

Coal Production Report

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- A. PURPOSE** This survey collects information from U.S. coal mining companies. Information on the type and status of coal mining operations, characteristics of coal beds mined, recoverable reserves, productive capacity, and the disposition of coal mined is collected to provide Congress with basic statistics concerning coal supply, as required by the Federal Energy Administration Act of 1974 (FEAA) (P.L. 93-275) as amended.

These data appear in the *Annual Coal Report*, the *Quarterly Coal Report*, the *Monthly Energy Review*, and the *Annual Energy Review*. In addition, the Energy Information Administration uses the data for coal production related analysis and in short-term and mid-term models. The forecast data appears in the *Short-Term Energy Outlook* and the *Annual Energy Outlook*.

- B. WHO MUST SUBMIT** Form EIA-7A must be submitted by all coal mining companies that owned a mining operation which produced and/or processed, or prepared 10,000 or more short tons of coal during the report year. Standalone facilities (preparation plant/tipple/loading/dock/train loadout) that worked 5,000 or more hours must also submit the form.

C. WHERE TO SUBMIT

Respondents can submit data for this survey by mail, facsimile, or the Internet using the EIA Web system. Any questions regarding the submission of this form can be directed to the Survey Manager, Patty Chou, at <mailto:patty.chou@eia.doe.gov> (202) 287-1977.

Secure Communication Methods

By Internet: <https://signon.eia.doe.gov/ssoserver/login>

By Mail: Energy Information Administration, EI-52
Mail Station: BG-076, FORSTL
U.S. Department of Energy
Washington, DC 20077-5651
EIA-7A

Unsecured Communication Method

By facsimile: Fax Number: (202) 287-1944, or (202) 287-1946
Attn: Form EIA-7A

- D. WHEN TO SUBMIT** Form EIA-7A must be submitted by **March 1** to report data for the previous year.

- E. SANCTIONS** The timely submission of Form EIA-7A by those required to report is mandatory under Section 13(b) of the FEAA as amended. Failure to respond may result in a civil 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 willful violation. Civil action may be enforced to prohibit reporting violations and may result in the granting of a temporary restraining order or a preliminary or permanent injunction without bond. In such a civil action, the court may also issue a mandatory injunction 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.**

F. DEFINITIONS

Area Mine: A type of surface mine found on relatively flat or gently rolling terrain. It recovers coal by mining long strips successively; the material excavated from the strip

being mined is deposited in the strip pit previously mined.

Auger Mine: A type of surface mine in which the coal bed is removed by means of a large diameter drill. Usually used when the overburden becomes too thick for other surface mining methods.

Captive Coal: All coal produced and consumed by the independent producer/operator or operating subsidiary or produced for consumption by a parent company.

Coal Bed: A bed or stratum of coal. Also called a coal seam.

Coal Stocks: Coal that has been mined and stored awaiting shipment or transfer to a user.

Contour Mine: A type of surface mine in which the mining follows the outcrop or contour of the coal bed, removing overburden by mining back into the hillside until the overburden becomes too thick. As the overburden is removed, the coal bed is mined.

Datum: The geospatial referencing system used for establishing latitude and longitude.

Drift Mine: A type of underground mine that opens horizontally into the coal bed or coal outcrop.

f.o.b (Free on Board) Mining Operation Value: The price of coal at the mining operation. Includes processing and loading costs but does not include insurance and freight or shipping costs.

Highwall Miner: Specialized equipment used to remove coal exposed at the highwall or the unexcavated face of exposed overburden and coal of a contour mine or pit mine.

Independent Producer/Operator: An entity which operates a coal mining facility and is not owned or controlled by a parent firm that owns other coal mining operations and is not a contractor.

Latitude and Longitude: The distance on the Earth's surface measured, respectively, north or south of the equator and east or west of the standard meridian, expressed in angular degrees, minutes, and seconds.

Mining Operation: One mine, preparation plant, tipple, loading dock, or train loadout at a single physical location.

Mountaintop Removal Mine: A type of surface mine in which all of the overburden and interburden near the top of a mountain is removed and redistributed to expose one or more coal beds near the top of the mountain.

Open Market Coal: Coal sold in the open market (i.e., coal sold to companies other than the reporting company's parent company or an operating subsidiary of the parent company).

Open Pit Mine: A mine combining contour and area mining methods used to mine thick coal beds or steeply inclined coal beds. Many of the surface mines in the

Powder

River Basin of Wyoming, an area with thick coal beds, are open pit surface mines.

Operating Subsidiary: Company which operates a coal mining operation and is owned by another company (i.e., the parent company).

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Shaft Mine: A type of underground mine that reaches the coal bed by means of a vertical shaft.

Silt, Culm, Refuse Bank, Slurry Dam, or Dredge: A surface mine that recovers refuse or waste coal left from previous mining or coal cleaning operations. Different mining methods are applied depending upon the conditions found in the mining area.

Slope Mine: A type of underground mine that reaches the coal bed by means of an inclined opening.

Strip Mine: An open cut in which the overburden is removed from a coal bed prior to the removal of coal.

