Form Approved OMB No. 1905-0209 Expiration Date: xx/xx/xxxx

Burden: 1.4 hours

# EIA-63C DENSIFIED BIOMASS FUEL REPORT

#### GENERAL INSTRUCTIONS and DUE DATE

Complete one report for each facility producing or planned to produce densified biomass fuel products within the next twelve months. Do not report products for grilling, animal bedding, or uses other than heating fuel. Report monthly for manufacturing plants with a capacity to produce 10,000 tons per year (TPY) or more. Smaller plants, with a production capacity of less than 10,000 TPY, report Part 1 and Part 2 only, once a year (annually) for the prior year's data due by the first business day of June. Planned or under construction facilities complete only Part 1 and Part 2. Do not leave fields blank unless specifically directed. Report zeros where appropriate. Static information will be preprinted on the report after the initial collection. Provide comments as needed to clarify or explain your data where appropriate on each part of the form.

For those plants reporting monthly, data are to be completed for each calendar month. Reports are due the last day of the month following the reporting month, or the next business day. For example, June data are due July 31 or the next business day. Small plants reporting annually should submit the survey by the first of June each year.

#### PART 1. IDENTIFICATION and CONTACT INFORMATION

#### 1.1 Please verify the legal name and mailing address of the reporting facility.

Verify or provide an update to the legal name of the facility, as well as the mailing address, including city, state and zip code. After initial collection, this information will be preprinted on the form.

## 1.2 Where is the facility physically located?

Verify or provide an update to the physical location by county or city and state where the facility is located. After initial collection, this information will be preprinted on the form.

#### 1.3 Please verify the parent company legal name and mailing address (if different from facility name and address above).

If the facility in Question 1.1 is owned by a parent company, please verify or provide an update to the legal name and address for the parent company. After initial collection, this information will be preprinted on the form.

## 1.4 Please verify the primary contact information.

Please verify or provide an update to the name, telephone, FAX, company name, email and address for the primary contact for this form. This should be the person EIA would send the form information to and be able contact for questions regarding the data on the form. After initial collection, this information will be preprinted on the form.

## 1.5 Please verify the supervisor contact information.

Please verify or provide an update to the name, telephone, FAX, company name, email and address for a supervisor at the facility that EIA may contact in the event the primary contact is not available. After initial collection, this information will be preprinted on the form.

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#### PART 2. FACILITY INFORMATION

#### 2.1 What is the operational status of the facility at the end of the reporting period?

Select from the dropdown list:

- Currently Operating facility is producing and/or selling densified fuel products.
- Temporarily Not in Operation facility is closed down for less than a year and is expected to resume operations.
- Ceased Operation facility is closed and is not expected to resume operations.
- Under Construction/Planned facility is currently in a planning or construction phase and will likely be operating within the next twelve months.
- Sold facility has been sold. Please provide new owner company, contact name, and telephone and/or email address.

After initial collection, this information will be preprinted on the form. If a change in status occurs, please update the information.

#### 2.2 What year did the facility begin or is expected to begin commercial operation?

Report the year that the facility first began or is expected to begin producing densified biomass fuel product(s) for commercial sale. If the original date is unknown, please report the year the current owner began operations and put a note in the comment section to that effect. After initial collection, this information will be preprinted on the form.

## 2.3 What is (or if planned, will be) the maximum annual production capacity at this facility?

Report the maximum annual production capacity possible with the presently installed equipment if fully utilized, in short tons per year.

## 2.4 If the pellet extrusion machinery was not fully utilized during the month, choose the applicable explanations. Choose all that apply.

Choose an explanation for a significant discrepancy between potential production based on available machinery as measured by maximum annual capacity as measured in tons per year. Limiting factors include shortage of raw materials, drying capacity, grinding capacity, pelletizing capacity, and/or lack of market. Other reasons may be written in.

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#### PART 3. DENSIFIED BIOMASS PRODUCTION AND INVENTORY INFORMATION

3.1 For each type of feedstock received during the reporting period, what is the volume in short tons and the total delivered cost in whole U.S. dollars (USD)?

