U.S. Department of Energy **Energy Information Administration** Form EIA-851A (Annual) Survey or Reporting Year = CY2008

DOMESTIC URANIUM PRODUCTION REPORT

Form Approved OMB No. 1905-0160 Approval Expires 12/31/2009

This report is **mandatory** under Public Law 93-275. Failure to comply may result in criminal fines, civil penalties and other sanctions as provided by law. For the sanctions and the provisions concerning the confidentiality of information submitted on this form, see the instructions. Title 18 USC 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.

# INSTRUCTIONS

### SANCTIONS

The timely submission of Form EIA-851A by those required to report is mandatory under Section 13(b) of the Federal Energy Administration Act of 1974 (FEAA) (Public Law 93-275), as amended. Failure to respond may result in a penalty of not more than \$2,750 per day for each civil violation, or a fine of not more than \$5,000 per day for each criminal violation. The government may bring a civil action to prohibit reporting violations, 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.

## CONFIDENTIALITY

The items RESPONDENT IDENTIFICATION NAME and all of ITEM 1: FACILITY INFORMATION on Form EIA-851A are NOT considered confidential and may be publicly released in identifiable form. In addition to the use of the information from these two data fields by EIA for statistical purposes, this information may also be used for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes. All other information you provide on Form EIA-851A will be considered confidential and used for statistical purposes only. In accordance with the Confidential Information Protection and Statistical Efficiency Act of 2002 (Title 5 of Public Law 107-347) and other applicable Federal laws, your responses will not be disclosed in identifiable form without your consent. By law, every EIA employee, as well as every agent, is subject to a jail term, a fine of up to \$250,000, or both if he or she discloses ANY identifiable information about you.

## **REPORTING BURDEN**

Public reporting burden for this collection of information is estimated to average 3 hours per response, including the time of reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Energy Information Administration, Statistics and Methods Group, EI-70 Forrestal Building, 1000 Independence Avenue SW, Washington, D.C. 20585-0670; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503. A person is not required to respond to the collection of information unless the form displays a valid OMB number.

## **EIA-851A SURVEY MANAGER AND CONTACT**

Douglas Bonnar Telephone Number: (202) 586-1085 FAX Number: (202) 287-1944

E-mail: douglas.bonnar@eia.doe.gov

WHO MUST RESPOND: Firms and individuals that were involved in the (domestic) U.S. uranium industry must complete the Form EIA-851A. WHEN TO RESPOND: The Form EIA-851A must be filed with the EIA by March 1, 2009.

METHODS OF FILING RESPONSE: Survey respondents should submit data electronically using EIA's secure Single Sign-On internet data collection system. This system uses security protocols to protect information against unauthorized access during transmission. If you have not registered with EIA's Single Sign-On system, send an e-mail requesting assistance to EIA-851A@eia.doe.gov. If you have registered with Single Sign-On, log on at https://signon.eia.doe.gov/ssoserver/login. If you are having a technical problem with accessing or using the Single Sign-On system, send an e-mail requesting assistance to EIA-851A@eia.doe.gov.

An alternative to the preferred Single Sign-On system that is also electronically secure is EIA's Secure File Transfer (SFT) system. To use SFT, save the form to your hard drive and refer to the following website for further instructions: https://signon.eia.doe.gov/upload/notice851A.jsp.

Or file the form by the following nonsecure methods:

- E-mail the form to douglas.bonnar@eia.doe.gov.
- Fax the form to (202) 287-1944.
- Mail the form to: U.S. Department of Energy, Energy Information Administration, Mail Stop: BG-076 (Form EIA-858), 1000 Independence Avenue, SW, Washington, DC 20077-5651.

Note that commonly used facsimile and e-mail transmissions (including files attached to e-mail messages) travel over ordinary telephone lines and are not considered secure electronic methods of transmitting survey data. Please retain a copy of your submission for your files.

