



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

13901 Crown Court, Woodbridge, Virginia 22193

(703) 583-3800 Fax (703) 583-3821

www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

STATE AIR POLLUTION CONTROL BOARD ENFORCEMENT ACTION - ORDER BY CONSENT ISSUED TO BIOMASS ENERGY, LLC

Registration No. 41057

SECTION A: Purpose

This is a Consent Order issued under the authority of Va. Code §§ 10.1-1309 and -1316, between the State Air Pollution Control Board and Biomass Energy, LLC for the purpose of resolving certain violations of the Virginia Air Pollution Control Law and the applicable permit and regulations.

SECTION B: Definitions

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

1. "Board" means the State Air Pollution Control Board, a permanent citizens' board of the Commonwealth of Virginia, as described in Va. Code §§ 10.1-1184 and -1301.
2. "Biomass Energy" means Biomass Energy, LLC, a limited liability company authorized to do business in Virginia and its members, affiliates, partners, and subsidiaries. Biomass Energy is a "person" within the meaning of Va. Code § 10.1-1300
3. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia, as described in Va. Code § 10.1-1183.
4. "Director" means the Director of the Department of Environmental Quality, as described in Va. Code § 10.1-1185.

5. "Facility" means the Biomass Energy, LLC facility, located at 1376 Fredericks Hall Road in Bumpass Virginia which is located in Louisa County, Virginia.
6. "Notice of Violation" or "NOV" means a type of Notice of Alleged Violation under Va. Code § 10.1-1309.
7. "NRO" means the Northern Regional Office of DEQ, located in Woodbridge, Virginia.
8. "Order" means this document, also known as a "Consent Order" or "Order by Consent," a type of Special Order under the Virginia Air Pollution Control Law.
9. "PCE" means a partial compliance evaluation by DEQ staff.
10. "Permit" means a Minor New Source Review (NSR) permit to modify and operate a wood pellet manufacturing facility, which was issued under the Virginia Air Pollution Control Law and the Regulations to WoodFuels Virginia, LLC on December 17, 2010 and which was amended on February 2, 2011, and May 5, 2011.
11. "Regulations" or "Regulations for the Control and Abatement of Air Pollution" mean 9 VAC 5 chapters 10 through 80.
12. "Va. Code" means the Code of Virginia (1950), as amended.
13. "VAC" means the Virginia Administrative Code.
14. "Virginia Air Pollution Control Law" means Chapter 13 (§ 10.1-1300 *et seq.*) of Title 10.1 of the Va. Code.
15. "VEE" means a Visible Emissions Evaluation, as determined by EPA Method 9 (*see* 40 CFR 60, Appendix A).
16. "WoodFuels" means WoodFuels Virginia, LLC. WoodFuels Virginia, LLC formerly owned and operated the Facility until August 25, 2011.

SECTION C: Findings of Fact and Conclusions of Law

1. Biomass Energy, previously known as WoodFuels, owns and operates the Facility in Bumpass, Virginia. The Facility is the subject of the Permit which allows Biomass Energy to modify and operate a wood pellet manufacturing facility. The equipment permitted at the Facility includes but is not limited to an Ecotherm low temperature wood burner and dryer, an Earth Care Products low temperature wood burner and dryer, and 3 Pellet Hammer mills.

2. On March 4, 2011, Department staff conducted a PCE at the Facility in part, to determine compliance with the requirements of the Virginia Air Pollution Control Law, the Permit, and the Regulations. Based on the evaluation, Department staff made the following observation:
 - a) Fugitive dust emissions were observed being generated from vehicle traffic traveling on the plant's haul roads. DEQ did not observe any fugitive dust emission controls in place.
3. Permit Condition 6(a) requires that fugitive dust and fugitive emission controls include the following, or equivalent, as approved by DEQ: (a) Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; paving of roadways, and maintenance of roadways in a clean condition.
4. 9 VAC 5-50-20E requires that at all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
5. On March 9, 2011, based on the evaluation, the Department issued a Notice of Violation to WoodFuels for the violations described in paragraphs C(2) through C(4), above.
6. On March 15, 2011, Department staff conducted a PCE at the Facility to observe VEE and stack testing for compliance with the requirements of the Virginia Air Pollution Control Law, the Permit, and the Regulations. Based on the evaluation, Department staff made the following observation:
 - a. During the VEEs, DEQ informed the company performing the VEEs, Environmental Source Samplers Inc., and Quentin Cannatella with Environmental Resource Management, the environmental contractor representing WoodFuels, that EPA Method 9 could not be accurately performed because of environmental conditions.
7. On March 21, 2011, WoodFuels submitted a written response to the March 9, 2011 NOV which included a summary of actions taken to address the fugitive dust emissions.

