

Instructions to Form EIA-22M Monthly Survey of Biodiesel Production 2008

General Information

I. Purpose

Form EIA-22M collects the following data from registered U.S. producers of biodiesel by plant:

- Company identification and supervisory contact information
- Plant location, operating status, and annual production capacity
- B100 and co-product production and monthly stock changes
- Feedstock, methanol input, and other catalysts into biodiesel production
- Sales of B100 and blended biodiesel
- End-use sales of biodiesel

Form EIA-22M is designed to provide the data necessary for the Energy Information Administration (EIA), U.S. Department of Energy (DOE), to carry out its responsibilities for the collection of renewable fuels demand in the motor fuels market, monitor the size of growth of the biodiesel industry, and provide Congress with a measure of the extent to which the objectives of Section 503 of the Energy Policy Act of 1992 and Section 1508 of Energy Policy Act of 2005 are being achieved. The data collected will be published in the *Renewable Energy Annual* and also be available through EIA's Internet site at <http://www.eia.doe.gov/fuelrenewable.html>.

II. Who Must Submit

This report is mandatory and required pursuant to the authority granted to the Department of Energy (DOE) by the Federal Energy Information Administration Act of 1974 (Public Law 93-275). Form EIA-22M is to be submitted by all entities producing biodiesel that meets ASTM D 6751-07B specifications and is used for commercial purposes. A company should submit separate forms for each of its plants.

III. When to Submit

The Form EIA-22M must be submitted to the EIA no later than the 20th of the month after the reference month, i.e., January 2009 data must be submitted no later than February 20th, 2009.

IV. Where to Submit

Respondents can submit data for this survey by facsimile, e-mail, or Internet using an encrypted web system. With the Internet-based option, EIA uses security protocols to protect the information against unauthorized access during transmission. Commonly used facsimile and e-mail transmissions (including files attached to e-mail messages) travel over ordinary telephone lines and are not considered secure electronic methods of transmitting survey data. Any questions regarding the submission of this form can be directed to Chris Buckner at (202) 586-6670.

Please retain a completed copy of this form for your files.

Secure Communications Methods

By Internet: The site for Internet Data Collection (IDC) will be available by reporting time.

Unsecured Communications Methods

By fax: (202) 287-1944

If you need an alternate means of filing your response, contact the survey manager, e-mail: chris.buckner@eia.doe.gov.

V. Provisions Regarding Confidentiality of Information

The information reported on this form will be protected and not disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. §552, the Department of Energy regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905.

The Federal Energy Administration Act requires the EIA to provide company-specific data to other Federal agencies when requested for official use. The information reported on this form may also be made available, upon request, to another component of the Department of Energy (DOE); to any Committee of Congress, the Government Accountability Office, or other Federal agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order. The information may be used for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

VI. Sanctions

The timely submission of Form EIA-22M by those required to report is mandatory under the Federal Energy Administration Act of 1974 (FEAA), Public Law 93-275, as amended. Failure to respond may result in a penalty of not more than \$2,750 per day for each violation, or a fine of not more than \$5,000 per day for each criminal violation. The Government may bring a civil action to prohibit reporting violations that may result in a temporary restraining order or a preliminary or permanent injunction without bond. In such civil action, the court may also issue mandatory injunctions commanding any person to comply with these reporting requirements.

Title 18 U.S.C. 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.

VII. Filing Forms with Federal Government and Estimated Reporting Burden

Respondents are not required to file or reply to any Federal collection of information unless it has a valid OMB control number. Public reporting burden for this collection of information is

estimated to average 3 hours per response including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to the Energy Information Administration, Statistics and Methods Group, EI-70, 1000 Independence Ave., S.W., Washington, D.C. 20585-0670, and the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

Form EIA-22M Instructions

This survey is designed to capture biodiesel data from producers on a monthly basis by plant.

- *Section 1* is for respondent identification
- *Section 2* asks plant information and operating status
- *Section 3* collects information on production, inputs to production, stocks, and sales volume and revenue
- *Section 4* is a remarks section allowing the respondent to explain any discrepancy, add additional relevant information, or provide an explanation as to why the respondent is unable to answer any question listed on the form.

For questions regarding definitions of terms used in EIA-22M, see the glossary at the end of the instructions section.

