

EIA-820 ANNUAL REFINERY REPORT INSTRUCTIONS

1. QUESTIONS?

If you have any questions about Form EIA-820 after reading the instructions, please contact the Form Manager at (202) 586-5994.

2. PURPOSE

The Energy Information Administration (EIA) Form EIA-820, "Annual Refinery Report," is used to collect data on current and projected capacities of all operable petroleum refineries. The data appear on EIA's website at www.eia.doe.gov and in numerous government publications.

3. WHO MUST SUBMIT

Form EIA-820 is mandatory pursuant to Section 13(b) of the Federal Energy Administration Act of 1974 (Public Law 93-275) and must be completed by all operating and idle petroleum refineries (including new refineries under construction) and refineries shutdown during the previous year, located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam and other U.S. possessions.

Section 9 explains the possible sanctions for failing to report.

4. WHEN TO SUBMIT

Form EIA-820 must be filed with the EIA by February 15th.

5. WHERE TO SUBMIT

Survey forms may be submitted by facsimile, e-mail, or electronically.

This form may be submitted to the EIA by fax, e-mail, or secure file transfer. Should you choose to submit your data via e-mail or facsimile, we must advise you that e-mail and facsimile are insecure means of transmission because the data are not encrypted, and there is some possibility that your data could be compromised. You can also send your Excel files to EIA using a secure method of transmission: HTTPS. This is an industry standard method to send information over the web using secure, encrypted processes. (It is the same method that commercial companies communicate with customers when transacting business on the web.) To use this service, we recommend the use of Microsoft Internet Explorer 5.5 or later or Netscape 4.77 or later. Send your surveys using this secure method at: <https://idc.eia.doe.gov/upload/noticeoog.jsp>.

Fax completed forms to: (202) 586-6323 or (202) 586-1076

E-mail completed forms to: OOG.SURVEYS@eia.doe.gov

6. COPIES OF SURVEY FORMS, INSTRUCTIONS AND DEFINITIONS

Copies in portable document format (PDF) and spreadsheet format (XLS) are available on EIA's website at:

www.eia.doe.gov/oil_gas/petroleum/survey_forms/pet_survey_forms.html

You may also access the materials by following the steps below:

- Go to EIA's website at www.eia.doe.gov
- Place a cursor on *By Fuel* near the center of the page and click on *Petroleum* from the drop down menu
- Click on *Survey Forms* on the left side of the page
- Select the materials you want.

Files must be saved to your personal computer. Data cannot be entered interactively on the website.

7. HOW TO COMPLETE THE SURVEY FORM

PART A. RESPONDENT IDENTIFICATION

- Enter the 10-digit EIA ID Number. If you do not have a number, submit your report leaving this field blank. EIA will advise you of the number.
- Enter the name and mailing address of the reporting company. If there has been a change since the last report, insert an "X" in the box to the right.
- Enter the refinery or blending plant name.
- Enter the name, title, telephone number, fax number, and e-mail address of the person to contact concerning information shown on the report. The person listed should be the person most knowledgeable of the specific data reported. Check the box provided if the contact information is different from the prior year.

Resubmission

A resubmission is required whenever an error greater than 5 percent of a previously reported value is discovered by a respondent or if requested by the EIA.

Insert an "X" in the resubmission box if you are correcting information previously reported.

Enter only those data cells which are affected by the changes. You are not required to file a complete form when you resubmit.

PART B. COMMENTS

Explain any unusual or substantially different aspects of your reporting year's operations that affect the data reported (e.g., new processing units, major modifications or retirement of processing units, sale of refinery).

PART C. REFINERY ACTIVITY

Definitions of petroleum products and other terms are available on our website. Refer to Section 6 for details on accessing our website. Please refer to these definitions before completing the survey form.

Report all quantities to the nearest whole number. See individual headings for correct units of measure. Shaded cells on the form are those in which data are not currently required to be reported.

Section 1: Fuel, Electricity, and Steam Purchased and Consumed at the Refinery

Natural Gas (Code 105) - Report the volume of dry natural gas purchased and consumed at the refinery for all purposes to the **nearest whole number of million cubic feet**.

Coal (Code 109) - Report the volume of coal purchased and consumed at the refinery to the nearest whole number of **thousand short tons**.

Report electricity and steam consumed at the refinery for all purposes last year. **Report purchased quantities only**. Exclude consumption by petrochemical facilities associated with a refinery.

Electricity (Code 114) - Report purchased electricity to the nearest whole number of million kilowatt-hours.

Steam (Code 113) - Report purchased steam to the nearest whole number of **million pounds**.

