Independent Statistics & Analysis
U.S. Energy Information Administration

U. S. DEPARTMENT OF ENERGY
ENERGY INFORMATION ADMINISTRATION
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EIA-810
MONTHLY REFINERY REPORT
INSTRUCTIONS

QUESTIONS

If you have any questions about Form EIA-810 after reading the instructions, please contact the Survey Manager at (202) 586-6281.

PURPOSE

The Energy Information Administration (EIA) Form EIA-810, *Monthly Refinery Report*, is used to collect data on the operations of all petroleum refineries located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U.S. possessions. A summary of the data appear on EIA's website at www.eia.gov and in numerous government publications.

WHO MUST SUBMIT

Form EIA-810 is mandatory under 15 U.S.C. §772(b) and must be completed by the operators of all operating and idle petroleum refineries located in the 50 States, District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U.S. possessions.

WHEN TO SUBMIT

Form EIA-810 must be received by EIA by the 20th calendar day following the end of the report period (e.g., the Form EIA-810 covering the January report period must be received by February 20).

Form EIA-810, *Annual Storage Capacity Supplement*, must be received by EIA by the 20th of April for the March report period.

HOW TO SUBMIT

Instructions on how to report are printed on Part 2 of Form EIA-810.

We recommend secure file transmission (HTTPS) for companies to use when sending this form to EIA. Secure transmission is an industry standard method to send information over the internet using encrypted processes. Access the EIA secure transmission site at: https://signon.eia.doe.gov/upload/noticeoog.jsp

Forms may also be submitted using the PC Electronic Data Reporting Option (PEDRO). PEDRO is a Windows-based application that will enable you to enter data interactively, import data from your own database, validate your data online, and transmit the encrypted data electronically to EIA via the Internet. Contact the Electronic Data Collection Support Staff at (202) 586-9659 for information about PEDRO.

COPIES OF SURVEY FORMS, INSTRUCTIONS, AND DEFINITIONS

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

https://www.eia.gov/survey/#eia-810

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

GENERAL INSTRUCTIONS

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

Quantities: Report using the following criteria:

Report quantities to the nearest whole number in **thousand barrels** (42 U.S. gallons/barrel). Quantities ending in 499 or less are rounded down, and quantities ending in 500 or more are rounded up (e.g., 106,499 barrels are reported as 106 and 106,500 barrels are reported as 107).

Report data for only those lines which are applicable to your operation. If the quantity for a product for which you usually report data is zero, please enter "0". Shaded cells on the form are those in which data are not currently required to be reported.

Report quantities corrected to 60 degrees Fahrenheit (^{0}F) less basic sediment and water (BS&W).

PART 1. RESPONDENT IDENTIFICATION DATA

- Enter the year and month on each page. The monthly report period begins at 12:01 a.m. EST on the first day of the month and ends midnight of the last day of the month.
- 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 name of the reporting company.
- Enter the Doing Business As "DBA" name if appropriate.
- Enter the refinery site name.
- Enter the Terminal Control Number (TCN) used for identification of terminals and other facilities in the IRS ExSTARS system.
- 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

Submission

Refer to "How to Submit" section for more details or methods for submitting data.

Resubmission

A resubmission is required whenever an error greater than 5 percent of the true value is discovered by a respondent or if requested by EIA. Enter "X" in the resubmission box if you are correcting information previously reported.

Comments

Report any unusual aspects of your operations during the current reporting period in the **Comments** section at the bottom of the form below Part 4 on page 1. Comments will be used in the validation process and should address any data anomalies that could raise questions requiring contact by survey staff for clarification. Comments will be protected in the same manner as other information reported on this form as described in detail in "Provisions Regarding Confidentiality of Information" following Part 6 of these instructions on Page 8.

SPECIFIC INSTRUCTIONS

PART 3. REFINERY INPUT AND CAPACITY

Refinery Input

Gross Input to Atmospheric Crude Oil Distillation Units (Product code 990) - Report the sum of the various components of refinery input to atmospheric crude oil distillation units. Exclude inputs to downstream units such as vacuum distillation units, catalytic cracking units, and coking units. 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. Fresh feed inputs to selected downstream units are reported in Product codes 490, 491, 492, and 493.