EIA-22M SECTION 1:

In Section 1, the respondent is required to give the following information:

Part A - Preparer name, preparer company name, preparer address, preparer phone number, preparer fax number, and preparer e-mail address.

Part B - Plant name and address for which data are being reported, plant contact name, plant contact title, plant contact phone number, plant contact fax number, and plant contact e-mail address.

Part C - Company name, company address, company contact name, company contact title, company contact phone number, company contact fax number, and company contact e-mail address.

Part D - Company supervisory contact name, company supervisory contact title, company supervisory contact address, company supervisory contact phone number, company supervisory contact fax number, and company supervisory contact e-mail. (The company supervisory contact should be the supervisor of the preparer or another higher-level official with authorization to complete the form.)

EIA-22M SECTION 2:

Part A - Report annual production capacity of the plant, by volume in gallons.

Part B - Report “YES” or “NO” if the plant is a farmer’s cooperative.

Part C - Provide information on the operating status of the plant listed in Section 1 part B. The respondent must identify operating status based on the following categories, as appropriate: active, inactive, permanently ceased operation, sold to another company or leased to another company. For definitions of the operating status categories, refer to the glossary at the end of the instructions. Note: The status, "leased to another company" does not include biodiesel plants that process feedstock for fuel marketers under tolling agreements. Respondents should mark only ONE of the categories. Only those respondents stating that the plant has been sold or leased during the reporting month should complete part D. Data should only be given for any production, sales, or inputs up to the date of transaction given in Part D. Respondents marking 'active', 'inactive' or 'permanently ceased operation' should skip Part D and continue to Section 3 to complete the rest of the form. Respondents marking 'inactive' should fill out only the end-of-month stocks information in Section 3 (question 3.A.f.).

Part D – Only respondents reporting the plant as sold or leased to another company during the previous month should complete this section. The following information should be provided: the date of the transaction, the name of the company the plant was sold to or leased to, the address of the company, the contact name at this company, the contact telephone number, the contact fax number, and the contact e-mail address.

EIA-22M SECTION 3:

Section 3 requires the respondent to provide information on the production, inputs, stocks, and sales of biodiesel. If the plant permanently ceased operations, or was sold or leased to another company, the respondent should report on all activity up until the transaction date that was reported in Section 2.D.

In Part A, respondents should report the volume, in gallons, of biodiesel (B100) held in storage at the plant. Beginning of month stocks are those held as of midnight on the last day of the month prior to the survey month. The respondent should not report stocks of any biodiesel blends.

Respondents should then report the total number of gallons of biodiesel (B100) produced at this plant during the survey month. Next, sales of non-blended biodiesel (B100) and biodiesel blends should be reported. For sales of biodiesel blends, the respondent should report only biodiesel included in the blend. Other components of the blends will be reported in section 3, part D.

Changes in biodiesel stock that are not accounted for by sales in the domestic U.S. market should be reported as B100 losses or adjustment. These could include, for example, changes resulting from theft, leaks, and exports.

End of month stocks are those held as of midnight on the last day of the survey month. The respondent should not report stocks of any biodiesel blends.

Data provided in Part A will be used to generate a volumetric balance equation to verify the quality of the data. The balance equation is calculated as follows: beginning month stock of B100 *plus* production of B100 *less* sales of B100 *less* B100 sold in biodiesel blends *plus or minus* adjustments and losses of B100 should equal end of month stocks. For questions about the definitions of these terms, refer to the glossary at the end of the instructions. If the equation does not balance, please review the data entered for stocks, receipts, consumption, and adjustments. If the balance is not a numerical error, enter a comment to explain any discrepancy. Also, enter in the remarks section an explanation of the source of B100 losses or adjustment, if available.

Part B collects data on monthly co-product production. Production values may be given by volume in gallons or by weight in pounds. The pure glycerol contained in the glycerin co-product may be obtained by material balance or by laboratory analysis. Respondents should answer “Y” to 3. B. c. if the glycerol content of at least one sample of the glycerin co-product was obtained by laboratory analysis within the reporting period. If the glycerol is used to produce some other chemical at the biodiesel plant, respondents should report zero glycerol production on line 3. B. a. and include the production of glycerol-derived chemicals in line 3. C. b.

