STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY OFFICE OF THE DIRECTOR

In the matter of administrative proceedings against PWGG , LLC , doing business as)	
ISABELLA PELLET, a corporation organized under the laws of the State of Michigan and doing business at 6900 West Baseline Road, Village of Lake Isabella, County of Isabella, State of Michigan))))	AQD No. 43-2014 SRN: P0215

STIPULATION FOR ENTRY OF FINAL ORDER BY CONSENT

This proceeding resulted from allegations by the Michigan Department of Environmental Quality (MDEQ) Air Quality Division (AQD) against PWGG LLC, doing business as Isabella Pellet (Company), a Michigan corporation located at 6900 West Baseline in the Village of Lake Isabella, County of Isabella, State of Michigan, with State Registration Number (SRN) P0215. The MDEQ alleges that the Company is in violation of Part 55 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, the Michigan Administrative Code (MAC), 2008 AACS, R 336.1201 (Rule 201), and air use Permit to Install No. 30-11A. Specifically, the MDEQ alleges that the Company failed to timely obtain an air use permit to install prior to commencing construction of the facility; failed to timely raise the FGMATERIAL stack height and the EUDRYER stack height; and failed to timely submit to the AQD a stack testing protocol and failed to timely test for emissions from the wood pellet facility processes, as cited herein and in the Violation Notices dated March 22, 2011, April 17, 2012, May 29, 2012, October 9, 2012, June 20, 2013 and September 13, 2013, and the Enforcement Notice dated October 22, 2013. The Company and MDEQ stipulate to the termination of this proceeding by entry of this Stipulation for Entry of a Final Order by Consent (Consent Order).

The Company and MDEQ stipulate as follows:

1. The Natural Resources and Environmental Protection Act, 1994 PA 451 (Act 451), MCL 324.101 *et seq.* is an act that controls pollution to protect the environment and natural resources in this State.

2. Article II, Pollution Control, Part 55 of Act 451 (Part 55), MCL 324.5501 *et seq.* provides for air pollution control regulations in this State.

- 3. The MDEQ was created as a principal department within the Executive Branch of the State of Michigan pursuant to Executive Order 2011-1 and has all statutory authority, powers, duties, functions and responsibilities to administer and enforce all provisions of Part 55.
- 4. The Director has delegated authority to the Chief of the AQD (AQD Chief) to enter into this Consent Order.
- 5. The termination of this matter by a Consent Order pursuant to Section 5528 of Part 55 is proper and acceptable.
- 6. The Company and the MDEQ agree that the signing of this Consent Order is for settlement purposes only and does not constitute an admission by the Company that the law has been violated.
- 7. This Consent Order becomes effective on the date of execution (effective date of this Consent Order) by the AQD Chief.
- 8. The Company shall achieve compliance with the aforementioned regulations in accordance with the requirements contained in this Consent Order.

COMPLIANCE PROGRAM AND IMPLEMENTATION SCHEDULE

9. A. Air Use Permit to Install No. 30-11A

Air use Permit to Install No. 30-11A, and/or revisions or modifications made by mutual agreement of the parties, is incorporated by reference and attached as an enforceable document to this Consent Order as Exhibit A. Any such revisions or modifications, to the extent they conflict with requirements referenced in paragraph 9.B and 9.C., shall supersede those requirements.

B. Final Emission Limitations

- 1. On and after the effective date of this Consent Order, the visible emissions emission rate from the EUDRYER shall not exceed 20 percent opacity on a 6-minute average, except one 6-minute average per hour of not more than 27 percent, in accordance with 336.1301(Rule 301) and as specified in Exhibit A of this Consent Order.
- 2. On and after the effective date of this Consent Order, the visible emissions emission rate from the FGMATERIAL shall not exceed 20 percent opacity on a 6-minute average, except

one 6-minute average per hour of not more than 27 percent, in accordance with 336.1301(Rule 301) and as specified in Exhibit A of this Consent Order.

- On and after the effective date of this Consent Order, the Company shall comply with the emission limitations from the EUDRYER as specified in Exhibit A of this Consent Order.
- 4. On and after the effective date of this Consent Order, the Company shall comply with the emission limitations from the FGMATERIAL as specified in Exhibit A of this Consent Order.