Section 2: Refinery Receipts of Crude Oil by Method of Transportation

Report in **thousand barrels** the receipts of crude oil last year by method of transportation using the following criteria:

Report the last method of transportation used if the distance traveled via this mode is equal to or greater than 100 miles.

Examples:

If the refinery received crude oil that first traveled 5,000 miles by tanker and then traveled 105 miles by pipeline to the refinery, report *pipeline* as the method of transportation.

If the refinery received crude oil that first traveled 3,000 miles by tanker, then 500 miles by barge, then 50 miles by pipeline, and finally traveled 75 miles to the refinery by truck, report *barge* as the method of transportation.

Report the method which represents the greatest distance traveled if several methods of transportation are used and no single method is equal to or greater than 100 miles.

Example:

If the refinery received crude oil that first traveled 75 miles by tank car, then 70 miles by barge and finally travels 55 miles by truck to the refinery, report *tank car* as the method of transportation.

Total domestic crude oil receipts reported on the annual Form EIA-820 must equal the sum of last year's monthly submissions of Domestic Crude Oil Receipts (Code 010) reported on the Form EIA-810, "Monthly Refinery Report."

Total foreign crude oil receipts reported on the annual Form EIA-820 must equal the sum of last year's monthly submissions of Foreign Crude Oil Receipts (Code 020) reported on the Form EIA-810, "Monthly Refinery Report."

Section 3: Atmospheric Crude Oil Distillation Capacity

Current Year:

Report operable capacity as of **January 1, 2004** (Code 401) for atmospheric crude oil distillation facilities in terms of **both barrels per calendar day and barrels per stream day**. Any processing equipment upstream of the actual atmospheric distillation tower/furnace, such as preflash drums/towers, prefractionators and outboard flash towers, should be considered part of the atmospheric distillation unit for capacity reporting purposes. The barrels per calendar day capacity for atmospheric crude oil distillation reported on the annual Form EIA-820 and the monthly Form EIA-810, "Monthly Refinery Report" for January 1, 2004 **must match**.

Barrels per Calendar Day - The amount of input that a distillation facility can process under usual operating conditions. The amount is expressed in terms of capacity during a 24-hour period and reduces the maximum processing capability of all units at the facility under continuous operation (see **Barrels per stream day**) to account for the following limitations that may delay, interrupt, or slow down production:

- the capability of downstream processing units to absorb the output of crude oil processing facilities of a given refinery. No reduction is necessary for intermediate streams that are distributed to other than downstream facilities as part of a refinery's normal operation;
- the types and grades of inputs to be processed;
- the types and grades of products expected to be manufactured;
- the environmental constraints associated with refinery operations;
- the reduction of capacity for scheduled downtime due to such conditions as routine inspection, maintenance, repairs, and turnaround; and
- the annualized reduction of capacity for unscheduled downtime due to such conditions as mechanical problems, repairs, and slowdowns.

Barrels Per Stream Day - The maximum number of barrels of input that a distillation facility can process within a 24-hour period when running at full capacity under optimal crude and product slate conditions with no allowance for downtime.

Barrels per stream day capacity must be greater than barrels per calendar day capacity.

Operable Capacity has two components, operating and idle capacity.

- **Operating Capacity** (Code 399) - the component of operable capacity in operation at the beginning of the year (January 1).
- **Idle Capacity** (Code 400) - the component of operable capacity not in operation and not under active repair, but capable of being placed in operation within 30 days; or capacity not in operation but under active repair which can be completed in 90 days.

Projections:

Projections of operable capacity for next year (Code 501) should include operating, idle, and **any additional capacities slated for completion as of January 1 of the next year.**

Section 4: Downstream Charge Capacity

Report in *barrels per calendar day* the operable charge capacity as of January 1 of this year of the following downstream processing units:

- fluid coking (includes flexicoking) (Code 404)
- delayed coking (Code 405)
- fresh feed catalytic cracking (Code 407)
- catalytic hydrocracking:
 - distillate (Code 439)
 - gas oil (Code 440)
 - residual (Code 441)

Barrels per calendar day capacity must be less than barrels per stream day capacity. Charge capacity for a processing facility is measured in terms of its liquid adjusted inputs (feed) capacity.

Report in **barrels per stream day** (see definition in Section 3) the operable charge capacity of the downstream processing facilities listed on the survey form as of January 1 of this year and projections of operable charge capacity, including operating, idle, and any **additional capacities slated for completion as of January 1 of the next year.** Charge capacity for a processing facility is measured in terms of its input (liquids feed) capacity.

For the Thermal Cracking category "Other" (Code 406), include gas oil.

For the Desulfurization Units (Codes 426, 420, 421, 422, 423, 424, 413, and 425), include capacity of all types of desulfurization technologies as well as those hydrotreating units which have functions besides desulfurization.