Part C asks for information about feedstock used to produce biodiesel **during the survey month**. Feedstocks are divided into vegetable oils (*canola oil, castor oil, coconut oil, corn oil, cottonseed oil, palm oil, peanut oil, soybean oil, sunflower oil, tung oil, and other*); animal fats (*tallow, white grease, and other fats such as lard and poultry fat*); recycled feedstock (*yellow grease and other recycled feedstocks such as brown grease*); algae; and other feedstocks. Inputs should be listed by feedstock in pounds. The respondent should also report the amount of alcohol and catalysts used in production in this section. “Alcohol” is the total of methanol, ethanol, and any other alcohols used in production.

Part D gathers information about the sale of biodiesel and biodiesel blends. First, the respondent should list the total volume of sales in gallons and total revenue in dollars received from these sales of biodiesel and biodiesel blends and not co-product sales. Total volume and revenue are to be reported separately based on whether tax credit has been taken (i.e., Sales for Which Producer Claimed Tax Credit) or whether tax credit was not taken on the sale (i.e., Sales for Which Producer Did Not Claim Tax Credit). “Tax credit” for purposes of this part is defined as the credit against the Federal income tax and/or the Federal motor fuels excise tax for the blending of biodiesel. If a biodiesel producer claims the Federal small producer credit for biodiesel but does not claim any Federal credit for biodiesel blending, then the volume and revenue of the producer’s sales should be reported under “Sales for Which Producer Did Not Claim Tax Credit.” Sales for which a producer claimed any State tax incentive and no Federal tax credits for biodiesel blending should also be reported under “Sales for Which Producer Did Not Claim Tax Credit.” Next, the respondent must provide volume and revenue figures for sales to end users and sales for resale separately. Sales to end users are sales made directly to the user of the product. End users can be bulk customers, such as agriculture and industry, as well as residential and commercial customers. Sales for Resale are sales to customers who are other than final consumers. Most frequently, these are wholesale sales. If the plant sells product both to end users and for resale, the respondent should complete Subsections 1 and 2. Otherwise, the respondent should report monthly sales under either Subsection 1 or 2, as appropriate. For further definition of sales to end users and sales for resale, refer to the glossary at the end of the instructions.

In subsection 1 of Part D, the respondent must list the total volume and revenue received from B98 to B100 sold to end users in line 1.a. Volume and revenues for sales on which the tax credit was taken and those on which the tax credit was not taken must be reported separately. On line 1.a, sales of blends should include the volume of non-biodiesel components in the blend. On line 1.a1, respondents must give the total volume of diesel fuel included in the B98-B100 sales reported. On line 1.b, respondents must list the volume and revenue earned from all other biodiesel blends below B98, i.e. B0.1 to B97.9. On this line, sales of blends should include the volume of non-biodiesel components in the blend. On line 1.b.1, the amount of diesel fuel included in the other biodiesel blends category should be given in volume.

Subsection 2 of Part D requires the respondent to list information regarding the sale of biodiesel or biodiesel blends for resale. One line 2.a, the respondent must list the total volume and revenue received from B98-B100 sold to end users. Volume and revenues for sales on which the tax credit was taken and those on which the tax credit was not taken must be reported separately. On line 2.a, sales of blends should include the volume of non biodiesel components in the blend. On line 2.a1, respondents must give the total volume of diesel fuel included in the B98-B100 blends reported. On line 2.b, respondents must list the volume and revenue earned from all other biodiesel blends below B98, i.e. B0.1 to B97.9. On line 2.b, sales of blends should include the volume of non-biodiesel components in the blend. On the line 2.b.1, the amount of diesel fuel included in the other biodiesel blends category should be given in volume.

Part E relates to the sale of biodiesel to end users. This section should be completed only if sales to end users were reported in Subsection 1 of Part D. Total end-use sales should be divided according to their type of use: *on-road transportation, off-road transportation, heating, or any other industrial or consumer use*. For definitions of usage type, refer to the glossary at the end of the instructions. For each applicable end use, respondents are required to give end-use sales by volume in gallons. Respondents are required to list end-use sales for B98-B100 biodiesel on line 1, diesel fuel included in the B98 to B100 on line 2, other biodiesel blends of B0.1 to B97.9 on line 3 and diesel fuel used in other biodiesel blends of B0.1 to B97.9 on line 4.