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### **INSTRUCTIONS** SPECIFIC INSTRUCTIONS **ITEM 1: FACILITY INFORMATION (in the United States)** Provide information about the uranium concentrate processing facility. Rated capacity is synonymous with nominal capacity and nameplate capacity. Indicate operating status at end of the Survey Year. ITEM 2: MILLING AND PROCESSING (in the United States) For each mill or processing plant (in-situ leach, byproduct) enter the: quantity of in-process inventory at the beginning of the Survey Year, quantity fed during the Survey Year (also see Item 3), quantity of uranium concentrate produced during the Survey Year, quantity of tailings or other not counted as ending in-process inventory, and the quantity of in-process inventory at the end of the Survey Year. For the Survey Year, fill in the quantity of uranium concentrate by beginning inventory at the facility, quantity shipped to conversion plants, and the balance of ending inventory at the facility. **ITEM 3: FEED SOURCE** Of the uranium feed to the process in Item 2, indicate the quantity where the feed came from (mines and/or other sources, i.e. alternate feed, restoration, byproduct of phosphate production, etc.). ITEM 4: MINE PRODUCTION (in the United States) For each mine (operating or operated) during the Survey Year enter the mine name, mine type (in-situ leach/open pit/underground/etc.), mine capacity, ore produced (if applicable), contained uranium produced, owner of mine, and State location of mine. **ITEM 5: EMPLOYMENT (in the United States)** Provide the number of person-years (include staff and contract personnel) by each employment category, and State, during the Survey Year for the firm's entire operation. ITEM 6: DRILLING (in the United States) Enter the number of drill holes and footage completed during the Survey Year for exploration (include assessment drilling) and development. Do not include drilling done in foreign countries.

#### ITEM 7: EXPENDITURES (for activities in the United States)

Land - all expenditures for land held and acquired for the Survey Year.

Exploration - all expenditures for assessment work on geological research; geochemical, and geophysical surveys; costs incurred by field personnel in the course of exploration for the Survey Year, including overhead and administrative charges directly associated with supervising and supporting exploration field activities.

Drilling - all expenditures directly associated with your company's domestic exploration and development drilling effort for the Survey Year. Production - all expenditures for mining, milling, processing of uranium, and facility expenses for the Survey Year.

Reclamation - all expenditures for reclamation and restoration work during the Survey Year, including overhead and administrative charges directly

associated with supervising and supporting reclamation field activities.

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# DOMESTIC URANIUM PRODUCTION REPORT

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#### GLOSSARY

**Conventional mill (uranium):** A facility engineered and built principally for processing of uraniferous ore materials mined from the earth and the recovery, by chemical treatment in the mill's circuits, of uranium and/or other valued coproduct components from the processed one.

**Development drilling:** Drilling done to determine more precisely the size, grade, and configuration of an ore deposit subsequent to when the determination is made that the deposit can be commercially developed. Not included are: (1) secondary development drilling, (2) solution-mining drilling for production, or (3) production-related underground and openpit drilling done for control of mining operations.

**Domestic:** The 50 States and the District of Columbia. *Note*: The United States has varying degrees of jurisdiction over a number of territories and other political entities outside the 50 States and the District of Columbia, including Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Johnston Atoll, Midway Islands, Wake Island, and the Northern Mariana Islands. EIA data programs may include data from some or all of these areas in U.S. totals. For these programs, data products will contain notes explaining the extent of geographic coverage included under the term "United States."

**Domestic uranium industry:** Collectively, those businesses (whether U.S. or foreign-based) that operate under the laws and regulations pertaining to the conduct of commerce within the United States and its territories and possessions and that engage in activities within the United States, its territories, and possessions specifically directed toward uranium exploration, development, mining, and milling; marketing of uranium materials; enrichment; fabrication; or acquisition and management of uranium materials for use in commercial nuclear power plants.

**Drilling:** The act of boring a hole (1) to determine whether minerals are present in commercially recoverable quantities and (2) to accomplish production of the minerals (including drilling to inject fluids).

- Exploratory. Drilling to locate probable mineral deposits or to establish the nature of geological structures; such wells may not be capable of production if
  minerals are discovered.
- Developmental. Drilling to delineate the boundaries of a known mineral deposit to enhance the productive capacity of the producing mineral property.
- Directional. Drilling that is deliberately made to depart significantly from the vertical.

