

**DRAFT (4/1//08)**

## **PERMIT TO CONSTRUCT AND OPERATE**

**PERMITTEE:** Plainfield Renewable Energy, LLC  
**FACILITY ADDRESS:** Mill Brook Road / Norwich Road (Route 12) intersection, Plainfield, CT  
**PERMIT No.** 1090... - PCO

Pursuant to Section 22a-208a of the Connecticut General Statutes ("CGS") and Section 22a-209-4 of the Regulations of Connecticut State Agencies ("RCSA"), a PERMIT TO CONSTRUCT AND OPERATE IS HEREBY ISSUED by the Commissioner of Environmental Protection ("Commissioner") to Plainfield Renewable Energy, LLC ("Permittee"; "PRE") for a Biomass Wood Gasification Plant consisting of two (2) operational units [(1) a volume reduction plant and (2) a power block facility] located at the intersection of Mill Brook Road and Norwich Road (Rt. 12), Plainfield, CT ("Facility").

This permit consists of sequential authorization sections and is based on all documents and specifications submitted as part of Application No. 200602249, including, but not limited to, the documents and specifications incorporated herein by reference:

1. Application form, signed August 9, 2006 (with various attachments).
2. An "Executive Summary" document.
3. A July 20, 2006 "Traffic Study" document prepared by DSL Consulting Traffic Engineering Services.
4. Two (2) memos from PMA: (a) dated January 25, 2007 (specifying estimated on-site storage volumes); and (b) dated January 26, 2007 (summarizing PRE discussions with various / potential wood suppliers).
5. A letter dated September 5, 2007 from AES and PMA providing clarifications to various issues (surety bond amount; mass/energy balance; property lines; fire emergency systems; wood fuel quality; site ownership; generated residue).
6. An "Operation and Management Plan" (O&MP) document (updated January 2008; received January 23, 2008), prepared by Anchor Engineering Services, Inc. (AES) and Project Management Associates, LLC (PMA) and accompanied by four (4) "general equipment arrangement" drawings prepared by R.W. Beck and Energy Products of Idaho for the Power Block Facility (PBF) component.
7. A report (received January 23, 2008) prepared by AES and incorporating: (a) an explanatory letter dated January 22, 2008; and (b) various sections and documents (submitted for the purpose of clarifying and resolving various issues raised in a December 21, 2007 letter jointly issued by various divisions of the Department), including a document titled "Biomass Wood Supply Quality Control Procedures" dated January 18, 2008, prepared by AES and PMA, with an attached Exhibit #1: "Operating, Sampling & Testing Requirements" (describing the PRE / wood suppliers relationship).
8. A report (received February 20, 2008) prepared by AES and incorporating: (a) an explanatory letter dated February 19, 2008; and (b) various sections and documents (submitted for the purpose of clarifying and resolving various issues raised in a February 11, 2008 letter jointly issued by various divisions of the Department), including: NPDES Addendum (Section A.4.) providing a detailed description of the design for the outdoor wood storage area, the proposed stormwater management and monitoring actions and the features proposed to be constructed (pavement; sealer; curbs; storage buffer zone; catch basins; underground and above ground storage tanks; pump station).
9. A letter dated May 30, 2006 from Wheelabrator Milbury Inc. providing assurances for long-term final disposal of PRE generated residues at various facilities throughout the Northeast and Mid-Atlantic Region.

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10. A set of seven (7) P.E. certified drawings prepared by AES and received on March 31, 2008:

- Boundary Survey, dated July 10, 2006.
- Wetlands and Site Plan, revised 3/4/08.
- Drainage and Grading Plan, revised March 4, 2008.
- Drainage and Grading Plan, revised March 4, 2008.
- Erosion and Sedimentation Plan, revised March 4, 2008.
- Drainage and Erosion & Sediment Control Details, revised February 18, 2008.
- Proposed Conservation Easement, revised January 21, 2008.