C. Operating Conditions

- 1. On and after the effective date of this Consent Order, the Company shall not operate the EUDRYER unless an approved malfunction abatement plan (MAP) as described in R 336.1911 (Rule 911(2)) is implemented and maintained, as specified in Exhibit A of this Consent Order.
- 2. On and after the effective date of this Consent Order, the Company shall not operate the EUDRYER unless the high efficiency cyclone is installed, maintained and operated in a satisfactory matter as specified in Exhibit A of this Consent Order.
- 3. On and after the effective date of this Consent Order, the Company shall not process through FGWOODPELLETS more than 33,600 tons of green softwood chips per year on a 12-month rolling time period basis as determined at the end of each calendar month, in accordance with the requirements of Exhibit A of this Consent Order.
- 4. On and after the effective date of this Consent Order, the Company shall not operate the FGMATERAL unless a MAP as described in Rule 911(2) is implemented and maintained, as specified in Exhibit A of this Consent Order.
- 5. On and after the effective date of this Consent Order, the Company shall not operate the FGMATERIAL unless the baghouse is installed, maintained and operated in a satisfactory matter as specified in Exhibit A of this Consent Order.
- 6. On and after the effective date of this Consent Order, the Company shall not operate FGWOODPELLETS unless an acceptable program for continuous fugitive emissions control for all plant roadways, the plant yard, the storage pile and all material handling operations is implemented and maintained, as specified in Exhibit A and this Consent Order.

RECORDKEEPING AND REPORTING

10. On and after the effective date of this Consent Order, the Company shall keep separate records of the moisture content of the softwood chips in accordance with the requirements of Exhibit A of this Consent Order. This information shall be kept on file at the facility for a period of at least five (5) years, and shall be made available to MDEQ upon written or verbal request.

- 11. On and after the effective date of this Consent Order, the Company shall conduct daily visible emissions observations, either by a certified or a non-certified reader, as required in Emission Limit Special Condition No. I.1. Whenever visible emissions are observed, operational steps shall be immediately taken to reduce them. The time of the observation shall be recorded. Additionally, the corrective measures taken shall be detailed and recorded. Also, if visible emissions are observed, a USEPA Method 9 certified visible emissions observation, which is a 6-minute average reading consisting of 15 second data points, shall be conducted by a certified reader. Records shall be kept as specified in Exhibit A. The Company shall keep all records on file at the facility for a period of at least five years and shall make them available to the MDEQ upon written or verbal request.
- 12. On and after the effective date of this Consent Order, the Company shall monitor and record the tons per hour of green softwood chips processed in EUDRYER in a manner as approved by the AQD District Supervisor. Records shall be kept on file at the facility for a period of at least five (5) years, and shall be made available to MDEQ upon written or verbal request.
- 13. On and after the effective date of this Consent Order, the Company shall install, calibrate, maintain and operate, in a satisfactory manner, a device to monitor and record the temperature at the inlet of EUDRYER on a continuous basis. The Company shall keep all records on file at the facility for a period of at least five (5) years and shall make them available to the MDEQ upon written or verbal request.
- 14. On and after the effective date of this Consent Order, the Company shall keep a record of the fan setting and resultant air flow of the EUDRYER in a manner acceptable to the AQD Saginaw Bay District Supervisor in accordance with the requirements of Exhibit A of this Consent Order. This information shall be kept on file at the plant for a period of at least five (5) years, and shall be made available to the MDEQ upon written or verbal request.

15. On and after the effective date of this Consent Order, the Company shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the pressure drop across the baghouse, in accordance with the requirements of Exhibit A of this Consent Order.

- 16. On and after the effective date of this Consent Order, the Company shall monitor and record in a satisfactory manner, the amount of greenwood chips processed in tons of FGWOODPELLETS on a monthly and a 12-month rolling time period as determined at the end of each calendar month. The Company shall keep all records on file and make them available to the MDEQ upon written or verbal request.
- 17. On and after the effective date of this Consent Order, the Company shall record the date raw wood chip material is delivered to the Company for the storage pile and the date that the storage pile is exhausted, to demonstrate compliance with the requirements for FGWOODPELLETS specified in Exhibit A. The Company shall keep records in a manner acceptable to the AQD Saginaw Bay District Supervisor in accordance with the requirements of Exhibit A of this Consent Order. This information shall be kept on file at the plant for a period of at least five (5) years, and shall be made available to the MDEQ upon written or verbal request.