The following components of refinery input to atmospheric crude oil distillation units should be included in Product code 990:

Crude Oil –

- **Report** the total amount of crude oil (including lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale) of both foreign and domestic origin that is charged to the atmospheric crude oil distillation units.
- **Exclude** crude oil charged to units other than the atmospheric crude oil distillation units (e.g., coking unit) from Product code 990.

Products of Natural Gas Processing Plants –

- **Report** all quantities of natural gas liquids (i.e., ethane, propane, normal butane, isobutane, and natural gasoline) charged to the atmospheric crude oil distillation units. Include inputs of unfractionated streams and mixtures of natural gas liquids.
- **Exclude** natural gas liquids blended or charged to units other than the atmospheric crude oil distillation units from Product code 990.

Unfinished Oils –

- **Report** all unfinished oils charged to the atmospheric crude oil distillation units (e.g., unfinished naphthas, gas oil, virgin naphtha, topped crude, cracking stocks, and slop oil).
- **Exclude** unfinished oils charged to units other than the atmospheric crude oil distillation units (e.g., cracking units) from Product code 990.

All Other Oils –

- **Report** any finished petroleum products (e.g., distillate fuel oil and residual fuel oil) charged to the atmospheric crude oil distillation units for further processing. Include raw materials such as coal tar derivatives, hydrogen, and gilsonite.
- **Exclude** oils charged to units other than the atmospheric crude oil distillation units (e.g., cracking units) from Product code 990.

Fresh Feed Input to Downstream Processing Units (Product codes 490, 491, 492, and 493) –

- **Report** the fresh feed liquid (adjusted for standard temperature and pressure) input to catalytic reforming units, catalytic cracking units, catalytic hydrocracking units, and fluid and delayed coking units.
- **Exclude** recycled feeds, steam, and hydrogen gas. For Product code 493, include fresh feed input to flexicoking units.

Operable Capacity of Atmospheric Crude Oil Distillation Units on the First Day of the Month

Report in *barrels per calendar day (see definition below)* the Operating, Idle, and Total Operable Capacities in the appropriate spaces. The capacity for an individual unit must be either idle or operating **on the first day of the month.** Do not report percentages of capacity based on monthly inputs.

- *Operating Capacity* (Product code 399) - **Report** the component of Total Operable Capacity that was in operation on the first day of the month.
- *Idle Capacity* (Product code 400) - **Report** the component of Total Operable Capacity that was not in operation and not under active repair, but capable of being placed in operation within 30 days; and capacity not in operation but under active repair that can be placed in operation within 90 days.
- *Total Operable Capacity* (Product code 401) - **Report** the amount of capacity that on the first day of the month, was either in operation; not in operation, and not under active repair but capable of being placed in operation within 30 days; or not in operation but under active repair that can be placed in operation within 90 days. Total Operable Capacity is the sum of the Operating and Idle Capacity (Product code 399 and Product code 400).

Barrels per calendar day is defined as the amount of input that a distillation facility can process under usual operating conditions on an average day. Calendar day capacity is less than the

stream day capacity which is a measure of maximum processing capacity under ideal operating conditions. Calendar day capacity 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 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 grade of products expected to manufactured;
- The environmental constraints associated with refinery operations;
- The annualized 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.

PART 4. SULFUR CONTENT AND API GRAVITY OF CRUDE OIL

Report the sulfur content and the API gravity of Crude Oil (Product code 050) either as refinery receipts or inputs, but not both.

Weighted Average Sulfur Content is the percentage of sulfur in domestic and foreign crude oil. Report to the nearest one hundredth of one percent (two decimal places).

Weighted Average API Gravity is gravity at 60 degrees Fahrenheit (°F) of domestic and foreign crude oil. Report to the nearest hundredth of a degree (two decimal places).

The following example illustrates how to calculate and report weighted average API gravity:

Operator inputs 100,000 barrels of 27.5 API gravity oil (at 60°F) and 200,000 barrels of 33.5 API gravity oil (at 60°F).

Convert API Gravity to specific gravity:

- 141.5/(131.5+27.5) = 0.89
- 141.5/(131.5+33.5) = 0.86

Calculate a weighted average of the specific gravity:

- 100,000 barrels x .89 = 89,000
  200,000 barrels x .86 = 172,000
  300,000 barrels 261,000
- 261,000 divided by 300,000 = .87

Convert specific gravity back to API gravity:

- 141.5/.87 – 131.5 = 31.14
- The weighted average API gravity would be reported as 31.14.

