

## EIA-820 ANNUAL REFINERY REPORT

### **YOUR RESPONSE IS REQUIRED BY LAW**

This report is mandatory under Title 15 U.S.C. §772(b). Failure to comply may result in criminal fines, civil penalties and other sanctions as provided by Title 15 U.S.C. §797. 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.

Form EIA-820 must be completed by the operators of all operating and idle petroleum refineries and non-refinery operators of distillation, reforming, cracking, coking, hydrotreating and similar processes located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U.S. possessions. In addition, Form EIA-820 must be completed by new refineries under construction and refineries shut down during the previous year.

### **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.gov](http://www.eia.gov) and in numerous government publications.

### **RESPONSE DUE DATE**

The Form EIA-820 must be received by EIA by February 15<sup>th</sup> of the designated report year.

### **HOW TO FILE A RESPONSE**

Respondents should transmit data using Secure file transmission (HTTPS). Secure transmission is an industry standard method to send information over the internet using encrypted processes. The secure hypertext transfer protocol (HTTPS) is a communications protocol designed to transfer encrypted information between computers over the Internet.

Copies in spreadsheet format (XLS) are available on EIA's website. You may access the materials here:

<https://www.eia.gov/survey/#eia-820>

Files must be saved to your personal computer. Data cannot be entered interactively on the website. EIA does not accept email, fax, or paper forms.

### **Data Submission Method**

By Secure File Transfer: <https://signon.eia.doe.gov/upload/noticeoog.jsp>

### **QUESTIONS**

Please contact the EIA Survey Support Team using the following communication methods:

By email: [eia4usa@eia.gov](mailto:eia4usa@eia.gov)

By phone: 1-855-EIA-4USA (1-855-342-4872) [Monday through Friday, 8:00 AM to 6:00 PM E.T.]

## HOW TO USE EIA'S SECURE FILE TRANSFER

EIA is ensuring the security of your transactions by using the latest Internet security technology. The technology being used to protect your data is encryption which is the scrambling of data into a code that is unreadable to anyone who does not have the key that deciphers it. The secure hypertext transfer protocol (HTTPS) is a communications protocol designed to transfer this encrypted information between computers over the internet. All information is protected by 128-bit encryption to maintain the privacy and confidentiality of your data. The only thing you need to take advantage of strong encryption technology is a secure browser, one that supports 128-bit encryption.

1. Go to the EIA Secure File Transfer system located at <https://signon.eia.doe.gov/upload/noticeoog.jsp>
2. Read the Agreement and then click the **Accept** button.
3. Enter your name, company name, phone number and email address into the boxes provided. Note that the email address is required so that we can send you a confirmation of the receipt of your data.
4. Click on the **Choose Files** button to navigate to your saved Excel file submission. Select the file to upload and click on the **Open** button.
5. If you are ready to submit your file, click on the green **Submit File(s)** button. Please be patient, it may take a few minutes to upload your file. Do not close your browser during this upload. A confirmation page will be displayed with a Submission Successful banner and indicate the names of the files you have transferred, a confirmation number and the date and time of the transfer.

## SANCTIONS

The timely submission of Form EIA-820 by those required to report is mandatory under 15 USC 772(b), as amended. Failure to respond may result in a civil penalty of not more than \$10,633 each day for each 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.

## REPORTING BURDEN

Public reporting burden for this collection of information is estimated to average 1.80 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining 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, Statistical Methods and Research, EI-21, 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.

## DISCLOSURE OF INFORMATION

Information on operable atmospheric crude oil distillation capacity, downstream charge capacity, and production capacity reported on Form EIA-820 are not considered 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 made available, upon request, to other Federal agencies authorized by law to receive such information for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

All other 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 DOE 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.

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.

## GENERAL INSTRUCTIONS

[Definitions](#) of petroleum products and other terms are available on the EIA website. Please refer to these definitions before completing the survey form.

**Quantities:** Report using the following criteria:

**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. One barrel equals 42 US gallons.

## SPECIFIC INSTRUCTIONS

### PART 1: RESPONDENT IDENTIFICATION DATA

- 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.
- If there has been a change since the last report, enter an "X" in the block provided.
- Enter the Doing Business As "DBA" name if appropriate.
- Enter the name of the reporting company.
- Enter the site name of the refinery.
- Enter the physical address of the reporting company.
- Enter the mailing address of the Contact. (Note: If the physical address and mailing address are the same, provide the information only for the physical address.)
- Enter the name, telephone number, facsimile 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.

## PART 2: SUBMISSION/RESUBMISSION INFORMATION

**Submissions:** Refer to the “How to File a Response” section for more details for submitting data.

**Resubmissions:** 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.

Enter 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.

## COMMENTS

**Report** any unusual or substantially different aspects of your current year’s operations that affect the data in the **Comments** section below Parts 1 and 2. For example, note new processing units, major modifications or retirement of processing units, sale of refinery etc. Explain changes in production capacity or downstream charge capacity of greater than 5 percent from the previous year.