TESTING

- 18. A. On June 17, 2014 the Company conducted stack testing to verify compliance with visible emissions, carbon monoxide (CO), volatile organic compounds (VOC) and formaldehyde concentrations from the EUDRYER by testing in accordance with methods and procedures approved by the AQD Saginaw Bay District Office District Supervisor and the Technical Programs Unit of the AQD to demonstrate compliance with the emission limitations specified in Condition I. Emission Limits of Exhibit A of this Consent Order.
- B. On July 21, 2014, the Company submitted to the AQD Saginaw Bay District Supervisor and Technical Programs Unit Supervisor a complete and acceptable test report.

GENERAL PROVISIONS

19. On and after the effective date of this Consent Order, except as otherwise provided by the administrative rules of Part 55, the Company shall not install, construct, reconstruct, relocate, alter, or

modify any process or process equipment including control equipment pertaining thereto, which may emit an air contaminant, unless a permit to install which authorizes such action is issued by the MDEQ pursuant to Rule 201, the Company is issued a waiver pursuant to Rule 202, or the change is exempt from the requirements of Rule 201.

- 20. This Consent Order in no way affects the Company's responsibility to comply with any other applicable state and federal, or local laws or regulations, including without limitation, any amendments to the federal Clean Air Act, 42 USC 7401 *et seq.*, Act 451, Part 55 or their rules and regulations, or to the State Implementation Plan.
- 21. This Consent Order constitutes a civil settlement and satisfaction as to the resolution of the violations specifically addressed herein; however, it does not resolve any criminal action that may result from these same violations.
- 22. The Company shall pay to the General Fund of the State of Michigan, in the form of checks made payable to the "State of Michigan" and mailed to the Michigan Department of Environmental Quality, Accounting Services Division, Cashier's Office, P.O. Box 30657, Lansing, Michigan 48909-8157, a settlement amount of \$18,00.00 which includes AQD costs for investigation and enforcement. The first payment shall be made within thirty (30) days after the effective date of this Consent Order, in the amount of \$4,000.00. Thereafter, the Company shall pay four (4) equal additional payments of \$3,500.00 by the following dates: December 1, 2014; March 30, 2015; September 30 2015; March 30, 2016. To ensure proper credit, all payments made pursuant to this Consent Order shall include the "Payment Identification Number AQD40050" on the front of the checks and/or in the cover letter with the payment. This settlement amount is in addition to any fees, taxes, or other fines that may be imposed on the Company by law.
- On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 19 of this Consent Order, the Company is subject to a stipulated fine of up to \$10,000.00 per violation. On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 18 of this Consent Order, the Company is subject to stipulated fines of up to \$5,000.00 per violation per day. On and after the effective date of this Consent Order, if the Company fails to comply with paragraphs 9.B or 9.C of this Consent Order, the Company is subject to stipulated fines of up to \$3,500.00 per violation per day. On and after the effective date of this Consent Order, if the Company

fails to comply with paragraphs 10, 11, 12, 13, 14, 15, 16, or 17 of this Consent Order, the Company is subject to stipulated fines of up to \$2,500.00 per violation per day. On and after the effective date of this Consent Order, if the Company fails to comply with any other provision of Exhibit A or this Consent Order, the Company is subject to a stipulated fine of up to \$500.00 per violation. The amount of the stipulated fines imposed pursuant to this paragraph shall be within the discretion of the MDEQ. Stipulated fines submitted under this Consent Order shall be by check, payable to the State of Michigan within thirty (30) days of written demand and shall be delivered to the Michigan Department of Environmental Quality, Financial and Business Services Division, Revenue Control, P.O. Box 30657, Lansing, Michigan 48909-8157. To ensure proper credit, all payments shall include the Agreement Identification No. AQD40050-S on the face of the check. Payment of stipulated fines shall not alter or modify in any way the Company's obligation to comply with the terms and conditions of this Consent Order.