The Permittee shall maintain records of all documents comprising all data pertaining to the application mentioned in this permit, as well as any supplemental information submitted to the Department in connection with such application. Any inaccuracies found in the information submitted by the Permittee may result in revocation, reissuance, or modification of this permit and civil or criminal enforcement actions.

**A. GENERAL TERMS AND CONDITIONS**

1. As used in this permit, the following definitions apply:

"Wood chips" means grounded wood pre-processed to the PRE specifications which can include either: (a) clean wood; (b) regulated wood fuel; or (c) a mixture of clean and regulated wood fuel.

"Clean wood" (as defined in Section 22a-208a-1 of RCSA) means wood derived from such products or processes as pallets, skid, spools, packaging materials, bulky wood waste (brush; landclearing debris), or scraps from newly built wood products, provided such wood is not treated wood as defined in Section 22a-209a of CGS, or demolition wood.

"Commissioner" means the Commissioner of the Department of Environmental Protection or the Commissioner's designee.

"Day" means calendar day.

"Department" means the Department of Environmental Protection.

"P.E." means Professional Engineer licensed in the state of Connecticut.

"Regulated Wood Fuel" [as defined in Section 22a-209a(a)(4) of CGS], means processed wood from construction and demolition activities, which has been sorted to remove plastics, plaster, gypsum wallboard, asbestos, asphalt shingles and wood which contains creosote or to which pesticides have been applied or which contains substances defined as hazardous waste under CGS Section 22a-115.

"Treated Wood" [as defined in Section 22a-209a(a)(2) of CGS], means wood which contains an adhesive, paint, stain, fire retardant, pesticide or preservative.

"Processing" means the practice by which either the physical characteristics or the volume of solid waste accepted at the Facility is being altered through separating, sorting, baling, shredding, crushing, grinding, chipping, compacting, consolidation, transfer or reworking as part of the volume reduction and processing operations of the facility.

"Residue" means all solid waste (as defined in Section 22a-207 of CGS), other than any recovered materials, remaining after handling and processing of the incoming waste stream.

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2. The Permittee shall comply with all terms and conditions of this permit. This permit consists of the conditions contained herein and the specifications contained in the application documents, except where such specifications are superseded by the more stringent conditions contained herein. Violation of any provision of this permit is subject to enforcement action pursuant, but not limited, to CGS Sections 22a-6, 22a-208, 22a-225 and 22a-226.
3. To the extent that any term or condition of this permit is deemed to be inconsistent, or in conflict, with any term or condition of any permit previously issued for this Facility, including any modifications thereto, or with any data or information contained in the application, or any other documents incorporated by reference in this permit, the terms and conditions of this permit shall control and remain enforceable against the Permittee.
4. The Permittee shall make no changes to the specifications and requirements of this permit, except in accordance with law.
5. The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Any document or action which is due or required on a Saturday, Sunday or a legal state or federal holiday shall be submitted or performed by the next business day thereafter.
6. The Permittee shall submit for the Commissioner's review and written approval all necessary documentation supporting any proposed physical and/or operational upgrades, improvements and/or minor changes in the Facility design, practices or equipment. The Commissioner may issue a written approval only if, in the Commissioner's judgment, the proposed physical and/or operational upgrades, improvements and/or minor changes: (a) are deemed necessary for a better and more efficient operation of the Facility; (b) are not significantly changing the nature of the Facility, or its impact on the environment; and (c) does not warrant the issuance of a permit or authorization pursuant to CGS Section 22a-208.
7. Any document, including, but not limited to any notice, which is required to be submitted to the Commissioner under this permit shall be signed by a duly authorized representative of the Permittee, as defined in RCSA Section 22a-430-3(b)(2), and by the individual or individuals responsible for actually preparing such documents, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement in the submitted information may be punishable as a criminal offense." Any false statement in any document submitted pursuant to this permit may be punishable as a criminal offense in accordance with CGS Section 22a-6, pursuant to CGS Section 53a-157, and in accordance with any other applicable statute.
8. This permit is subject to and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut and conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to, any and all public and private rights and to any federal, state or local laws or regulations pertinent to the Facility or activity affected thereby.