8. On April 26, 2011, Department staff met with representatives of WoodFuels to discuss the violations, including WoodFuel's written response and a fugitive dust control practices plan.
9. On May 19, 2011, Department staff conducted a PCE of the Facility record and Stack test results submitted by Woodfuels on May 16, 2011 for compliance with the requirements of the Virginia Air Pollution Control Law, the Permit, and the Regulations. Based on the evaluation, Department staff made the following observation:
 - a) The VEEs conducted on the Ecotherm process line, and the Baghouse (APC -03), Green Hammer Mill Cyclone (APC-05), Pellet Mill Cyclones 1 and 3 (APC-06 and 08), and the Pellet Cooler and Pellet Screener (APC-09). DEQ learned during a January 26, 2012, meeting with Facility representatives that VEEs were not conducted on Pellet Mill Cyclone #2 (APC-07) because of an equipment failure. The testing was completed by Environmental Source Samplers on March 15, 2011. The results from the VEEs conducted on March 15, 2011, were unacceptable because environmental conditions at the time of testing were such that an accurate U.S. EPA Reference Method 9 VEE could not be conducted.
 - b) The May 16, 2011, VEE testing report had no information demonstrating that a valid Method 9 VEE was conducted on the Pellet Mill Cyclone #2 (APC-07).
10. Permit Condition 21 requires that VEEs for initial compliance determination, in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted on the cyclone that is not tested for PM, NO_x, CO, and VOCs. The evaluation shall be performed within ninety days after permit issuance (i.e., by March 16, 2011).
11. Permit Condition 22 requires that VEEs for initial compliance determination, in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted on the bag house (Ref. No. APC-03), the Green Hammer Mill Cyclone (APC-05), pellet mill cyclones (Ref. Nos. APC-06, 07, and 08) and the pellet cooler and pellet screener (Ref. No. APC-09). The evaluation shall be performed within ninety days after permit issuance (i.e., by March 16, 2011).
12. On May 31, 2011, based on the March 15, 2011 evaluation and follow-up information, the Department issued a Notice of Violation to WoodFuels for the violations described in paragraphs C(9) through C(11), above.
13. On June 23, 2011, Department staff conducted a PCE at the Facility in part, to determine compliance with the requirements of the Virginia Air Pollution Control Law, the Permit, and the Regulations. While onsite Department staff conducted a VEE in accordance with U.S. EPA Reference Method 9, on the cyclone exhaust stacks (APC-01 and APC-02) of the Ecotherm and Earth Care wood-fired dryers, and on the cyclone exhaust stack (APC-06) of Pellet Mill 1. Based on the evaluation and follow-up information, Department staff made the following observations:

- a) Department staff observed sawdust accumulated on the belt conveying system that transports sawdust/woodchips into the pellet mill plant. Accumulations of sawdust and woodchips were also observed on the roof of the pellet mill plant and the transfer point where sawdust leaves a belt conveyer and drops into the wood screener located inside the pellet mill plant.
 - b) Department staff observed the sawdust become airborne by wind while on site.
 - c) Facility staff failed to employ any methods to clean-up or take reasonable precautions to prevent the particulate matter from becoming airborne while DEQ was onsite.
 - d) DEQ learned during a January 26, 2012 meeting with Facility representatives that Pellet Mill 2 had become clogged with sawdust, was inoperable and therefore VEEs on this unit could not be conducted.
 - e) The results of the VEEs conducted by Department staff indicate that opacity readings from the Earth Care Dryer and the Ecotherm Dryer exhaust stacks, and Pellet Mill 1 exceeded twenty percent opacity for more than one six-minute period in an hour during DEQ's evaluation of the units.
14. Permit Condition 18 states that visible emissions from the high efficiency cyclones (APC-01 & 02), the Green Hammer Mill Cyclone (Ref. No. APC-05), and the pellet mill cyclones (Ref. No. APC-06, 07, & 08) and pellet cooler and pellet screener (Ref. No. APC-09) shall not exceed twenty percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent opacity as determined by US EPA Method 9 (reference 40 CFR Part 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
15. 9 VAC 5-50-90 requires that during the construction, modification, or operation phase of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.
16. On June 30, 2011, based on the June 23, 2011, evaluation and follow-up information, the Department issued a Notice of Violation to WoodFuels for the violations described in paragraphs C(13) through C(15), above.
17. On August 2, 2011, Department staff met with representatives WoodFuels to discuss the aforementioned Notices of Violation and Facility responses. WoodFuels provided the Department with a daily operational log. This log noted that several operational issues occurred at the Facility between June 3, 2011 and July 28, 2011.

18. On August 11, 2011, Department staff conducted a PCE of the Facility record and VEE results submitted by Woodfuels on August 1, 2011, to determine compliance with the requirements of the Virginia Air Pollution Control Law, the Permit, and the Regulations. Based on the evaluation, Department staff made the following observation:
 - a) The VEE results noted that VEEs were performed at the Facility on June 29, 2011 on the Ecotherm Dryer, Pellet Mill #2, and the Pellet Cooler; on July 1, 2011, on Pellet Mill #1; on July 5, 2011, on the Earth Care Dryer Baghouse, and Green Hammer Mill; and on July 6, 2011, on Pellet Mill #3. DEQ was not notified that WoodFuels was performing testing on the above dates, and therefore was not present when VEEs were conducted.
 - b) The report does not contain all the necessary information pursuant to the DEQ approved VEE testing protocols previously submitted by WoodFuels, or the test report format enclosed with the Permit to demonstrate the operating conditions of the equipment.
19. On August 25, 2011, change of name/ownership documentation was submitted to DEQ. This information noted that Biomass Energy, LLC is now the new owner and operator of the Facility.
20. On November 23, 2011, Biomass submitted VEE results to the Department. These results were reviewed and approved by the Department on December 28, 2011.
21. On December 5, 2011, Department staff conducted a PCE of the Facility in response to a citizen complaint and to determine compliance with the requirements of the Virginia Air Pollution Control Law, the Permit, and the Regulations. Based on the evaluation, Department staff made the following observations:
 - a) Fugitive dust emissions were observed, and appeared to be generated from vehicle traffic traveling on the plant's haul roads.
 - b) Department staff conducted a visible emissions observations of the pellet mill plant's operations and observed fugitive wood dust emissions being generated from one of the plant's conveyors. Staff also observed sawdust accumulated on the roof of the pellet mill plant and throughout the Facility's vehicle and foot traffic areas, as well as on some of the plant's stationary and mobile equipment.
 - c) The Facility only conducted 54 of the daily inspections in a 126 day period. The check sheet includes visual inspections that look for sawdust accumulations generated from plant processes.

22. Permit Condition 6(a) requires that fugitive dust and fugitive emission controls include the following, or equivalent, as approved by DEQ: (a) Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; paving of roadways, and maintenance of roadways in a clean condition.
23. 9 VAC 5-50-20E requires that at all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
24. Permit Condition 17 requires that visible fugitive emissions as determined by EPA Method 22 (reference 40 CFR 60, Appendix A) resulting from the collection, transfer, or handling of wood shall be remediated as soon as the condition is detected.
25. 9 VAC 5-50-90 requires that during the construction, modification, or operation Phase of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.
26. On December 9, 2011, based on the December 5, 2011, evaluation, the Department issued a Notice of Violation to Biomass for the violations described in paragraphs C(21) through C(25), above.
27. Based on the results of March 4, 2011, March 15, 2011, May 19, 2011, June 23, 2011, August 11, 2011, and December 5, 2011 evaluations, the April 26, 2011 and August 2, 2011 meetings, and documentation submitted on March 21, 2011 and August 25, 2011, the Board concludes that Biomass Energy has violated Permit Condition 6(a), 17, 18, 21, and 22, and 9 VAC 5-50-20E, and 9 VAC 5-50-90 as described in paragraphs C(3), C(4), C(10), C(11), C(14), C(15), C(22), C(23), C(24) and C(25) above.
28. In order for Biomass Energy to return to compliance, Department staff and representatives of Biomass Energy have agreed to the Schedule of Compliance, which is incorporated as Appendix A of this Order.