- 24. The AQD, at its discretion, may seek stipulated fines or statutory fines for any violation of this Consent Order which is also a violation of any provision of applicable federal and state law, rule, regulation, permit, or MDEQ administrative order. However, the AQD is precluded from seeking both a stipulated fine under this Consent Order and a statutory fine for the same violation.
- 25. To ensure timely payment of the settlement amount assessed in paragraph 22 and any stipulated fines assessed pursuant to paragraph 23 of this Consent Order, the Company shall pay an interest penalty to the State of Michigan each time it fails to make a complete or timely payment under this Consent Order. The interest penalty shall be determined at a rate of twelve percent (12%) per year compounded annually, using the full increment of amount due as principal, calculated from the due date specified in this Consent Order until the date that delinquent payment is finally paid in full. Payment of an interest penalty by the Company shall be made to the State of Michigan in accordance with paragraph 22 of this Consent Order. Interest payments shall be applied first towards the most overdue amount or outstanding interest penalty owed by the Company before any remaining balance is applied to subsequent payment amount or interest penalty.
- 26. The Company agrees not to contest the legal basis for the settlement amount assessed pursuant to paragraph 22. The Company also agrees not to contest the legal basis for any stipulated fines assessed pursuant to paragraph 23 of this Consent Order, but reserves the right to dispute in a court of

competent jurisdiction the factual basis upon which a demand by MDEQ of stipulated fines is made. In addition, the Company agrees that said fines have not been assessed by the MDEQ pursuant to Section 5529 of Part 55 and therefore are not reviewable under Section 5529 of Part 55.

- 27. The compliance program and implementation schedule in this Consent Order is not a variance subject to the 12 month limitation specified in Section 5538 of Part 55.
- 28. This Consent Order shall remain in full force and effect for a period of at least four (4) years. Thereafter, the Consent Order shall terminate only upon written notice of termination issued by the AQD Chief. Prior to issuance of a written notice of termination, the Company shall submit a request, to the AQD Chief at the Michigan Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, consisting of a written certification that the Company has fully complied with all the requirements of this Consent Order and has made all payments including all stipulated fines required by this Consent Order. Specifically, this certification shall include: (i) the date of compliance with each provision of the compliance program and the date any payments or stipulated fines were paid; (ii) a statement that all required information has been reported to the AQD Saginaw Bay District Supervisor; (iii) confirmation that all records required to be maintained pursuant to this Consent Order are being maintained at the facility; and, (iv) such information as may be requested by the AQD Chief.
- 29. In the event the Company sells or transfers the facility, with SRN P0215, it shall advise any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within thirty (30) calendar days, the Company shall also notify the AQD Saginaw Bay District Supervisor, in writing, of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Consent Order has been given to the purchaser and/or transferee. As a condition of the sale, the Company (PWGG, LLC, d/b/a Isabella Pellet) must obtain the consent of the purchaser and/or transferee, in writing, to assume all of the obligations of this Consent Order. A copy of that agreement shall be forwarded to the AQD Saginaw Bay District Supervisor within thirty (30) days of assuming the obligations of this Consent Order.
- 30. Prior to the effective date of this Consent Order and pursuant to the requirements of Sections 5511 and 5528(3) of Part 55, the public was notified of a 30-day public comment period and was provided the opportunity for a public hearing.

31. Section 5530 of Part 55 may serve as a source of authority but not a limitation under which the Consent Order may be enforced. Further, Part 17 of Act 451 and all other applicable laws and any other legal basis or applicable statute may be used to enforce this Consent Order.

32. The Company hereby stipulates that entry of this Consent Order is a result of an action by MDEQ to resolve alleged violations of its facility located at 6900 West Baseline Road, in Lake Isabella, Michigan. The Company further stipulates that it will take all lawful actions necessary to fully comply with this Consent Order, even if the Company files for bankruptcy in the future. The Company will not seek discharge of the settlement amount and any stipulated fines imposed hereunder in any future bankruptcy proceedings, and the Company will take necessary steps to ensure that the settlement amount and any future stipulated fines are not discharged. The Company, during and after any future bankruptcy proceedings, will ensure that the settlement amount and any future stipulated fines remain an obligation to be paid in full by the Company to the extent allowed by applicable bankruptcy law.

The undersigned certifies that he/she is fully authorized by the Company to enter into this Consent Order and to execute and legally bind the Company to it.

James	Brock	Gutie.	rez	-Partner
Print Name a				
Signature C	9	Date;	9-	4-14

The above signatory subscribed and sworn to before me this 4th day of September , 2014.