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9. Nothing in this permit:
  - a. Shall affect the Commissioner's authority to institute any proceeding or to take any actions to prevent violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for violations of law;
  - b. Shall relieve the Permittee of other obligations under applicable federal, state and local laws;
  - c. Authorizes any person, municipality or authority to hinder municipal or regional solid waste recycling efforts. All activities conducted by the Permittee at the Facility shall be in accordance with the documents submitted as part of the application and in compliance with the Connecticut State Solid Waste Management Plan in effect on the issuance date of this permit.

**B. AUTHORIZATION TO CONSTRUCT**

1. The Permittee is authorized to construct the Facility designed to receive, store and process wood chips for purposes of generating steam and 37.5 MW (net) of electric energy.
2. The Permittee is authorized to construct the Facility in accordance with all applicable law, including this permit. The Facility shall consist of two (2) separate operational units:
  - (a) A "volume reduction plant" (VRP) where wood chips shall be received through a double truck scale system, unloaded into hoppers, conveyed, handled, stored in piles located in a dedicated area (outdoors and/or under a canopy structure), screened and subsequently conveyed for gasification at the adjacent "power block facility" (PBF). The outdoor storage area shall incorporate: a truck emergency access; a storage buffer zone; a sealed pavement; curbs; and a stormwater control system (catch basins; a pump station; and underground and above ground storage tanks); and
  - (b) A "power block facility" (PBF) housing various ancillary equipment, including: a fluidized bed gasification and boiler system designed to process biomass (wood); a bottom ash residue collection system; a fly ash residue collection system; a state-of-the art air pollution system; an induced (ID) fan/stack system; a storage silo for bottom and fly ash residue; a control room / steam turbine generator system; a water treatment system designed to filter, clarify and store cooling water; and a transformer connected to the electrical distribution grid.
3. The Permittee shall control dust, odors, water discharges and noise resulting from the construction of the Facility at all times to assure compliance with applicable requirements of RCSA, and any other applicable laws, including OSHA.
4. The Permittee shall, within thirty (30) days from the completion of the construction of the features described in condition B.2. of this permit, and for the purpose of operating the entire Facility at the processing and storage limits noted in condition No. C.4. of this permit, submit a written notification for the Commissioner's review and written approval. Such notification shall include, at a minimum, the following documents certified by a P.E.:
  - a. A statement certifying that the construction activities have been completed, as approved; and
  - b. Appropriate "as-built" drawings identifying all constructed features of the Facility specified under condition No. B.2. of this permit.

**C. AUTHORIZATION TO OPERATE**

1. The Permittee is authorized to operate any or all of the components specified in condition No. B.2. of this permit upon written approval granted by the Commissioner. Such written approval may be issued

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only after the Permittee is deemed in full compliance with, but not limited to, the requirements of, Condition No. B.4. of this permit.

- 2. The Permittee shall not exceed the processing and storage limits established by this permit. Solid waste, other than those listed herein, shall not be accepted, processed, treated, stored, transported or disposed off-site, or otherwise processed at the Facility without prior written approval of the Commissioner.
- 3. The Permittee is authorized to operate the Facility in accordance with all applicable law, including this permit. Unless otherwise approved in writing by the Commissioner, the Permittee **is authorized to operate the Facility as follows:**
  - Receiving activities: Monday - Friday (6:30 am - 7:00 p.m.); Saturday (6:30 am - 3:00 pm)
  - Processing activities: 24 hours/day - 7 days/week
- 4. a. The Permittee shall, upon issuance of the written approval specified in condition No. B.4., limit the receiving, on-site storage and processing activities in accordance with, but not limited to, the following maximum limits and specifications:

<u>Processing Capacity</u>	<u>tons/day</u>	
Wood chips (*)	2,200	received / conveyed / stored at dedicated VRP area
Wood chips (**)	1,360	conveyed to / processed by the PBF equipment