PART 5. REFINERY OPERATIONS

Quantities: Report using the following criteria:

Report all quantities to the nearest whole number in **thousand barrels** (42 U.S. gallons/barrel). Quantities ending in 499 or less are rounded down, and quantities ending in 500 or more are rounded up (e.g., 106,499 barrels are reported as 106 and 106,500 barrels are reported as 107).

Report data for only those lines which are applicable to your operation. If there are no data for a specific line, leave the entire line blank. Shaded cells on the form are those in which data are not currently required to be reported.

Report for each product, beginning and end-of-month stocks, receipts, inputs, production, shipments, and refinery fuel use and losses during the month, except where shaded.

Report only positive (i.e., greater than or equal to zero) quantities.

Most reporting categories must balance across: Beginning Stocks + Receipts - Inputs + Production - Shipments - Fuel Use/Losses must equal Ending Stocks.

Stocks (Beginning and End of Month)

Report beginning stocks as of midnight of the last day of the month prior to the current report month. Report ending stocks as of midnight of the last day of the current report month.

Report all stocks in the custody of the refinery regardless of ownership. Reported stock quantities should represent actual measured inventories.

Report all domestic and foreign stocks held at refineries and in transit thereto, except crude oil in transit by water from Alaska or any crude oil or product in transit by pipeline. Crude oil in transit by pipeline and Alaskan crude oil in transit by water are reported on Form EIA-813, *Monthly Crude Oil Report*. Petroleum products in transit by pipeline are reported by pipeline operators on Form EIA-812, *Monthly Product Pipeline Report*. Include foreign stocks only after entry through Customs. Exclude stocks of foreign origin held in bond.

For purposes of this report, "after entry through Customs" is said to occur on:

- the "entry date" specified in block 7 on the U.S. Customs and Border Protection CBP Form 7501, *Entry Summary* (the entry date for a warehouse withdrawal is the date of withdrawal);
- the "import date" specified in block 5 on the U.S. Customs and Border Protection CBP Form 214A (Statistical Copy), *Application for Foreign Trade Zone Admission and/or Status Designation*; or
- the "export date" specified in block 4 on the U.S. Department of Commerce Form 7525-V, *Shipper's Export Declaration*, for shipments from Puerto Rico to the 50 States and the District of Columbia.

Report stocks in underground storage associated with the refinery when reporting natural gas liquids and refinery olefins.

Report end-of-month stocks of unfinished oils by degree Fahrenheit end-point. The following are the degree end-point categories: Naphthas and Lighter (Product code 820), less than 401°F; Kerosene and Light Gas Oils (Product code 830), 401°F to 650°F; Heavy Gas Oils (Product code 840), 651°F to 1,000°F; and Residuum (Product code 850), greater than 1,000°F.

Receipts During Month

Report all receipts at the refinery and in transit thereto by tanker, barge, rail, or truck, using the same criteria as those used for reporting stocks. Receipts of Crude Oil, Domestic (Product code 010) include Alaskan Crude Oil (Product code 011).

Crude Oil, Total (Product code 050) is the sum of Domestic (Product code 010) and Foreign (Product code 020) Crude Oil.

Report receipts of Natural Gas Liquids and Refinery Olefins under Product codes 108, 246, 244, 245 and 220. **Include** both fuel use and petrochemical feedstock use.

Exclude natural gas used as a feedstock to produce hydrogen from refinery receipts. Also exclude natural gas received at the refinery for use as a fuel.

Inputs During Month

Report the volume of crude oil, unfinished oils, natural gas liquids and refinery olefins, other hydrocarbons, and hydrogen input to refinery processing units for the purpose of producing finished petroleum products. Report inputs of ethanol for blending into motor gasoline.

Report gross refinery input for each item identified on the survey form except where shaded.

Note: Gross inputs (Product code 990 from Part 3) are typically greater than crude oil inputs since gross inputs include materials other than crude oil as well as any re-runs of the same barrels through the atmospheric crude oil distillation unit.