حالمعطمئ

MEATHER COOK
NOTARY PUBLIC - STATE OF MICHIGAN
COUNTY OF ISABELLA
My Commission Expires July 06, 20

Approved as to Form:

Approved as to Content:

Lynn Fiedler, Acting Chief
AIR QUALITY DIVISION
DEPARTMENT OF

ENVIRONMENTAL QUALITY

Dated: 9/16/14

ENVIRONMENTAL REGULATION SECTION ENVIRONMENT, NATURAL RESOURCES, AND AGRICULTURE DIVISION

DEPARTMENT OF ATTORNEY GENERAL

Dated:

FINAL ORDER

The Chief of the Air Quality Division having had opportunity to review the Consent Order and

having been delegated authority to enter into Consent Orders by the Director of the Michigan Department

of Environmental Quality pursuant to the provisions of Part 55 of Act 451 and otherwise being fully

advised on the premises,

HAS HEREBY ORDERED that the Consent Order is approved and shall be entered in the record of the

MDEQ as a Final Order.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Macy an Dolcharty
Lynn Fiedler, Acting Chief
Air Quality Division

Effective Date: 9/16/14

Exhibit A

Permit to Install No. 30-11A

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

May 10, 2013

PERMIT TO INSTALL 30-11A

ISSUED TO PWGG, LLC

LOCATED AT 6900 West Baseline Road Lake Isabella, Michigan

IN THE COUNTY OF Isabella

STATE REGISTRATION NUMBER P0215

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: February 8, 2013				
DATE PERMIT TO INSTALL APPROVED: May 10, 2013	SIGNATURE: G. Vinson Hellwig, Chief			
DATE PERMIT VOIDED:	SIGNATURE:			
DATE PERMIT REVOKED:	SIGNATURE:			

PERMIT TO INSTALL

Table of Contents

Section	Page
Alphabetical Listing of Common Abbreviations / Acronyms	2
General Conditions	3
Special Conditions	5
Emission Unit Summary Table	5
Special Conditions for EUDRYER	6
Flexible Group Summary Table	10
FGMATERIAL	10
Special Conditions for FGWOODPELLETS	13

Common Abbreviations / Acronyms

	Common Acronyms	Pollutant / Measurement Abbreviations		
AQD	Air Quality Division	BTU British Thermal Unit		
BACT	Best Available Control Technology	°C	Degrees Celsius	
CAA	Clean Air Act	co	Carbon Monoxide	
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot	
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter	
CO ₂ e	Carbon Dioxide Equivalent	°F	Degrees Fahrenheit	
COM	Continuous Opacity Monitoring	gr	Grains	
EPA	Environmental Protection Agency	Hg	Mercury	
EU	Emission Unit	hr	Hour	
FG	Flexible Group	H ₂ S	Hydrogen Sulfide	
GACS	Gallon of Applied Coating Solids	hp	Horsepower	
GC	General Condition	lb	Pound	
GHGs	Greenhouse Gases	kW	Kilowatt	
HAP	Hazardous Air Pollutant	m	Meter	
HVLP	High Volume Low Pressure *	mg	Milligram	
ID	Identification	mm	Millimeter	
LAER	Lowest Achievable Emission Rate	MM	Million	
MACT	Maximum Achievable Control Technology	MW	Megawatts	
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram	
MAP	Malfunction Abatement Plan	NO _x	Oxides of Nitrogen	
MDEQ	Michigan Department of Environmental Quality (Department)	PM	Particulate Matter	
MSDS	Material Safety Data Sheet	PM10	PM with aerodynamic diameter ≤10 microns	
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	PM with aerodynamic diameter ≤ 2.5 microns	
NSPS	New Source Performance Standards	pph	Pounds per hour	
NSR	New Source Review	ppm	Parts per million	
PS	Performance Specification	ppmv	Parts per million by volume	
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight	
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute	
PTI	Permit to Install	psig	Pounds per square inch gauge	
RACT	Reasonably Available Control Technology	scf	Standard cubic feet	
ROP	Renewable Operating Permit	sec	Seconds	
SC	Special Condition	SO ₂	Sulfur Dioxide	
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons	
SRN	State Registration Number	tpy	Tons per year	
TAC	Toxic Air Contaminant	μg	Microgram	
TEQ	Toxicity Equivalence Quotient	VOC	Volatile Organic Compound	
VE	Visible Emissions	yr	Year	