<u>Storage Capacity</u>	<u>cy (tons)</u>	
Wood chips	145,000 (45,500)	piles in dedicated storage areas (***)
Ash residue	500 (250)	covered containers + silo (area #11)
Non-ash residue	90 (68)	covered containers within the PBF area
Water solids residue	60 (46)	covered containers within the PBF area

.....  
Total on-site storage: 145,650 (45,864)  
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**Notes:**

- (\*) Based on PRE specifications, received biomass wood is pre-processed and/or mixed by the suppliers. Limited wood grinding activities can occur, as needed, at the VRP storage area. Treated wood (chips) containing pesticides or preservatives shall not be considered an allowable fuel pursuant to the definition of "regulated wood fuel".
- (\*\*) Estimated higher heating value (HHV) of wood chips = @ 4,625 BTU/lb
- (\*\*\*) Area #6 (max. 35 ft. height piles under canopy); Area #5 (max. 50 ft. height pile in outdoor area); Area #2 (small amounts in piles at the unloading/receiving area)

- b. **Storage of wood chips** shall take place in containers or piles located only in the dedicated storage area of the VRP. A 15 ft. fire truck emergency access shall be maintained along the western side of the outdoor storage area. The wood chips shall be: (i) conveyed for on-site storage on dedicated area provided with a sealed asphalt pavement (that can support heavy equipment during all seasons) and with various stormwater collection and storage features, designed and constructed in compliance with any other permits and/or applicable stormwater management requirements of Section 22a-430 of RCSA; and (ii) screened, mixed (as needed) and conveyed to, and processed by, the PBF's equipment on a first-in / first-out basis. Any wood chipping activities shall: comply with the requirements of the Connecticut Regulations for Abatement of Air Pollution, Sections 22a-174-18 and 22a-174-23 of RCSA; not generate noise, dust, fumes, smoke, vibrations and odors that exceed background levels thereof at any boundary of the property on which the Facility is located.

- c. **Storage of residues** shall comply with the limits and specifications incorporated in the above table.

5. The Permittee shall:

- a. Store solid waste on-site in conformance with proper fire control measures. Routine maintenance and inspections of all fire control equipment shall be conducted in accordance with manufacturer's specifications.
- b. Ensure that all solid waste accepted at the Facility is properly handled on-site, processed, stored and transported to markets or other solid waste processing or disposal facilities permitted to accept such solid waste.
- c. Ensure that any unacceptable or incidental solid waste inadvertently received, or solid waste which is unsuitable for processing at the Facility is: (1) promptly sorted, separated, isolated and temporarily stored in a safe manner prior to off-site transport; (2) recorded and reported in the quarterly report required by condition No. C.9. of this permit; and (3) disposed at a facility lawfully authorized to accept such waste. A spare container shall be available for any storage emergency.
- d. Provide expeditious notification about any emergency incident (explosion, accident, fire, release, or other significant disruptive occurrence) which: (1) **significantly damaged** equipment or structures; (2) interrupts the operation of the Facility for greater than 24 hours; (3) results in an unscheduled Facility shutdown or forced diversion of solid waste to other solid waste facilities; (4) could reasonably create a source of pollution to the waters of the state; or (5) otherwise threatens public health. Such notification required under this condition shall: (a) be within 24 hours of the emergency incident; (b) be verified to the Solid Waste Enforcement Program in the Waste Engineering and Enforcement Division of the **Bureau of Materials Management and Compliance Assurance** by phone at (860) 424-3366, or at another current publicly published number for the Waste Engineering and Enforcement Division, or by facsimile at (860) 424-4059; (c) be followed by a written report within 30 days of the emergency incident detailing the cause and effect of the incident, remedial steps taken and emergency backup used or proposed to be implemented; (d) be recorded in a log of emergency incidents. In addition to the notification requirements above, the Permittee shall comply with all other applicable reporting or notification requirements regarding the emergency incident including but not limited to, reporting required by CGS Section 22a-450.
- e. Prevent the spillage of solid waste from transfer containers during on-site maneuvering/storage and off-site transport, cover each loaded container before transportation off-site and instruct the haulers to keep the containers covered during off-site transportation. Remove any litter from the Facility's premises.
- f. Operate the Facility in a safe manner and control fire, odor, noise, spills, vectors, litter and dust emissions levels in continuous compliance with all applicable requirements, including OSHA.
- g. Process, store or otherwise handle at the Facility all solid waste received in such a manner as to avoid any spillage, nuisance and protect the public health and the environment.
- h. Maintain at the Facility's premises, and have available for review by the Commissioner, the manufacturer's operation and maintenance manuals for each major piece of fixed processing equipment installed at the Facility.
- i. Post a sign at the Facility's entrance, incorporating the requirements of RCSA Section 22a-209-10(3) and the number and issuance date of this permit.