Select the Feedstock Type, the Wood Type (hardwood or softwood), the Wood Source, and the Units (bone dry or green) from the dropdown lists. Report the quantity received in short tons and the total delivered cost, including transportation and taxes, in whole U.S. dollars for each feedstock type received during the reporting period. If feedstock is sourced from entity owned forests, residual materials from onsite operations, or other resources without cost, report zero for cost. Aggregate by feedstock type, wood type, wood source and units. Report the feedstock received during the reporting period (month). Do not attempt to report the feedstock volumes used to produce products during the reporting period. If no cost is involved, report zero for cost. If the feedstock type is not listed, choose "Other" and provide the name of the feedstock in the space below.

#### **Feedstock Types**

- Roundwood
- Pulpwood
- Sawmill Residuals
- Wood Product Manufacturing Residuals
- Logging Residues
- Other (please specify)

#### Units

- Green Short Tons
- Bone Dry Short Tons

#### **Wood Type**

- Softwood
- Hardwood

## **Wood Source**

- Natural Forests (private)
- Planted Forests (private)
- Public Forests
- Other (specify)
- Unknown

## 3.2 What is the quantity and what are the characteristics of each type of densified biomass fuel product produced during the reporting period?

Select the Product Type from the Product list. Provide the Quantity in short tons. Provide the Thermal (heat) Content of the Product Type in Btu per pound. For help in converting units see Page 6, Additional Information. Provide the Ash and Moisture Contents as a percentage by weight. Use average values for thermal, ash, and moisture contents. Use as many lines as needed to accommodate all Product Types produced at the facility. If the product type is not shown in the list, choose "Other" and provide the product and any certifications in the space provided.

3.3 How much product was stored as inventory at the facility or offsite, such as at ports, at the end of the reporting period?

Select the Product Type from the Product list. Provide the amount in Inventory stored in short tons. If the product type is not listed, use "Other" and write in the product type in the space provided. Include inventory held in offsite storage facilities owned by the company, such as at port silos. Do not double count inventory at offsite storage facilities serving multiple facilities. You may allocate offsite inventory among multiple facilities if appropriate or provide a total offsite inventory on one facility's report and provide a comment to explain the value.

## **Product List**

- Wood Pellets for Heating with PFI Certification
- Wood Pellets for Heating without PFI Certification
- Industrial/Utility-grade Wood Pellets
- Other (please specify below)

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3.4 How many Full-time Equivalent (FTE) direct employees were employed in the densified biomass fuel production operations at this facility during the current reporting period? Only operating facilities should report employee numbers; planned or under construction facilities should not report this.

Report the number of Full-time Equivalent (FTE) Employees during the reporting period. If employees varied over the reporting period, report the higher number of employees. Direct employees are those working at the facility for the company operating the facility and do not include indirect supporting industries' employees, such as logging companies or transportation companies under contract by the facility to provide support services.

## PART 4. PRODUCT SALES AND REVENUE INFORMATION

4.1 Of the products sold in the U.S. domestic market, what was the quantity sold at retail and at wholesale during the reporting period, and what was the associated revenue?

Select the Product Type from the Product list. Report the quantity in short tons of densified biomass fuel sold for consumption within the U. S. Report the revenue received as Free on Board at the plant (excludes transportation to customers). Report the total revenue received (not averages) in whole U.S. dollars (USD). Retail sales are to direct end users of the products. Wholesale sales are to entities intending to resell the product within the U.S.

Use as many lines as needed to describe each Product Type sold and the type of sale during the reporting period.

4.2 Of the products sold in the export market, what was the quantity sold at retail and at wholesale during the reporting period, and what was the associated revenue and destination country?

Select the Product Type from the Product list. If the Product Type is not listed, choose Other and provide the Product Type in the space below. Report the Quantity in short tons at Retail (directly to the end user) and at Wholesale (for resale). Report the Revenue received for each sale as Free on Board at the plant (excludes transportation to customers, port costs/fees or other costs associated with export). Report the total revenue (not averages) in U.S. whole dollars (USD). Report the name of the Destination Country. If the country cannot be determined, report UNKNOWN.