^{*} For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

GENERAL CONDITIONS

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. (R 336.1301)
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this Permit to Install.
- 12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. (R 336.2001)

SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUDRYER	A 20 MMBtu per hour softwood burner with a 4.5 ton per hr (3.02 ODT/hr) rotary dryer that will dry virgin softwood chips. Softwood is defined as the wood of an evergreen tree. The dryer is controlled by a high efficiency cyclone.		FGWOODPELLETS
EUHAMMERMILL	A hammer mill used to pulverize the wood chips, which is controlled by a baghouse.	June 2011	FGMATERIAL FGWOODPELLETS
EUPELLETMILL	The pellet mill extrudes the wood pellets from the wood chips, which is controlled by a baghouse.		FGMATERIAL FGWOODPELLETS
EUCOOLER	A cooler which cools the wood pellets after extrusion, which is controlled by a baghouse.	June 2011	FGMATERIAL FGWOODPELLETS
EUBAGGING	The bagging operation bags the chips after they are cooled, which is controlled by a baghouse.	June 2011	FGMATERIAL FGWOODPELLETS
Changes to the equipm	ent described in this table are subject to the requ	uirements of R 336 1	201 except as allowed

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.

PWGG, LLC (P0215)

Permit No. 30-11A

May 10, 2013

Page 6 of 14

The following conditions apply to: EUDRYER

<u>DESCRIPTION</u>: A 20 MMBtu per hour softwood burner with a 4.5 ton per hour (3.02 ODT/hr) rotary dryer that will dry virgin softwood chips. Softwood is defined as the wood of an evergreen tree. The dryer is controlled by a high efficiency cyclone.

Flexible Group ID: FGWOODPELLETS

POLLUTION CONTROL EQUIPMENT: High Efficiency Cyclone

I. EMISSION LIMITS

		Time Period /		Testing /	
Pollutant	Limit	Operating Scenario	Equipment	Monitoring Method	Underlying Applicable Requirements
 Visible 	20 percent	6-minute average	EUDRYER	SC V.1,	R 336.1301(1)(c)
Emissions	opacity	except one 6- minute average per hour of not more than 27 percent		SC VI.2	
2. PM	0.10 lb per 1000 lb of exhaust gases calculated on a "dry" gas basis	Test protocol*	EUDRYER	GC 13	R 336.1331(1)(a)
3. PM10	7.61 pph	Test protocol*	EUDRYER	GC 13	R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
4. PM2.5	7.61 pph	Test protocol*	EUDRYER	GC 13	R 336.2804, 40 CFR 52.21 (d)
5. NOx	2.3 pph	Test protocol*	EUDRYER	GC 13	R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
6. CO	16.5 pph	Test protocol*	EUDRYER	GC 13	R 336.2804, 40 CFR 52.21(d)
7. CO	201.2 ppmv	Test Protocol*	EUDRYER	SC V.1	R 336.2804, 40 CFR 52.21(d)
8. VOC (as propane)	20.4 pph	Test protocol*	EUDRYER	GC 13	R 336.1702(a)
9. VOC (as propane)	158.3 ppmv	Test protocol*	EUDRYER	SC V.1	R 336.1702(a)
10. Formaldehyde ¹ (CAS 50-00-0)	0.8 pph	Test protocol*	EUDRYER	GC 13	R 336.1224, R 336.1225
11. Formaldehyde ¹ (CAS 50-00-0)	9.1 ppmv	Test protocol*	EUDRYER	SC V.1	R 336.1224, R 336.1225
*Test protocol shall:	specify averaging t	ime.			