SECTION D: Agreement and Order

Accordingly, by virtue of the authority granted it in Va. Code §§ 10.1-1309 and -1316, the Board orders Biomass Energy, and Biomass Energy agrees to:

1. Perform the actions described in Appendix A of this Order; and
2. Pay a civil charge of \$49,960.95 within 30 days of the effective date of the Order in settlement of the violations cited in this Order.

Payment shall be made by check, certified check, money order or cashier's check payable to the "Treasurer of Virginia," and delivered to:

Receipts Control
Department of Environmental Quality
Post Office Box 1104
Richmond, Virginia 23218

Biomass Energy shall include its Federal Employer Identification Number (FEIN) with the civil charge payment and shall indicate that the payment is being made in accordance with the requirements of this Order for deposit into the Virginia Environmental Emergency Response Fund (VEERF).

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend this Order with the consent of Biomass Energy for good cause shown by Biomass Energy, or on its own motion pursuant to the Administrative Process Act, Va. Code § 2.2-4000 *et seq.*, after notice and opportunity to be heard.
2. This Order addresses and resolves only those violations specifically identified in Section C of this Order. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of the facility; or (3) taking subsequent action to enforce the Order.
3. For purposes of this Order and subsequent actions with respect to this Order only, Biomass Energy admits to the jurisdictional allegations, and agrees not to contest, but does not admit the findings of fact, and conclusions of law in this Order.
4. Biomass Energy consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order

5. Biomass Energy declares it has received fair and due process under the Administrative Process Act and the Virginia Air Pollution Control Law and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board to modify, rewrite, amend, or enforce this Order.
6. Failure by Biomass Energy to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority. Biomass does not waive any rights or objections it may have in any enforcement action by other federal, state, or local authorities arising out of the same or similar facts to those recited in this Order.
7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
8. Biomass Energy shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other unforeseeable circumstances beyond its control and not due to a lack of good faith or diligence on its part. Biomass Energy shall demonstrate that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. Biomass Energy shall notify the DEQ Regional Director verbally within 24 hours and in writing within three business days when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the Order. Such notice shall set forth:
 - a. the reasons for the delay or noncompliance;
 - b. the projected duration of any such delay or noncompliance;
 - c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and
 - d. the timetable by which such measures will be implemented and the date full compliance will be achieved.

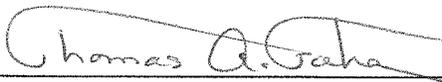
Failure to so notify the Regional Director verbally within 24 hours and in writing within three business days, of learning of any condition above, which the parties intend to assert will result in the impossibility of compliance, shall constitute a waiver of any claim to inability to comply with a requirement of this Order.

9. This Order is binding on the parties hereto and any successors in interest, designees and assigns, jointly and severally.
10. This Order shall become effective upon execution by both the Director or his designee and Biomass Energy. Nevertheless, Biomass Energy agrees to be bound by any compliance date which precedes the effective date of this Order.
11. This Order shall continue in effect until:
 - a. The Director or his designee terminates the Order after Biomass Energy has completed all of the requirements of the Order;
 - b. Biomass Energy petitions the Director or his designee to terminate the Order after it has completed all of the requirements of the Order and the Director or his designee approves the termination of the Order; or
 - c. the Director or Board terminates the Order in his or its sole discretion upon 30 days' written notice to Biomass Energy.

Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve Biomass Energy from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

12. Any plans, reports, schedules or specifications attached hereto or submitted by Biomass Energy and approved by the Department pursuant to this Order are incorporated into this Order. Any non-compliance with such approved documents shall be considered a violation of this Order.
13. The undersigned representative of Biomass Energy certifies that he or she is a responsible official authorized to enter into the terms and conditions of this Order and to execute and legally bind Biomass Energy to this document. Any documents to be submitted pursuant to this Order shall also be submitted by a responsible official of Biomass Energy.
14. This Order constitutes the entire agreement and understanding of the parties concerning settlement of the violations identified in Section C of this Order, and there are no representations, warranties, covenants, terms or conditions agreed upon between the parties other than those expressed in this Order.
15. By its signature below, Biomass Energy voluntarily agrees to the issuance of this Order.

And it is so ORDERED this 5th day of March, 2012



Thomas A. Faha, NRO Regional Director
Department of Environmental Quality

Biomass Energy LLC voluntarily agrees to the issuance of this Order.

Date: 3/1/12 By: MD Boivin, GM
(Person) (Title)
Biomass Energy LLC

Commonwealth of Virginia
City/County of HANOVER

The foregoing document was signed and acknowledged before me this 1 day of
MARCH, 2012, by MARK D BOIVIN who is
GENERAL MANAGER of Biomass Energy, LLC, on behalf of the company.

[Signature]
Notary Public

322828
Registration No.

My commission expires: 3.31.13

Notary seal: VA

APPENDIX A SCHEDULE OF COMPLIANCE

1. Permit

Biomass Energy shall submit a Permit Application to DEQ within 90 days of execution of this Order which shall make a request to incorporate the appropriate conditions of Appendix A into its Permit. Biomass Energy shall respond to requests from DEQ to provide additional information as requested, in a timely manner to deem the permit application complete.

2. Fugitive Dust/Emissions Control Plan:

Within 60 days of the execution of this Order, Biomass Energy shall submit for DEQ review and comment a Fugitive Dust/Emissions Control Plan that:

- Describes the practices and technologies that will be used to minimize airborne dust/particulate matter emissions from its haul roads, production processes and equipment, and other areas of the facility;
- Incorporates the use of best available control technologies/techniques for a wood pellet manufacturing facility;
- Describes procedures that will be implemented in response to citizen dust/particulate matter complaints and/or the detection of fugitive airborne dust and/or particulate matter accumulation by DEQ staff, including steps that will be taken to reduce such events;
- Includes procedures for making and documenting hourly visible emission observations, by plant staff, of plant emission points and fugitive emissions; and
- Includes the recordkeeping that will be used to document the actions taken to minimize the fugitive dust/emissions. A log of all dust complaints received, visible emission observations, and actions taken shall be kept and made available for inspection by authorized Federal, State or Local officials upon request.

Until such time that the Fugitive Dust/Emissions Control Plan is incorporated as part of the facility's Permit, the following provisions apply:

- A copy of the log entries of all dust complaints received, visible emission observations and corrective actions taken for each semi-annual period (January-June and July-December) shall be sent to the Air Compliance Manager, Northern Regional Office, within 10 days of the close of that semi-annual period.
- The Fugitive Dust/Emissions Control Plan shall be reviewed annually, by the permittee and evaluated for the need and feasibility of new or modified dust/fugitive emission control technology or practices. The results of this review and a modified plan (if applicable) shall be submitted to the Air Compliance Manager, Northern Regional Office, by November 1st of each year.

3. Certification of Documents and Reports

In accordance with 9 VAC 5-20-230(A), in all documents or reports, including, without limitation, the SEP Completion Report, submitted to DEQ pursuant to this Consent Order,

Biomass Energy shall by its officers, sign and certify under penalty of law that the information contained in such document or report is true, accurate, and not misleading by signing the following statement:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

4. DEO Contact

Unless otherwise specified in this Order, Biomass Energy shall submit all requirements of Appendix A of this Order to:

**Virginia Department of Environmental Quality
Northern Regional Office
Attention Enforcement
13901 Crown Court
Woodbridge, VA 22193**