For the Catalytic Reforming categories (Codes 430 and 431), report the capacity of low pressure (less than 225 pounds per square inch gauge (PSIG) measured at the outlet separator) and high pressure (equal to or greater than 225 PSIG) processing units.

In the case of Fuels Solvent Deasphalting (Code 432), include only units designed to remove asphalt from petroleum fractions intended for further processing into fuel-type products. Do not include lube solvent deasphalting capacity.

Section 5: Production Capacity

Report the maximum amount of product that can be produced from all processing facilities at the refinery for the products listed on the survey form. All are in barrels except for hydrogen and sulfur.

Projections of operable production capacity for next year should include operating, idle, **any additional capacities slated for completion as of January 1 of the next year.**

The following factors should be considered when reporting the capacities for the following products:

- **Alkylates** (Code 415) - Report the maximum amount of alkylates that can be produced.
- **Aromatics** (Code 437) - Report the maximum amount of aromatics that can be produced.
- **Asphalt and Road Oil** (Code 931) - Report the maximum amount of asphalt and road oil that can be produced.
- **Isobutane** (Code 615) - Report the maximum amount of isobutane (C₄H₁₀) that can be produced.
- **Isopentane, Isohexane** (Code 438) - Report the maximum amount of isopentane (C₅H₁₂) and isohexane (C₆H₁₄) that can be produced.
- **Lubricants** (Code 854) - Report the maximum amount of base stocks, including white oil feedstock, that can be produced.

This capacity should include base stocks and process oils that have undergone some combination of distillation, solvent extraction, hydrocracking, severe hydrotreating, deasphalting, dewaxing or finishing.

- **Petroleum Coke-Marketable** (Code 021) - Report the maximum amount of marketable petroleum coke that can be produced from processing and upgrading facilities. Do not include catalyst petroleum coke. Report in **barrels**. There are 5 barrels per short ton.
- **Hydrogen** (Code 091) - Report the maximum amount of hydrogen that can be produced from steam reforming and purification plants. Report quantities in **million cubic feet per day (MMcfd)**.
- **Sulfur** (Code 435) - Report the maximum total sulfur recovery capacity of the refinery. Report quantities in **short tons per day**.

Section 6: Storage Capacity

Report in **thousand barrels** both working and shell storage capacity located at the refinery for the products listed on the survey form as of January 1 of this year.

Working and Shell Storage Capacity are defined as:

Working Storage Capacity - the difference in volume between the maximum safe fill capacity and the quantity below which pump suction is ineffective (bottoms).

Shell Storage Capacity - the design capacity of a petroleum storage tank and is always greater than or equal to working storage capacity.

Include aboveground and underground storage capacity.

Exclude any leased tankage at other facilities.

Gasoline Blending Components (Code 136) - Includes motor gasoline and aviation gasoline blending components.

Other Products (Code 333) - Includes ethane/ethylene, isobutane/isobutylene, pentanes plus, other hydrocarbons, hydrogen, unfinished oils, finished aviation gasoline, special naphthas, wax, petroleum coke, still gas, petrochemical feedstocks and miscellaneous products.

8. PROVISIONS REGARDING CONFIDENTIALITY OF INFORMATION

Information on operable atmospheric crude oil distillation capacity, downstream charge capacity, and production capacity reported on Form EIA-820 are not considered as confidential and will be publicly released in identifiable form. In addition to the use of the information by EIA for statistical purposes, the information may be used for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

All other information reported on this form will be kept confidential 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 DOE regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905. The Energy Information Administration (EIA) will protect your information in accordance with its confidentiality and security policies and procedures.

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 General Accounting 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.

Company specific data are also provided to other DOE offices for the purpose of examining specific petroleum operations in the context of emergency response planning and actual emergencies.

Disclosure limitation procedures are not applied to the statistical data published from this survey's information. Thus, there may be some statistics that are based on data from fewer than three respondents, or that are dominated by data from one or two large respondents. In these cases, it may be possible for a knowledgeable person to estimate the information reported by a specific respondent.

9. SANCTIONS

The timely submission of Form EIA-820 by those required to report is mandatory under Section 13(b) of the Federal Energy Administration Act of 1974 (Public Law 93-275), as amended. Failure to respond may result in a civil penalty of not more than \$2,750 each day for each violation, or a fine of not more than \$5,000 for each willful violation.

The government may bring a civil action to prohibit reporting violations which 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.

10. FILING FORMS WITH THE 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 2 hours and 18 minutes 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: Energy Information Administration, Statistics and Methods Group, EI-70, 1000 Independence Avenue, S.W., Washington, D.C. 20585; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.