II. MATERIAL LIMITS

1. The permittee shall only combust dried softwood in the burner of EUDRYER. (R 336.1205(1)(a), R 336.1224, R 336.1702, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))

PWGG, LLC (P0215) May 10, 2013 Permit No. 30-11A Page 7 of 14

2. The permittee shall only process virgin softwood chips in EUDRYER. (R 336.1224, R 336.1702, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))

- The permittee shall not process more than 4.5 tons per hour of green softwood through EUDRYER. (R 336.1205(3), R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))
- 4. The moisture content of the softwood chips fed into EUDRYER shall not exceed 45 percent by weight. (R 336.1225, R 336.1702, R 336.1901)

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate EUDRYER unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the process and emission control equipment, has been submitted within 90 days of permit issuance for AQD District Supervisor review and approval, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. (R 336.1224, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

- 2. The permittee shall not operate EUDRYER unless an acceptable plan that describes how emissions will be minimized during all startups and shutdowns has been submitted to the AQD District Supervisor for review and approval within 90 days after the issuance of this permit, and is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer, if available, as well as incorporating standard industry practices. (R 336.1911, R 336.1912)
- 3. The temperature at the inlet of EUDRYER shall not exceed 850 degrees Fahrenheit. (R 336.1225, R 336.1702, R 336.1901)

IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The maximum design heat input capacity of burner portion of EUDRYER shall not exceed 20 MMBtu per hour on a fuel heat input basis, as certified by the equipment manufacturer. (R 336.1205(1)(a), R 336.1224, R 336.1702, R 336.1901)
- 2. The permittee shall not operate EUDRYER unless the high efficiency cyclone is installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control

device in accordance with an approved MAP for EUDRYER as required in SC III.1. (R 336.1301, R 336.1901, R 336.1910, R 336.1911)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. No later than October 1, 2013, the permittee shall verify visible emissions, CO, VOC, and formaldehyde concentrations from EUDRYER by testing at owner's expense, in accordance with Department requirements. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. The permittee shall submit a complete report of the test results to the AQD by December 1, 2013. (R 336.1301, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d), R 336.2001, R 336.2003, R 336.2004)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations/records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1301, R 336.1331, R 336.1702, R 336.1901, R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 2. The permittee shall conduct daily visible emissions observations, either by a certified or a non-certified reader, as required in Emission Limit SC I.1. If visible emissions are observed, a USEPA Method 9 certified visible emissions observation, which is a 6-minute average reading consisting of 15 second data points, shall be conducted by a certified reader. Records shall include the visible emissions observations (date, time, name of reader, whether the reader is certified or not), causes of abnormal opacity, corrective actions, and the results of such actions. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. (R 336.1301, R 336.1331, R 336.1910)
- 3. The permittee shall monitor and record the moisture content of the softwood chips fed into EUDRYER, on a daily basis, in a manner as approved by the AQD Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1225, R 336.1702, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 4. The permittee shall monitor and record, the tons per hour of green softwood chips processed in EUDRYER, in a manner as approved by the AQD Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1225, R 336.1331, R 336.1702, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 5. The permittee shall install, calibrate, maintain and operate, in a satisfactory manner, a device to monitor and record the temperature at the inlet of EUDRYER on a continuous basis. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 6. The permittee shall keep a record of the fan setting and resultant air flow of EUDRYER in a manner acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

VII. REPORTING

PWGG, LLC (P0215)

Permit No. 30-11A

May 10, 2013

Page 9 of 14

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVDRYER	57	54.3	R 336.1225, R 336.1901,
			R 336.2803, R 336.2804,
			40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

1. The minimum stack height above ground level listed in SC VIII.1 shall not apply until August 1, 2013. (R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))

PWGG, LLC (P0215)

Permit No. 30-11A

May 10, 2013

Page 10 of 14

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGMATERIAL	Each emission unit for material handling which includes	EUHAMMERMILL
	one hammer mill, material conveyance, one cooler, one	EUCOOLER
	pellet mill, and one bagging operation.	EUPELLETMILL
		EUBAGGING
FGWOODPELLETS	Each emission unit at the wood pelletizing facility which	EUDRYER
	includes the dryer, the hammer mill, material	EUHAMMERMILL
	conveyance, the cooler, the pellet mill, and the bagging	EUCOOLER
	operation.	EUPELLETMILL
		EUBAGGING

The following conditions apply to: FGMATERIAL

<u>DESCRIPTION</u>: Each emission unit for material handling which includes one hammer mill, material conveyance, one cooler, one pellet mill, and one bagging operation.