Use as many lines as needed to describe each Product Type sold, the type of sale, and the destination port or country for shipments made during the reporting period.

## **Product List**

- Wood Pellets for Heating with PFI Certification
- Wood Pellets for Heating without PFI Certification
- Industrial/Utility-grade Wood Pellets
- Other (please specify below)

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## **DEFINITIONS**

**Ash** - Noncombustible matter contained in the densified biomass fuel product. The amount of ash, measured on a percentage by weight basis, affects the burning characteristics of a fuel. In general, utility grade densified biomass fuel is higher in ash than premium grades.

**British Thermal Units (Btu)** -The quantity of heat required to raise the temperature of 1 pound of liquid water by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit).

Commercial Operation - Original month and year the facility began production of products for sale.

Conversion from Metric to Short Tons - One metric ton equals 1.1023 short tons.

#### Conversions to Btu per Pound

- To convert from kilojoules (KJ) per metric ton to Btu per pound:
  - o 1 KJ = (.947817) Btu
  - 0 1 Metric Ton = (1.1.023\*2000) pounds
- To convert from million Btu per ton (MMBtu/ton) to Btu per pound:
  - o MMBtu per ton /.002 = Btu/lb

**Densified Biomass Fuel Product** - Raw biomass that has been condensed into a high energy density and homogenously sized product, such as wood pellets, intended for use as fuel.

**Destination Country** - Country where exported product is destined to arrive.

**Feedstock Types** - Raw biomass intended for densification purchased and received at the facility during the reporting period. Report the volume as received, not the volume actually converted into product in the reporting period.

- Roundwood Roundwood typically classified as timber, can be five to ten inches in diameter.
- **Pulpwood** Roundwood, whole-tree chips, or wood residues used for the production of wood pulp, typically less than five inches in diameter.
- Sawmill Residuals Sawmill residues in the form of sawdust, chips, shavings, slabs or edges.
- Wood Product Manufacturing Residuals wood material from consumer product manufacturing facilities.
- Logging Residues Residual trimmings, limbs, chips, or sawdust from logging activities.

**Revenue Free on Board (FOB) at Plant** - Revenue received for sales of product, excluding costs or revenue due to transportation to or from plant, sales taxes, tax incentives, rebates, insurance, etc.

**Full-time Equivalent (FTE) Direct Employees** - The full-time equivalent of the employees onsite at a production facility, directly employed by the company which owns and/or operates the facility.

**Moisture** - The water content of a substance (a solid fuel) as measured under specified conditions being the "dry basis." Moisture content in densified biomass fuel is significantly reduced from the raw biomass feedstock, creating a higher density and thermal energy product. Moisture content should be reported as percentage by weight.

Product Types - Densified products such as pellets and the grade or certification standard met for the product.

**Reporting Period** - Calendar year and month covered in a single submitted report. Data reported should be inclusive of the calendar month for the report. If data are based on other than a calendar month, please provide a comment to describe the reporting period covered by the data.

**Retail Sales (to end users)** - Sales of product directly to the end user. Retail sales do NOT include sales to distributors, brokers or other entities with intent to resell the products.

**Short Tons** - Two thousand pounds.

Thermal (Heat) Content - The quantity of heat expressed in Btu contained in one unit of fuel. For the purposes of this report, Btu per pound of densified biomass fuel should be reported. Commonly, the value will fall between 5,000 and 12,000 Btu per pound (Btu/lb).

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**Total Delivered Cost (for feedstocks)** - Cost of feedstock delivered to plant including all cost components (transportation, commodity costs, taxes, handling, etc.).

#### Units

- Green Ton (GT) = 2,000 lbs of fresh cut woody material at a "green" moisture content
- Bone Dry Ton (BDT or DT) = 2,000 lbs of woody material at 0% moisture content

Wholesale Sales (for resale) - Sales of products to entities that will resell the products to end users.

## **Wood Type**

- Softwood Gymnosperm (seeds produced without covering, usually in cones) trees
- Hardwood Angiosperm (seeds produced with a covering) trees