Exclude from input of Crude Oil (Product code 050) any oils that have undergone prior refinery processing. Such oils should be reported as inputs of intermediate product (typically, unfinished oils or motor gasoline blending components) or finished product. An "Input" of a finished product, such as a finished motor gasoline or distillate fuel oil, represents a reclassification of a finished product (see Reclassification of Inventory on page 6).

Exclude inputs of product used to manufacture finished petrochemicals. Exclude input of natural gas to produce hydrogen. Exclude input of feedstock to manufacture oxygenates. Inputs of finished petroleum products are explained under "Reclassification of Inventory" on page 6.

Report Biodiesel B50-B100 (Product code 203) blending as inputs during the month. Also report stocks at the end of the month.

Production During Month

Report gross refinery production during the month for each item identified on the survey except where shaded.

Report the volume of petroleum products produced from processing of crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and hydrogen.

Report the volume of petroleum products produced from blending operations of motor gasoline and aviation gasoline blending components, ethanol and biofuels.

Report production of biofuels (fuel ethanol, biodiesel fuel, renewable diesel fuel, and other renewable fuels and intermediate products) when the volume of these fuels is increased by blending of petroleum barrels. For example, if a cargo of undenatured fuel ethanol was delivered to your refinery and then denatured at the refinery with RBOB for blending with fuel ethanol, then your report on Form EIA-810 will show production of fuel ethanol (Product code 141) equal to the volume of RBOB blended with the fuel ethanol as denaturant.

Exclude from production any biofuels coprocessed with petroleum feedstocks. Production of biofuels from coprocessing with petroleum should be reported as receipts and inputs. For example, renewable diesel fuel production from animal fat processed through a diesel hydrotreater should be reported as receipts and inputs of renewable diesel fuel (Product code 205). The volume of the receipt and input of renewable diesel fuel will equal the volume of output from the hydrotreater that is attributed to animal fat.

Report the production of olefins (Product codes 631, 632, 633, and 634) to include only that portion of natural gas liquids that are shipped from the refinery as a finished refinery product (e.g., olefins shipped to petrochemical facilities).

Report the production of aromatics (e.g., benzene, toluene, and xylene) based upon intended use. Aromatics to be used for blending or compounding into finished aviation or motor gasoline should be reported as production of aviation or motor gasoline blending components.

Report aromatics used as petrochemical feedstocks as production of Naphtha less than 401°F (Product code 822).

Report Miscellaneous Products for Non-fuel use production using Product code 097. These products include white spirits (distillate intermediaries in the naphtha/kerosene range) blended into paint, insecticides, and other similar products. Elemental **Sulfur** is also reported as Product code 097. To convert short tons of sulfur to barrels, multiply the number of short tons of sulfur by 3.17.

Shipments During Month

Report all shipments, including intracompany shipments to other refineries, storage facilities, chemical plants or fractionating facilities. Input to onsite petrochemical plants should be reported as shipments from the refinery.

Refinery Fuel Use and Losses During Month

Report crude oil and petroleum products used as fuel at the refinery. Include all nonprocessing losses (e.g., spills, fire losses, contamination, etc.) by product.

Exclude refinery processing gains and losses as well as stock discrepancies caused by gauging problems. Exclude fuel use at petrochemical facilities located at the same site as the refinery.

Inputs (Gain) or Production (Loss)

Report the **net** processing gain or loss that occurred during the refining process. These differences are due to the processing of crude oil and other inputs into products which in total have more volume or less volume than the inputs processed. Therefore, the total production of products is greater or less than input.

Exclude losses which do not take place during the refining process (e.g., spills, fire losses, and contamination during blending, transportation, or storage). Report those losses by product under the "Fuel Uses and Losses During Month" column.

- A refinery processing gain represents the volumetric amount by which total refinery production is greater than input for the report period.

  Report a processing **gain** in the "Input" column (Product code 911).

- A refinery processing loss represents the volumetric amount by which total refinery production is less than input for the report period.

  Report a processing **loss** in the "Production" column (Product code 911).

  Note: These entries are **always positive numbers** and are used to balance the total input and total production columns for Product code 999.

Hydrogen

Report receipts, inputs, and fuel use and loss of hydrogen using Product code 091. Quantities reported by refiners include hydrogen produced from hydrogen plants located at refineries and hydrogen purchased from third-party suppliers.