Emission Unit ID: EUHAMMERMILL, EUCOOLER, EUPELLETMILL, EUBAGGING

POLLUTION CONTROL EQUIPMENT: Baghouse

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Opacity	10 percent	6-minute average except one 6- minute average per hour of not more than 27 percent	FGMATERIAL	SC V.1, SC VI.2	R 336.1301(1)(c)
2. PM	0.016 lb per 1000 lb of exhaust gases calculated on a "dry" gas basis	Test Protocol	FGMATERIAL	SC V.1	R 336.1331(1)(c)
3. PM10	0.82 pph	Test Protocol	FGMATERIAL	SC V.1	R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
4. PM2.5	0.82 pph	Test Protocol	FGMATERIAL	SC V.1	R 336.1205(1)(a), R 336.2804, 40 CFR 52.21 (d)

PWGG, LLC (P0215) May 10, 2013 Permit No. 30-11A Page 11 of 14

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate FGMATERIAL unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the process and emission control equipment, has been submitted within 90 days of permit issuance for AQD District Supervisor review and approval, and is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. (R 336.1301, R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

IV. <u>DESIGN/EQUIPMENT PARAMETERS</u>

1. The permittee shall not operate FGMATERIAL unless the baghouse is installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for FGMATERIAL as required in SC III.1. (R 336.1301, R 336.1910, R 336.1911)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. Within 60 days of achieving the maximum production rate, but no later than 180 days initial startup, the permittee shall verify opacity, PM, PM10, and PM2.5 emission rates from FGMATERIAL by testing at owner's expense, in accordance with Department requirements. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. The permittee shall submit a complete report of the test results to the AQD within 60 days following the last date of the test. (R 336.1301, R 336.1331, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d), R 336.2001, R 336.2003, R 336.2004)

PWGG, LLC (P0215) May 10, 2013 Permit No. 30-11A Page 12 of 14

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall complete all required calculations/records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1331, R 336.1911, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

2. The permittee shall install, calibrate, maintain and operate, in a satisfactory manner, a device to monitor and record the pressure drop across the baghouse. The device shall be equipped with an audible alarm that will sound when the pressure drop is below the minimum level as specified in an approved MAP as required in SC III.1. (R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

VII. REPORTING

 The permittee shall submit the complete test report as required in SC V.1 no later than December 1, 2013. (R 336.1301, R 336.1331, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d), R 336.2001, R 336.2003, R 336.2004)

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVMATERIAL	12 X 32	35	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

1. The permittee shall have until May 1, 2013 to increase the stack height as required per SC VIII.1. (R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

PWGG, LLC (P0215) May 10, 2013 Permit No. 30-11A Page 13 of 14

The following conditions apply Source-Wide to: FGWOODPELLETS

<u>DESCRIPTION</u>: Each emission unit at the wood pelletizing facility which includes the dryer, the hammer mill, material conveyance, the cooler, the pellet mill, and the bagging operation.

Emission Unit ID: EUDRYER, EUHAMMERMILL, EUCOOLER, EUPELLETMILL, EUBAGGING

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

1. The permittee shall not process through FGWOODPELLETS, more than 33,600 tons of green softwood chips per year on a 12-month rolling time period basis as determined at the end of each calendar month. (R 336.1205(3))

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate FGWOODPELLETS unless the program for continuous fugitive emissions control for all plant roadways, the plant yard, the storage pile and all material handling operations has been submitted to the AQD District Supervisor within 60 days after the issuance of this permit, and is implemented and maintained. The plan shall identify the specific measures to be taken to prevent fugitive dust and the frequency of these measures. In addition, the permittee shall record the number of raw material and product trucks which are at the facility on a daily basis. (R 336.1372, Act 451 324.5524)
- The permittee shall not keep a raw wood chip material storage pile on site, for more than three days per calendar week. At no time may the storage pile be in place for longer than three consecutive days. (R 336.1901)

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations/records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(3))
- 2. The permittee shall monitor and record in a satisfactory manner, the amount of greenwood chips processed in tons for FGWOODPELLETS on a monthly and a 12-month rolling time period as determined at the end of each calendar month. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(3))

PWGG, LLC (P0215) May 10, 2013 Permit No. 30-11A Page 14 of 14

3. The permittee shall keep records of the date raw wood chip material is delivered to the facility for the storage pile and the date that the storage pile is exhausted, to demonstrate compliance with SC III.2. The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1901)

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

<u>Footnotes:</u> ¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).