6. The Permittee shall:

- a. Control all traffic related with the operation of the Facility in such a way as to mitigate queuing of vehicles off-site and excessive or unsafe traffic impact in the area where the Facility is located.
- b. Unless otherwise exempted, ensure that, pursuant to RCSA Section 22a-174-18(b)(3)(C), trucks shall not be left idling for more than three (3) consecutive minutes.

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- c. Prominently post and maintain signs limiting such truck idling time within the Facility (entrance; scale; unloading/loading areas; etc.).
  
7. The Permittee shall have at a minimum an operator, certified pursuant to RCSA Section 22a-209-6, present at all times during Facility operation. All individuals under the supervision of such certified operator shall have sufficient training to identify waste received at the Facility which is not permitted to be received, or is unsuitable for processing, and take proper action in handling such waste.
  
8. Unless otherwise specified in writing by the Commissioner, any documents required to be submitted under this permit shall be directed to: Calin V. Tanovici, Sanitary Engineer, Waste Engineering and Enforcement Division, Bureau of Materials Management and Compliance Assurance, Department of Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127. As necessary, such documents will be routed to the appropriate staff for their final evaluation.
  
9. The Permittee shall maintain daily records as required by RCSA Section [22a-209-10\(13\)](#) and CGS Sections 22a-208e and 22a-220. Based on such records, the Permittee shall prepare monthly summaries including, but not limited to, the following information:
  - a. Origin, type and quantity of solid waste received, including unacceptable waste (non-ash residue).
  - b. Type and quantity of solid waste processed by the PBF's equipment.
  - c. Destination to which ash residue, non-ash residue and water solids residue were delivered for disposal or recycling, including quantities delivered to each destination.

The monthly summaries required pursuant this condition shall be submitted quarterly directly to the Bureau of Materials Management and Compliance Assurance, Source Reduction and Recycling Program, no later than January 31, April 30, July 31, and October 31.

10. The Permittee shall, no later that sixty (60) days after the approval letter issued by the Commissioner pursuant to condition No. B.4. of this permit approving the start of the operation of the Facility, post \$1,835,000 as a closure surety bond amount, as required by Section 22a-6(a)(7) of CGS in conjunction with the general requirements of Section 22a-209-4(i) of RCSA.

The Permittee shall acknowledge and accept the following:

- a. The purpose of the financial assurance instrument is to cover the 3<sup>rd</sup> party cost for handling, transportation and disposal of the maximum amount of unprocessed and processed solid waste proposed to be stored at the Facility, as authorized by this permit and any additional cost of equipment rental, site clean-up, and decontamination/disposal of equipment and of all processing storage areas, if necessary.
  
- b. The surety documents shall follow the requirements of RCSA Section 22a-209-4(i), Federal Regulation 40 CFR 264.141 to 264.143 inclusive, and 40 CFR Section 264.151, as referenced therein. Appropriate language changes shall be made to reference the handling, transportation and disposal of such stored solid waste, instead of landfill closure and monitoring.
  
- c. The Department accepts only four (4) types of financial assurance documents: (a) Trust Agreement; (b) Guarantee Bond; (c) Performance Bond; or (d) Letter of Credit.  
Note: A "Stand-By Trust Agreement" is needed along with an (a), (b), or (c) document.  
A "Certification of Acknowledgement" is needed with an (a) document.
  