Exclude hydrogen produced from catalytic reformers from quantities reported for Product code 091 to avoid double counting inputs. Hydrogen input from refinery reformer units is counted indirectly as input of crude oil and unfinished oils.

Exclude feedstock inputs for hydrogen production on Form EIA-810. Report natural gas feedstock inputs for hydrogen production on Form EIA-820, *Annual Refinery Report*.

Convert standard cubic feet of hydrogen to barrels by using the conversion factor 19,426 standard cubic feet per barrel of fuel oil equivalent. (Simply divide the number of standard cubic feet of hydrogen by 19,426 to convert to barrels.)

Report Still gas (Product code 045), Special Naphtha (Product code 051), and Unfinished oils, naphtha and lighter (Product code 820) as shipments to a hydrogen plant when these products are used as hydrogen feedstock. Report any feedstock return streams from a hydrogen plant as receipts from the hydrogen plant and inputs at the refinery. Report receipts of return streams using the same product product codes as were used when reporting feedstock shipments to the hydrogen plant.

Natural Gas Liquids and Refinery Olefins

Report all mixes of natural gas liquids (including unfractionated streams) and refinery olefins by individual components as determined by chemical analysis, (e.g., ethane, propane, normal butane, isobutane, natural gasoline for gas plant liquids, and ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane/isobutylene for liquefied refinery gases).

Report *natural gas liquids* (NGL) *extracted from natural gas liquids* streams originating at natural gas processing plants, and received by the refinery for processing into finished products by component under Product codes 247, 249, and 220. Also report them under Product codes 244 and 245.

Report *natural gas liquids and refinery olefins that are fractionated from crude oil or produced from downstream processes*, such as catalytic cracking, and result in finished NGL N production that are subsequently stored or shipped as a NGL) under Product codes 641, 631, 642, 632, 643, 633, 644, and 634). The volume of LRG for any class (e.g., Ethane) has to be equal or greater than any breakout volume (e.g., Ethylene). Also report them under Product codes 108, 246, 244 and 245.

Report production of polymer grade or chemical grade propylene as propylene (Product code 632). Production volumes reported as propylene will include propylene and up to 8% propane. This is based on a definition of chemical grade propylene made up of at least 92% propylene and up to 8% propane.

Report production of mixed propane and propylene streams that do not meet the specification for polymer grade or chemical grade propylene (including refinery grade propylene) separately as propane (Product code 642) and propylene (Product code 632), as determined by chemical analysis, except in cases when you are reasonably certain the mixed propane and propylene stream will be sold as fuel, in which case report the entire mixed stream as propane (Product code 642).

Report inputs of natural gas liquids as products of natural gas processing plants (Product codes 249 and 247) when their origin is unknown.

Finished Motor Gasoline

Report finished motor gasoline blended with fuel ethanol that contains 55% denatured fuel ethanol or less by volume as Conventional, Blended with Fuel Ethanol Ed55 and Lower (product code 166).

Report finished motor gasoline blended with fuel ethanol that contains greater than 55% denatured fuel ethanol by volume as Conventional, Blended with Fuel Ethanol Greater than Ed55 (product code 149). All or most of the gasoline reported in this product category will be E85.

Gasoline Blending Components

Report naphtha-range hydrocarbons as one of the products broadly classified as motor gasoline blending components in cases where the intended end use is for blending or compounding into finished motor gasoline. Products classified by EIA as motor gasoline blending components include RBOB (Product code 118), CBOB (Product code 139), GTAB (Product code 117) and "all other" motor gasoline blending components (Product code 138).

Report naphtha-range hydrocarbons intended for blending or compounding into finished aviation gasoline in product Product code 112.

Exclude any naphtha-range hydrocarbons from gasoline blending components if the intended end use is other than blending or compounding into finished motor gasoline or finished aviation gasoline (e.g., naphtha intended for use in solvents or as petrochemical feedstocks).

Note: "Gasoline Treated as Blendstock" (GTAB) is a specific category of gasoline intended to provide importers with flexibility to blend imported gasoline after the gasoline arrives in the U.S. Classification of gasoline as GTAB requires compliance with specific regulatory and accounting requirements established by the U.S. Environmental Protection Agency. GTAB is not a generic descriptive term for finished gasoline or gasoline blending components intended for further blending. All GTAB is to be reported as Conventional (Product code 117).