## PART 3. FUEL, ELECTRICITY, AND STEAM PURCHASED AND CONSUMED AT THE REFINERY

**Report** purchased natural gas, coal, electricity, and steam used as a fuel at the refinery last year.

**Exclude** consumption by petrochemical facilities associated with the refinery.

**Report** the volume of dry natural gas purchased and used as a fuel at the refinery (Code 105) to the **nearest whole number of million cubic feet**. Include all natural gas used as fuel at cogeneration plants associated with the refinery. Exclude natural gas used as feed to hydrogen production. Natural gas used as feed for hydrogen production is reported using code 107.

**Report** the volume of dry natural gas purchased and used for the production of hydrogen at the refinery last year (Code 107) to the **nearest whole number of million cubic feet**. Report purchased quantities only and exclude natural gas used as a fuel. Natural gas used as fuel is reported using code 105.

**Report** the volume of coal purchased and used as a fuel at the refinery (Code 109) to the nearest whole number of **thousand short tons**. Include coke from coal, but exclude coke derived from petroleum.

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

**Exclude** electricity produced at cogeneration plants associated with the refinery.

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

## PART 4. REFINERY RECEIPTS OF CRUDE OIL BY METHOD OF TRANSPORTATION

**Report** last year’s receipts of crude oil by method of transportation in **thousand barrels** 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*. Alaskan crude is domestic.

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*.

## **PART 5. ATMOSPHERIC CRUDE OIL DISTILLATION CAPACITY AS OF JANUARY 1**

**Current Year:**

**Report** operable capacity as of **January 1** (Code 401) for atmospheric crude oil distillation units in **both barrels per calendar day** and **barrels per stream day**. Processing equipment upstream of the 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.

**NOTE:** 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 of the same year **must match**.

**Barrels per Calendar Day** - This is your total rated capacity and is the amount of input that your distillation units can process under usual operating conditions during a year. The amount is expressed in terms of capacity during a 24-hour period and should be reduced to account for the following limitations that may delay, interrupt, or limit optimal productive performance during a year:

- the annualized reduction of stream day capacity to account for scheduled downtime due to such conditions as routine inspection, maintenance, repairs and turnaround, and for unscheduled downtime due to such conditions as mechanical problems, repairs, and slowdowns. These factors may only happen once over a period of years and should not be counted only in the year of occurrence.
- 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.

**Barrels per Stream Day** - This is your design capacity, also called the surge capacity. It represents the maximum number of barrels of input that your distillation unit(s) can process within a 24-hour period when running at full capacity without interruption under optimal crude and product slate conditions with no bottlenecks in the system or 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.**

**PART 6. DOWNSTREAM CHARGE CAPACITY AS OF JANUARY 1**

This section requires reporting current and future capacities for every named type of unit in terms of **barrels per stream day** and also in terms of **barrels per calendar day** for some of the units.

**Report** in **barrels per calendar day** (see definition in Part 5), 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)
- **Catalytic Reforming:**
  - Low Pressure (Code 430)
  - High Pressure (Code 431)

**Note:** 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 feed adjusted for standard temperature and pressure inputs (feed) capacity. **Exclude** hydrogen gas inputs.

**Report** in **barrels per stream day** (see definition in Part 5) 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.

**Include** gas oil in the Thermal Cracking category "Other" (Code 406).

**Report** capacity 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. Do not report mercaptan sweetening capacity. Please include a short note in the **Comments Section** (see cover page) of the form noting the details of hydrotreating for other than desulfurization purposes.

**Report** capacity 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.

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

## PART 7. PRODUCTION CAPACITY AS OF JANUARY 1

**Report** the **maximum** amount of product that can be produced in 24 hours from all processing facilities at the refinery for the products listed on the survey form. All products should be reported in barrels except for hydrogen and sulfur.

Projections of operable production capacity for next year should include operating, idle, and **any additional capacities slated for completion by 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 from alkylation processes.
- **Aromatics** (Code 437) - **Report** the maximum amount of aromatics that can be produced from various separation processes after catalytic reforming.
- **Asphalt and Road Oil** (Code 931) - **Report** the maximum amount of asphalt and road oil that can be produced. **Exclude** unfinished oils under this classification.
- **Isobutane** (Code 644) - **Report** the maximum amount of isobutane (C<sub>4</sub>H<sub>10</sub>) that can be produced from butane isomeration units. Include isobutene produced at the refinery and used internally or blended into fuels.
- **C5/C6 Isomerate** (Code 438) - **Report** the maximum amount of isomerate including isopentane (C<sub>5</sub>H<sub>12</sub>) and isohexane (C<sub>6</sub>H<sub>14</sub>) that can be produced.
- **Isooctane** (Code 635) – **Report** the maximum amount of isooctane that can be produced by isooctane units (including MTBE units converted to production of isooctane). **Exclude** isooctane production capacity of alkylation units.
- **Lubricants** (Code 854) - **Report** the maximum amount of base stocks, including white oil feedstock, that can be produced at the refinery. **Exclude** associated lube plant production outside the refinery gate.

**Note:** 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. **Exclude** 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 by a hydrogen generation plant located at the refinery grounds and operated by the refinery operator. **Exclude** the hydrogen that is generated by the catalytic reforming units producing reformate. **Report** quantities in **million standard cubic feet per day**. **NOTE: standard temperature/pressure = 0°C (32°F) and 1 bar (≈1 atmosphere)**
- **Sulfur** (Code 435) - **Report** the maximum total sulfur recovery capacity of the refinery. **Report** quantities in short tons per day.