- d. The financial assurance instruments shall: (a) be valid for, and be appropriately maintained during, the term of this permit; (b) specify the Permittee's name, the Facility's address and the

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No. and issuance date of this permit; (c) use the format language specified in the forms provided by the Department (as modified from Title 40 of the Code of Federal Regulations, sections 264.151).

- e. The surety bond amount: (a) shall be adjusted within thirty (30) days after each anniversary date of the surety to reflect inflation, any storage capacity increases or changes in the cost of closure [in accordance with the requirements of 40 CFR Section 264.142(b) and/or (c) as revised through March 21, 1990].
  - f. The financial documents required to be submitted under this condition shall be directed to: Mark Latham, Waste Engineering and Enforcement Division, Bureau of Materials Management and Compliance Assurance, Department of Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127.
11. The Permittee shall, commencing within 60 days after the issuance date of the approval letter granted pursuant condition No. B.4. of this permit, start to perform compliance audits for the life of this permit. The compliance audits shall be subject to the following conditions:
- a. The compliance audits shall consist of a thorough and complete assessment of the Permittee's compliance: (i) with the Regulations of Connecticut State Agencies Sections 22a-209-1 through 22a-209-17; and (ii) with all documents, terms and conditions specified in this permit.
  - b. The audits required pursuant to this permit shall be performed by a professional engineer licensed to practice in Connecticut ("consultant") approved in writing by the Commissioner. The Permittee shall, prior to the Commissioner's approval of the named consultant, certify to the Commissioner that such consultant: (i) is not a subsidiary or affiliated corporation; (ii) does not own stock in Permittee or any parent, subsidiary, or affiliated corporation; (iii) have no other direct financial stake in the outcome of the compliance audit(s) outlined in this permit; and (iv) have expertise and competence in environmental auditing and the regulatory programs being addressed through this permit.
  - c. The results of each compliance audit shall be summarized in a compliance audit report (CAR) which shall be submitted for evaluation to the Enforcement Program, Waste Engineering and Enforcement Division, Bureau of Materials Management and Compliance Assurance, no later than fifteen (15) days after the completion date of such audit. Each such report shall describe in detail Permittee's compliance as noted in condition No. 11.a. of this permit, identify any violations and shall describe actions taken by the Permittee to correct violations identified in each compliance audit. Each such report shall also include Permittee's certification of compliance with the regulations and documentation demonstrating such compliance.  
  
In cases where multiple counts of the same violation are discovered, the report shall include a listing of the multiple counts. The report shall also include a detailed description of the compliance audit, including but not limited to: (i) the names of those individuals who conducted the compliance audit; (ii) the areas of the site inspected; and (iii) the records reviewed to determine compliance.
  - d. Site inspection and preparation/submittal the related CAR document, shall comply with the following specifications:
    - Frequency: Quarterly (for the first 2 years)  
Semi - Annual (for the last 3 years)
    - Recording/Reporting: Within 15 days from the inspection date, the CAR document



**SUMMARY**

**Application No.:** 200602249  
**Applicant's Name:** Plainfield Renewable Energy, LLC (PRE)  
**Type of Permits:** Permit to Construct and Operate a Solid Waste Facility  
**Facility Type:** Biomass Wood Gasification Facility  
 (incorporating a "volume reduction plant" and a "power block facility")

**Staff:** Calin Tanovici, Sanitary Engineer

**Date:**

**DESCRIPTION OF THE PROJECT**

The proposed plant is located on an estimated 27-acre site in an "industrial zone" of the Town of Plainfield and consist of the following two (2) separate facilities:

- (a) A "volume reduction plant" (VRP) where wood chips shall be received through a double truck scale system, unloaded into hoppers, conveyed, handled, stored in piles located in a dedicated area (outdoors and/or under a canopy structure), screened and subsequently conveyed for gasification at the adjacent "power block facility" (PBF). The outdoor storage area shall incorporate: a truck emergency access; a storage buffer zone; a sealed pavement; curbs; and a stormwater control system (catch basins; a pump station; underground and above ground storage tanks); and
- (b) A "power block facility" (PBF) housing: a fluidized bed gasification and boiler system designed to process biomass (wood); a bottom ash residue collection system; a fly ash residue collection system; a state-of-the art air pollution system; an induced (ID) fan/stack system; a storage silo for bottom and fly ash residue; a control room / steam turbine generator system; a water treatment system designed to filter, clarify and store cooling water; and a transformer connected to the electrical distribution grid.

<u>Processing Capacity</u>	<u>tons/day</u>	
Wood chips (*)	2,200	received / conveyed / stored at dedicated VRP area
Wood chips (**)	1,360	conveyed to / processed by the PBF equipment
<u>Storage Capacity</u>	<u>cy (tons)</u>	
Wood chips	145,000 (45,500)	piles in dedicated storage areas (***)
Ash residue	500 (250)	covered containers + silo (area #11)
Non-ash residue	90 (68)	covered containers within the PBF area
Water solids residue	60 (46)	covered containers within the PBF area
.....		
Total on-site storage:	145,650 (45,864)	

**Notes:**

- (\*) Received wood is pre-processed and/or mixed by the suppliers to PRE specifications  
 Limited wood grinding activities can occur, as needed, at the VRP storage area.  
 Shall not be obtained from processing of treated wood containing pesticides and/or preservatives.
- (\*\*) Estimated higher heating value (HHV) of wood chips = @ 4,625 BTU/lb
- (\*\*\*) Area #6 (max. 35 ft. height piles under canopy); Area #5 (max. 50 ft. height pile in outdoor area);  
 Area #2 (small amounts in piles at the unloading/receiving area)

The facility is designed to process 24 hours/day, 7 days/week the conveyed wood chips [estimated design higher heating value (HHV) = 4,625 BTU/lb] to generate steam, ash residue and 37.5 MW (net) of electrical energy. Wood chips will be received Monday-Friday (6:30 am - 7:00 p.m.) and Saturday (6:30 am - 3:00 pm).

**PUBLIC NOTICES:**

The Notice of Permit Application was published on 8/16/06 in The Norwich Bulletin. To date, no specific comments were received with respect with the solid waste application.

**COMPLIANCE HISTORY:**

The compliance history of the applicant was reviewed by the Department's enforcement staff. The attached memo dated 3/19/08 recommends the issuance of the solid waste permit.

**SPECIAL NOTES, CONCERNS, EXPLANATIONS AND PERMIT CONDITIONS**

- The facility is designed to process: (a) 100% clean wood (section 22a-208a-1 of RCSA); (b) 100% regulated wood fuel [section 22a-209a(a)(4) of CGS]; or (c) any combination thereof.
- Various supporting documents (identified under No. 6 and No. 7 in the "list" of documents noted on page No.1 of the solid waste permit) are specifying the actual protocols for sorting, grinding, sampling, testing, receiving, storage and processing of "regulated wood fuel" chips.
- The solid waste permit prohibits the receipt and process of wood chips obtained from wood treated with pesticides and preservatives.
- The permittee's obligations regarding the construction phase and subsequent notification procedures are noted as part of section B of the permit.
- The processing capacity and various storage limits are specified in condition No. 4
- The surety bond amount (\$1,835,000) is specified in condition No. C.10.
- The frequencies of the environmental compliance audits are noted in condition No. C.11.
- This is a multimedia project. In addition to the (a) solid waste application, PRE submitted additional applications for: (b) air point source permit; (b) water diversion permit; (c) water discharge permit. All four (4) applications are proposed to be noticed by the Department to the public through a joint Notice of Tentative Determination.

**TIMELINESS**

8/14/06	Application received
8/28/06	Notice of Sufficiency issued
1/22/07	The review of the Environmental Justice Implementation Plan and Report was finalized by the DEP EJ office.