Exclude the following products from motor gasoline blending components.

- normal butane (Product codes 244, 249 and 643),
- butylene (Product code 633),

- isobutane (Product codes 245, 247 and 644),
- isobutylene (Product code 634),
- natural gasoline (Product code 220),
- fuel ethanol (Product code 141), and
- MTBE (Product code 144).

While these products may be blended into finished motor gasoline, they are reported under separate product product codes. This applies only to unblended products. After blending, butanes, natural gasoline, fuel ethanol, MTBE, and other materials become part of the volume of gasoline blending components or finished motor gasoline.

> **Note:** Certain gasoline blending components may be received as return streams from chemical plants. In this case, it is very important to maintain consistent classification of product produced and shipped from the refinery and received and input at the refinery. For example, a refinery may ship naphtha-range petrochemical feedstocks (Product code 822) to a chemical plant and then receive a return stream from the chemical plant that will be used for motor gasoline blending. In this case, the return stream reported to EIA must be classified as receipt and input of petrochemical feedstock and then production of gasoline blending components or finished gasoline.

Distillate Fuel Oil by Percent of Sulfur Content

Report refinery input and production during the month and end-of-month stocks of distillate fuel oil by sulfur content. Product Product codes 465, 466, and 467 must sum to the total for Distillate Fuel Oil (Product code 411).

Residual Fuel Oil by Percent of Sulfur Content

Report refinery input and production during the month and endof-month stocks of residual fuel oil by sulfur content. Product Product codes 508, 509, and 510 must sum to the total for Residual Fuel Oil (Product code 511).

Lubricants

Report only lubricant base oils produced at the refinery. Exclude finished lubricants produced at lube plants. Exclude byproducts of lubricating oil refining such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. Reporting categories include:

> *Paraffinic.* Includes all grades of bright stock and neutrals with a Viscosity Index >75.
>
> *Naphthenic.* Includes all lubricating oil base stocks with a Viscosity Index <75.

Note: The criterion for categorizing lubricants is based solely on the Viscosity Index of the stocks and is independent of crude sources and type of processing used to produce the oils.

Exceptions: Lubricating oil base stocks that have been historically classified as naphthenic or paraffinic by a refiner may continue to be so categorized irrespective of the Viscosity Index criterion (e.g., Unextracted paraffinic oils that would not meet the Viscosity Index test).

Petrochemical Feedstocks

- **Report** petrochemical feedstock. Exclude finished petrochemicals.
- **Report** deliveries of feedstock to petrochemical units within your refinery, chemical or rubber manufacturing plants as shipments.
- **Report** return streams of petrochemical feedstocks as a receipt and input of petrochemical feedstocks and as a production in the product category of intended use.
- **Exclude** natural gas liquids or refinery olefins as petrochemical feedstock. These products are reported by component as ethane, ethylene, propane, propylene, normal butane, butylene, isobutane, isobutylene, and natural gasoline (Product codes 108, 641, 631, 246, 642, 632, 244, 249, 643, 633, 245, 247, 644, 634, and 220).

Petroleum Coke

Report marketable petroleum coke in barrels. There are 5 barrels per short ton.

Report catalyst coke in fuel oil equivalent barrels. The conversion factor is 6.287 million BTU's per fuel oil equivalent barrel (higher heating value).

Still Gas

Report still gas shipped to petrochemical facilities as a shipment in Product code 045, less the amount of such streams returned to the producing refinery. Still gas used as a fuel at the refinery should be reported as a fuel use/loss.

> Note: report still gas in thousand fuel oil equivalent barrels. The conversion factor is 6.287 million BTU's per fuel oil equivalent barrel (higher heating value).

Synthetic Hydrocarbons

Report synthetic hydrocarbons (e.g., shale oil and oil from tar sands) as crude oil (Product code 050).

Transmix

Transmix is created when two different petroleum products (e.g., motor gasoline and distillate fuel oil) become commingled during pipeline transport. **Exclude** transmix from all quantities reported on Form EIA-810.

Reclassification of Inventory

Report a finished product that is reclassified as a different finished product or as an unfinished oil as follows: the quantity of the original product is reported in the "Input" column and the reclassified product is reported in the "Production" column.