EIA-22M SECTION 4:

Section 4 is included for remarks. Remarks may include any relevant explanations regarding Sections 1 through 3 of the survey form. For example, respondents may explain discrepancies in numbers or reasons why questions have not been answered. The respondent should provide the section of the form to which the comment pertains.

GLOSSARY OF TERMS

Active (operating status): A plant that has produced or sold any amount of biodiesel during the monthly survey period in question and has not ceased operations or been sold or leased during that period.

Algae: A large and diverse group of simple plant-like organisms, ranging from unicellular to multicellular forms. The largest and most complex marine forms are called seaweeds. They are considered "plant-like" because of their photosynthetic ability, and "simple" because they lack the distinct organs of higher plants such as leaves and vascular tissue. Algae can be used to make biodiesel.

Animal Fats: Animal fat obtained from the tissues of mammals and/or poultry during the rendering process. Animal fats must contain less than 90% total fatty acids, not more than 2.5% unsaponifiables, and not more than 1% insoluble matter.

B100: 100% biodiesel with no petroleum diesel added.

B100 losses or adjustments: Changes in biodiesel stock not accounted for by the removal of biodiesel for commercial purposes in the domestic US market from storage facilities including, for example, theft, leaks, and exports.

Biodiesel: A fuel composed of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100, and meeting the requirements of ASTM (American Society for Testing & Materials) D 6751.

Biodiesel blends: Named for their percentage of biodiesel. For example, BX means that X% of the blend (by volume) is biodiesel and (100-X)% of the blend is petroleum diesel.

B2- A blend of 2% biodiesel with 98% petroleum diesel

B20- A blend of 20% diesel with 80% petroleum diesel

B98-B99-A blend of 99% to 98% biodiesel with 1% to 2% petroleum diesel

Brown Grease: A generic term which includes trap grease, sewage grease, black grease, and grease from all other sources whose free fatty acid content exceeds limits for animal feed

Canola Oil: The edible oil extracted from rapeseed, also used as a lubricant and in the manufacture of various products, and in the production of biodiesel.

Castor Oil: A colorless or pale yellowish oil extracted from the seeds of the castor-oil plant, used pharmaceutically as a laxative and skin softener and industrially as a lubricant and to produce biodiesel.

Coconut Oil: A pale yellow to colorless oil or a white semisolid fat obtained from the flesh of the coconut.

Co-product: Any product produced in addition to the principle product. For biodiesel, any product, such as glycerin, that is produced in the process of making biodiesel.

Corn Oil: A pale yellow liquid obtained from the embryos of corn grains.

Cottonseed Oil: The usually pale yellow oil obtained from cottonseed, used in manufacturing, industry, and cooking.

Distributor: A company primarily engaged in the sale and delivery of biodiesel directly to consumers.

Farmer's Cooperative: An autonomous, jointly owned association of farmers united voluntarily to meet common economic needs in the transformation, packaging, distribution, and marketing of produce. 'Produce' means biodiesel for purposes of EIA-22M.

Feedstock: Raw material (biomass) made into biodiesel fuel, including soybeans, vegetable oil, recycled cooking grease, and animal fats.

Glycerol: ($C_3H_8O_3$) A viscous, colorless liquid. Glycerol and biodiesel are produced by the reaction of alcohol with vegetable oil or animal fats. Glycerin is a solution of glycerol, water, and other substances. The water is introduced in the washing stage after the biodiesel and glycerol are produced. Glycerin may be refined for commercial purposes. It is usually sold for use in soaps and other products.

Inactive (operating status): A plant that has not produced or sold any biodiesel during the monthly period in question but has not permanently ceased operations.

Lard: An edible, soft, white, solid or semisolid fat obtained by rendering the fatty parts of pigs.

Leased to Another Company (operating status): A plant that is still under the ownership of the respondent but the production has been contracted out to another company. Does not include biodiesel plants that process feedstock for fuel marketers under tolling agreements.

Methanol: (CH₃OH) A light, volatile alcohol.

Off-Road Transportation: A vehicle is treated as an off-road vehicle if its primary function is to perform a task not normally done on or using the highway system. For example, trains, construction equipment such as earthmovers, and farm tractors are considered off-road transportation.