- G. GENERAL INSTRUCTIONS** Report coal quantities in short tons (2,000 pounds) to the nearest ton. Report value in dollars to the nearest dollar. Report coal bed thickness in inches to the nearest whole inch. Report coal classification code (**10** = Anthracitic, **20** = Bituminous, **30** = Subbituminous, **40** = Lignitic). See Table 1 below for coal classification guidelines. Report percentages to the nearest whole percent. Operating subsidiaries and contractors who are unable to provide the data requested should forward form EIA-7A immediately to the parent company for the mine for completion prior to submission to the Energy Information Administration.

H. SPECIFIC INSTRUCTIONS

Instructions for estimating latitude, longitude and datum by using the methods in the Section J (a) are found at the EIA Web site:

<http://www.eia.doe.gov/cneaf/coal/page/surveys/datuminst.pdf>

If the readings are in decimal degrees, then convert the readings to degrees, minutes, and seconds.

An example of the calculations to convert 82.4536 degrees to degrees, minutes, and seconds is

Retain 82 degrees

Multiply 0.4536 by 60 = 27.216 minutes

Retain 27 minutes

Multiply 0.216 by 60 = 12.96 seconds

Mine or coal preparation plant location is 82 degrees 27 minutes and 13 seconds

- I. PROVISIONS REGARDING CONFIDENTIALITY OF INFORMATION.** The name and address of the responding company, the mine or plant type (i.e., underground, surface, preparation plant) and location (state, county, and/or coal-producing district) are considered non-confidential and will be released upon request in the form of a full or partial list of respondents for this coal data collection survey. The other information reported on Form EIA-7A 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 (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 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 applied to the statistical data published from EIA-7A survey information to ensure that the risk of disclosure of identifiable information is very small.

- J. BURDEN** Public reporting burden for this collection of information is estimated to average 1.0 hour per response, including the time 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, including suggestions for reducing this burden, to the Energy Information Administration, Statistics and Methods Group, EI-70, 1000 Independence Ave, SW, Washington, DC 20585, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

Table 1. Coal Classification by Rank¹

Coal Rank	Fixed Carbon Limits, in Percentage (Dry, mineral-matter free) ²		Volatile Matter Limits, in Percentage (Dry, mineral-matter free) ²		Gross Calorific Value Limits (Btu/lb., on moist, mineral-matter-free basis) ³		Agglomerating character ⁴
	Equal or greater than	Less than	Greater than	Equal or less than	Equal or greater than	Less than	
10. Anthracite	86	98(+)	2(-)	14	-	-	Non-agglomerating
20. Bituminous	69	86	14	31	-	-	Agglomerating
20. Bituminous	-	69	31	-	14,000 ⁵	-	Commonly Agglomerating ⁶
20. Bituminous	-	-	-	-	11,500 ⁵	14,000	Commonly Agglomerating ⁶
20. Bituminous⁷	-	-	-	-	10,500	11,500	Agglomerating
30. Subbituminous⁷	-	-	-	-	10,500	11,500	Nonagglomerating
30. Subbituminous	-	-	-	-	8,300	10,500	Nonagglomerating
40. Lignite	-	-	-	-	-	8,300	Nonagglomerating

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¹This classification does not apply to a few coals, principally nonbanded varieties with unusual properties, whose fixed carbon or calorific value fall within those for high-volatile bituminous and subbituminous ranks. In North America, those coals contain only small portions of vitrain and consist mainly of attrital material; for example, cannel coal.

²The dry, mineral-matter free basis for coal analysis is calculated from the coal sample and expressed as though the total moisture and mineral matter have been removed (see formula below). Note: "mineral matter free" is not the same as "ash free." Mineral matter is the parent material from which ash is derived upon combustion. The minerals associated with coal are altered during combustion, resulting in a different, generally lower weight for ash than for its source minerals.

³The moist, mineral-matter free basis for coal analysis is calculated from the coal sample and expressed as though the natural inherent moisture is present but mineral matter has been removed (see formula below). Moist coal does not include visible water on the surface.

⁴"Agglomerating," as applied to coal, is the property of softening when heated to above approximately 400°C in a nonoxidizing atmosphere, then forming a coherent mass upon cooling to room temperature. Agglomeration is a critical property for coking coals and an authenticating characteristic for bituminous coals.

⁵Coals having 69 percent or more fixed carbon (dry, mineral-matter-free basis) are classified according to fixed carbon regardless of calorific value.

⁶There may be nonagglomerating varieties in these groups of bituminous coals, most notably in the "high volatile C bituminous" group, but all coal that agglomerate are bituminous.

⁷Coals with calorific values between 10,500 and 11,499 Btu/lb (moist, mineral-matter free) can be bituminous or subbituminous. The determining factor becomes their capability to agglomerate. As a rule, with the exception of the anthracites in Pennsylvania and the lignites of the Gulf Coast States, all U.S. coals east of Colorado are bituminous.

Formulas:

Dry, mineral-matter-free fixed carbon = $100 (FC - 0.15S) / (100 - (M + 1.08A + 0.55S))$

Dry, mineral-matter-free volatile matter = $100 - \text{Dry, Mm-free FC}$

Moist, mineral-matter-free Btu = $100 (Btu - 50S) / (100 - (1.08A + 0.55S))$

where:

Mm = mineral matter;

Btu = gross calorific value, Btu/lb;

FC = fixed carbon, percentage by weight;

VM = volatile matter, percentage by weight;

M = moisture, percentage by weight;

A = ash, percentage by weight; and

S = sulfur, percentage by weight.