> For example, if you produce 10,000 barrels of kerosene during January and have it in storage at the end of the month, this quantity then report "Production" and "Stocks" of Kerosene (Product code 311) on the January report. If during February the intended use of the 10,000 barrels of kerosene is changed to Kerosene-Type Jet Fuel, report this reclassification by reporting the 10,000 barrels as "Input" of Kerosene (Product code 311) and "Production" of Kerosene-Type Jet Fuel (Product code 213).

PART 6. ANNUAL STORAGE CAPACITY SUPPLEMENT

Report storage capacity to the nearest whole number in **thousand barrels** (42 U.S. gallons/barrel). Quantities ending in 499 or less are rounded down, and quantities ending in 500 or more are rounded up (e.g., 106,499 barrels are reported as 106 and 106,500 barrels are reported as 107).

Report storage capacity once each year with the submission for March. It is unnecessary to report storage capacity for months other than March.

Report underground and above ground storage capacity operated by your company.

Exclude leased storage capacity located at facilities operated by other companies. This storage capacity will be reported by the companies operating those facilities.

Exclude storage capacity in trucks, rail cars, barges, and tankers.

Report working storage capacity and net available shell storage capacity as described in figure 1 for tanks or figure 2 for caverns. Figures 1 and 2 are based in part on schematics developed by the National Petroleum Council and U.S. Strategic Petroleum Reserve.

Figure 1. Schematic of Tank Storage Capacity and Stocks

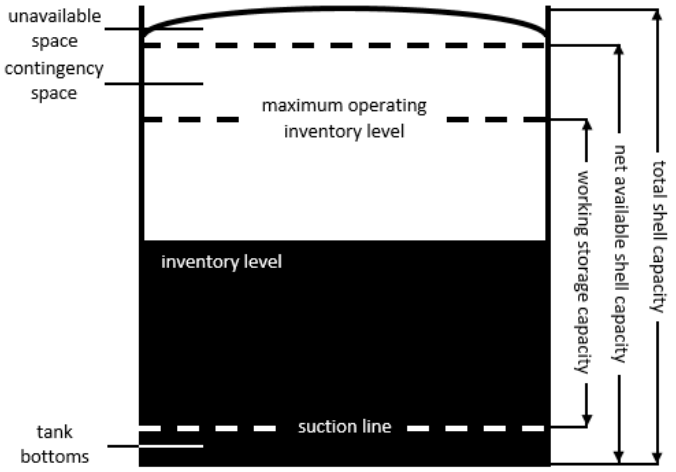
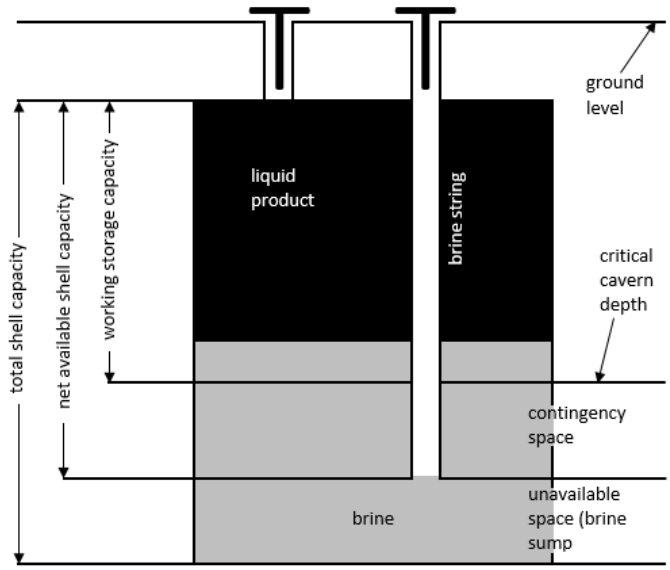


Figure 2. Schematic of Cavern Storage Capacity and Stocks



Terms used in Figures 1 and 2 are defined as follows.