On-Road Transportation: Vehicles in use, including any self-propelled vehicle or trailer or semi trailer, to perform the function of transporting a load over the public highway, whether or not also designed to perform other functions. Excluded from the definition are certain types of vehicles, including certain specially designed mobile machinery vehicles (the mobile machinery exception) and certain vehicles specially designed for off highway transportation.

Palm Oil: A yellowish fatty oil obtained especially from the crushed nuts of an African palm (*Elaeis guineensis*) and used in the manufacture of soaps, chocolates, cosmetics, candles, and biofuels.

Peanut Oil: The oil pressed from peanuts, used for cooking, in soaps, and as a solvent for pharmaceutical preparations and for biofuel production.

Permanently Ceased Operations (operating status): A plant that has stopped producing biodiesel and is not expected to restart operations.

Plant Production Capacity: The maximum quantity of a product that can be produced in a plant in 1 year if operating for 365 days. It includes the capacity of idle plants until the plant is destroyed, dismantled, or abandoned.

Poultry Fat: Poultry tissues obtained during the rendering process. It must contain less than 90% total fatty acids, not more than 2.5% unsaponifiables, and not more than 1% insoluble matter.

Producer: A company engaged in the production and sale biodiesel with delivery generally at or near the production facility. For the purposes of firm classification, a firm primarily engaged in the development and/or production of biodiesel. A biodiesel producer must be legally registered with the Environmental Protection Agency.

Recycled Feedstock: Material (biomass) used to produce biodiesel fuel that is not virgin, i.e. not produced for the first time or for the express purpose of making biodiesel.

Revenue: The total gross income produced by a given source.

Sales to End User: Biodiesel product sold to any of the following:

- Government: An energy-consuming sector that consists of federal, state, and local governments and agencies
- Farm Use: An energy-consuming sector that consists of all facilities and

equipment engaged in growing crops and raising animals. Energy use by all facilities and equipment at these establishments is included, whether or not it is directly associated with growing crops and/or raising animals

- **Industrial:** An energy-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following type of activity: manufacturing and mining
- **Commercial:** An energy-consuming sector that consists of service providing facilities and equipment of: non-manufacturing businesses, such as firms engaged in transportation, wholesale, or retail trade, finance, insurance, and real estate
- **All Other Users:** Report volumes of biodiesel blends sold to all other end users not included elsewhere. This includes private and residential consumers

Sold to Another Company (operating status): A plant that has been sold to another company and is expected to continue biodiesel production under different ownership.

Soybean Oil: The most common oil used in the U.S. to produce biodiesel made from soybeans.

Stocks: Inventories of fuel stored for future use. Beginning of month stocks are those held as of midnight on the last day of the month prior to the survey month. End of month stocks are those held as of midnight on the last day of the survey month.

Sunflower Oil: A combustible, pale-yellow, semidrying oil with a pleasant scent, expressed from the seeds of the common sunflower; soluble in alcohol, ether, and carbon disulfide; consists mostly of mixed triglycerides of fatty acids, and used to make biodiesel.

Tallow: Solid fat extracted from the tissues and fatty deposits of cattle and sheep. Pure tallow is white, odorless and tasteless; it consists chiefly of triglycerides of stearic, palmitic, and oleic acids. There is both inedible tallow, used to produce biodiesel, and edible tallow, used for food.

Tung Oil: A yellow or brownish oil extracted from the seeds of the tung tree and used as a drying agent in varnishes and paints, for waterproofing, and for producing biodiesel.

Unsaponifiables: Incapable of being saponified -- used especially of the portion of oils and fats other than the glycerides; is generally used as a measure of feedstock quality.

Vegetable Oils: Vegetable oils that are used to produce biodiesel including cottonseed, sunflower, and peanut oils, among others.

Virgin Vegetable Oils: Vegetable oils that are used to produce biodiesel including cottonseed, sunflower, and peanut oils.

White Grease: A term used to describe inedible rendered pork fat.

Yellow Grease: A term from the rendering industry that is generally assumed to include used frying oils from deep fryers and restaurants' grease traps. It can also refer to lower-quality grades of tallow from rendering plants.