structure Permit and Use*, 2013 VT 54, ¶ 12, 194 Vt. 159, 75 A.3d 625 (2013).

to specific “farming activities” the farm conducts. AAFM is unaware of any specific insight into the legislature’s intent and does not have compelling guidance for this issue of statutory construction. Nevertheless, AAFM shares some related thoughts.

First, AAFM does not consider logging for non-farm purposes to constitute “farming” within the meaning of 10 V.S.A. § 6001(22). AAFM does not merge or conflate the terms “farming” and “logging” within the cited Act 250 definition of “farming,” because Act 250 separately describes “logging,” “forestry,” and “farming.”<sup>30</sup> This differentiation suggests that while the terms may overlap, they are not synonymous. Moreover, while AAFM regulates “farming,”<sup>31</sup> it does not regulate “logging” or “forestry” that is unrelated to farming activities. Instead, the Department of Forest Parks and Recreation (FPR) regulates silvicultural practices through its Acceptable Management Practices (AMPs) for Maintaining Water Quality on Logging Jobs in Vermont.<sup>32</sup> Similarly, the State’s limitations on municipal zoning bylaws reinforces a distinction between forestry and farming, as the legislature adopted separate exemptions for forestry (or “silvicultural operations”)<sup>33</sup> and farming.<sup>34</sup>

While distinct governmental agencies regulate farming and forestry activities for environmental purposes in Vermont, AAFM recognizes the potential argument that any “other use of land for growing...fiber”<sup>35</sup> could be considered “farming.” Accordingly, the natural growth of trees (or ‘fiber’) for pulp or any other forestry use could arguably be construed as “farming.” While AAFM recognizes the argument, we do not support the potential interpretation

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<sup>30</sup> See 10 V.S.A. § 6001 (3)(D)(i).

<sup>31</sup> See 6 V.S.A. § 4802(2).

<sup>32</sup> See 10 V.S.A. § 2622.

<sup>33</sup> See 24 V.S.A. § 4413(d)(1)(B).

<sup>34</sup> See 24 V.S.A. § 4413(d)(1)(A).

<sup>35</sup> See 10 V.S.A. § 6001 (22)(A).

as it would result in AAFM’s regulation of “forestry” activities that DFR already regulates.

AAFM believes it could be redundant, inefficient, and potentially contradictory for both Agencies to simultaneously apply different regulations to the same forestry activities. That said, AAFM believes that “cultivating the land” to grow “fiber” crops—including some types of trees for some purposes—fits squarely within the “farming” definition. But, AAFM does not regulate typical forestry practices that are unrelated to farming, like harvesting trees for pulp, lumber, or firewood. Trees are present, plentiful, and important on farm parcels, and their growth and management may constitute “farming,” but AAFM does not believe logging or forestry activities unrelated to farming activities are properly construed as “farming” under 10 V.S.A. 6001(22).

Second, while “an agricultural operation” necessarily engages in “farming,” a farm is also reasonably described as “an agricultural operation.” Farms own and utilize significant forestlands. Given that “feedstock from off-site farms” is eligible for the Standard Offer Program when derived from “an agricultural operation,” and that “an agricultural operation” is not defined and is arguably broad and/or refers to the farm business entity, there is an argument that wood or wood waste from a farm-owned forestlands is “feedstock” from “an agricultural operation.” AAFM does not have any special expertise in defining the full scope of the term “an agricultural operation” within the meaning of 30 V.S.A. § 248(q)(1).

Third, Vermont farmland is rapidly disappearing, and Vermont farms are vulnerable to natural disasters and a variety of economic and regulatory pressures. Although dairy has long been agriculture’s principal economic driver in Vermont, Vermont has lost 350 dairy farms, 14,000 dairy cows, and 72,000 acres of cropland and pasture since 2016. As of January 2025, only 441 cow dairies remain in the State. Farm diversification and adding revenue streams has long been encouraged and is often critical to farm viability. Petitioner’s proposed project may

deliver multiple co-benefits, and may provide an important additional revenue stream to help keep farms—or agricultural operations—in business.

If the project is built as described, Petitioner will generate renewable energy in Vermont from feedstock that is primarily derived from farms. The project could significantly benefit local working lands in a rural part of the State that depends on farms and needs economic opportunities. Allowing farms to utilize a novel revenue source from an existing natural resource on their farms could provide an additional economic benefit to farmers and loggers, while replacing fossil-fuel based energy sources and combating climate change. Arguably, the proposed project serves the public good while simultaneously benefiting farmers and the local rural economy.

#### IV. CONCLUSION

AAFV respectfully contends that Petitioner satisfies the requirements of 30 VSA § 248(q)(1)(B) when a majority of its feedstock is derived from “farming” activities from off-site farms. Farms are involved in many farming activities that generate woody biomass products and/or waste. However, Petitioner also plans to utilize woody biomass harvested from farms’ woodlots from logging and/or forestry activities. The pertinent related question is whether forestry products or waste harvested on a farm constitutes feedstock “derived from an agricultural operation.” If “an agricultural operation” refers to the farm business entity, then forestry activities on farms should produce eligible feedstock. If “an agricultural operation” refers exclusively to the specific “farming” activities defined in Act 250, then forestry byproducts harvested on farms do not appear to be eligible feedstock.

When determining what constitutes “an agricultural operation,” it may be helpful to evaluate the objectives of the statutory framework and the intended beneficiaries. If the statute is designed to generate renewable energy while supporting farms, then construing “an agricultural operation” to encompass forestry activities on farms seems warranted. Alternatively, if the statute is intended to be tethered to a farm’s specific farming activities instead of its broader “operations,” then forestry activities on farms likely do not generate eligible feedstock.

AAFM is hopeful that Petitioner can meaningfully demonstrate how it will use a majority of its feedstock from agricultural operations—regardless of how the PUC chooses to define the term. AAFM believes a properly constructed project in Lyndon could substantially benefit farmers, loggers, foresters, and rural communities, while also providing a source of energy renewably produced on Vermont farms. To remain viable, farmers would surely welcome another productive outlet for their products and/or waste. AAFM believes this project warrants thoughtful deliberation and careful consideration, and an opportunity to successfully operate within the appropriate legal parameters.

Dated at Montpelier, Vermont this 27<sup>th</sup> day of January 2025.

By: /s/ WillyJane Patry  
WillyJane Patry  
Agency of Agriculture, Food & Markets  
116 State Street  
Montpelier, VT 05620-2901  
802-261-1861  
willyjane.patry@vermont.gov