**EIA:** The Energy Information Administration. An independent agency within the U.S. Department of Energy that develops surveys, collects energy data, and analyzes and models energy issues. The Agency must meet the requests of Congress, other elements within the Department of Energy, Federal Energy Regulatory Commission, the Executive Branch, its own independent needs, and assist the general public, or other interest groups, without taking a policy position. See more information about EIA at <a href="http://tonto.eia.doe.gov/abouteia/">http://tonto.eia.doe.gov/abouteia/</a>.

**Exploration drilling:** Drilling done in search of new mineral deposits, on extensions of known ore deposits, or at the location of a discovery up to the time when the company decides that sufficient ore reserves are present to justify commercial exploration. Assessment drilling is reported as exploration drilling.

**Footage drilled:** Total footage for wells in various categories, as reported for any specified period, includes (1) the deepest total depth (length of well bores) of all wells drilled from the surface, (2) the total of all bypassed footage drilled in connection with reported wells, and (3) all new footage drilled for directional sidetrack wells. Footage reported for directional sidetrack wells does not include footage in the common bore that is reported as footage for the original well. In the case of old wells drilled deeper, the reported footage is that which was drilled below the total depth of the old well.

In situ leach mining (ISL): The recovery, by chemical leaching, of the valuable components of a mineral deposit without physical extraction of the mineralized rock from the ground. Also referred to as "solution mining."

Mill feed: Uranium ore supplied to a crusher or grinding mill in an ore-dressing process.

Milling: The grinding or crushing of ore, concentration, and other benefication, including the removal of valueless or harmful constituents and preparation for market. Milling capacity: The maximum rate at which a mill is capable of treating ore or producing concentrate.

Milling of uranium: The processing of uranium from ore mined by conventional methods, such as underground or openpit methods, to separate the uranium from the undesired material in the ore.

Natural uranium: Uranium with the U-235 isotope present at a concentration of 0.711 percent (by weight), that is, uranium with its isotopic content exactly as it is found in nature.

Nonconventional plant (uranium): A facility engineered and built principally for processing of uraniferous solutions that are produced during in situ leach mining, from heap leaching, or in the manufacture of other commodities, and the recovery, by chemical treatment in the plant's circuits, of uranium from the processing solutions.

**Person-year:** One whole year, or fraction thereof, worked by an employee, including contracted manpower. Expressed as a quotient (to two decimal places) of the time units worked during a year (hours, weeks, or months) divided by the like total time units in a year. For example: 80 hours worked is 0.04 (rounded) of a person-year; 8 weeks worked is 0.15 (rounded) of a person-year; 12 months worked is 1.0 person-year. Contracted manpower includes survey crews, drilling crews, consultants, and other persons who worked under contract to support a firm's ongoing operations.

Processing: Uranium-recovery operations whether at a mill, an in situ leach, byproduct plant, or other type of recovery operation.

**Reclamation:** Process of restoring surface environment to acceptable pre-existing conditions. Includes surface contouring, equipment removal, well plugging, revegetation, etc.

Respondent: A company or individual who completes and returns a report or survey form.

Restoration: The returning of all affected groundwater to its premining quality for its premining use by employing the best practical technology.

Tailings: The remaining portion of a metal-bearing ore consisting of finely ground rock and process liquid after some or all of the metal, such as uranium, has been extracted.

Uranium concentrate: A yellow or brown powder obtained by the milling of uranium ore, processing of in situ leach mining solutions, or as a byproduct of phosphoric acid production.

Uranium mill: A plant where uranium is separated from ore taken from mines.

Uranium ore: Rock containing uranium mineralization in concentrations that can be mined economically, typically one to four pounds of  $U_3O_8$  per ton or 0.05 percent to 0.2 percent  $U_3O_8$ .

Uranium oxide: Uranium concentrate or yellowcake. Abbreviated as U<sub>3</sub>O<sub>8</sub>.

Yellowcake: A natural uranium concentrate that takes its name from its color and texture. Yellowcake typically contains 70 to 90 percent  $U_3O_8$  (uranium oxide) by weight. It is used as feedstock for uranium fuel enrichment and fuel pellet fabrication.