- **Contingency Space (Tank):** Available space that is above the maximum operating inventory level. This storage space remains empty during normal operations, but it is available if needed. It allows flexibility to exceed working storage capacity without reaching an inventory level that might create safety hazards or disrupt operations. Storage space above the top of this level is unavailable.
- **Contingency Space (Cavern):** Available space that is below the critical cavern depth but still above unavailable space. This storage space remains filled with brine during normal operations, but it is available if needed. It allows flexibility to exceed working storage capacity without reaching an inventory level that might create hazards or disrupt operations.
- **Net Available Shell Storage Capacity (Tank):** Total available space including tank bottoms, working storage capacity, and contingency space.
- **Net Available Shell Storage Capacity (Cavern):** Total available space including working storage capacity, and contingency space.
- **Tank Bottoms:** Inventory that is below the normal suction line of a storage tank. In floating roof tanks, this is at least the volume required to remain in a storage tank in order to keep the roof from touching the bottom of a storage tank.
- **Total Shell Capacity:** Total storage space including unavailable space and net available shell storage capacity.
- **Unavailable Space (Tank):** Storage space that is required as part of the design of a tank but cannot be used. Includes tank tops, safety allowance, and any other space that is included by design but cannot be used.
- **Unavailable Space (Cavern):** Storage space that is required as part of the design of an underground storage facility but cannot be used. Includes the brine sump and any other space that is included by design but cannot be used.
- **Working Storage Capacity (Tank):** Available capacity for storing crude oil or liquid products that is above tank bottoms and below contingency space. When filled to this capacity, inventory of crude oil or liquid products stands at the maximum operating inventory level.
- **Working Storage Capacity (Cavern):** Available capacity for storing crude oil or liquid products that is above contingency space.

Storage Capacity in Operation

Storage capacity in operation includes capacity of tanks and caverns that were available and able to be used to hold stocks on the report date. Tanks and caverns in operation may hold stocks, they may hold only tank bottoms, or they may be empty, but they must have been able to be placed in operation on the report date.

Report working storage capacity of tanks and caverns that were in operation on the report date.

Report net available shell storage capacity of tanks and caverns that were in operation on the report date.

Net available shell storage capacity of tanks in operation must always be greater than or equal to working storage capacity of tanks and caverns in operation.

Storage Capacity Temporarily Out of Service

Storage capacity temporarily out of service includes capacity of tanks and caverns that were not usable for holding stocks on the report date but could be placed in operation within 90 days of the report date after maintenance or repair. When assessing whether or not a tank can be placed in service within 90 days, it is acceptable to use a current planned or scheduled return to service date. It is unnecessary to try to account for possible contingencies (e.g., maintenance delays caused by weather) unless these were incorporated into the planned or scheduled in operation date.

Report net available shell storage capacity of tanks and caverns temporarily out of service.

Exclude storage capacity and caverns temporarily out of service when reporting working storage capacity.

Exclude storage capacity of tanks and caverns that were temporarily out of service at the end of the report month and could not be placed in operation within 90 days.

Exclude storage capacity of tanks and caverns temporarily out of service where there is no scheduled date when the capacity will be placed in service.

Exclude storage capacity of tanks and caverns under construction even when construction is scheduled for completion within 90 days. Storage capacity of tanks and caverns under construction is reported as capacity in operation only after new tanks and caverns are placed in service.

New Storage Capacity

Report new storage capacity beginning with the first storage capacity report period after the new capacity was placed in operation.

Exclude new capacity while it is under construction even when the scheduled completion date was within 90 days of a storage capacity report date.

Comparison of Stocks and Storage Capacity

In most cases, stocks reported in Part 5 of Form EIA-810 will be less than total shell storage capacity. There may be exceptions in cases where barrels stored in trucks, rail cars, barges, or tankers are reported as stocks in Part 5 but the storage capacity is excluded from Part 6.

PROVISIONS REGARDING CONFIDENTIALITY OF INFORMATION

Information on operable atmospheric crude oil distillation capacity reported on Form EIA-810 is not considered confidential and may be publicly released in identifiable form. All other information reported on Form EIA-810 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(b), 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 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.

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.

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.

The data collected on Form EIA-810, *Monthly Refinery Report*, are used to report aggregate statistics on and conduct analyses of the operation of U.S. petroleum refineries.

SANCTIONS

The timely submission of Form EIA-810 by those required to report is mandatory under 15 U.S.C. §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.

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 5 hours and 12 minutes per response. This includes 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, Office of Statistical Methods and Research, EI-21, 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.