COUNTRY FACT SHEET

UNITED STATES

(last updated December 2014)

- a producer, consumer and importer of uranium
- ranks eighth in 2014 in global uranium production
- is currently the world’s largest consumer of uranium with roughly 100 operating nuclear power reactors requiring approximately 22 million kilograms of U\textsubscript{3}O\textsubscript{8} equivalent (in 2012)
- it has five operating conventional mines
- five in-situ leach (ISL)
- one conventional mill
- one conversion plant

International Conventions

<table>
<thead>
<tr>
<th>Convention</th>
<th>Signed / entered into force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear Non-proliferation Treaty (NPT)</td>
<td>1968 / 1970</td>
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<tr>
<td>Comprehensive Test Ban Treaty (CTBT)</td>
<td>1996 / --</td>
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<tr>
<td>Convention on the Physical Protection of Nuclear Material (CPPNM) and 2005 Amendment</td>
<td>1980 / 1987 (no amendment)</td>
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<tr>
<td>Convention on Nuclear Safety</td>
<td>1994 / 1999</td>
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<tr>
<td>Convention on Assistance in Case of a Nuclear Accident or Radiological Emergency</td>
<td>1986 / 1988</td>
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**Domestic Legislation**

**Atomic Energy Act**

**Uranium Mill Tailings Radiation Control Act (UMTRCA)**

**Regulations**

Regulations issued by the NRC are found in Chapter I of title 10, 'Energy,' of the Code of Federal Regulations (CFR). The following are most relevant to the licensing and operation of uranium recovery facilities:

- 10 CFR Part 20, "Standards for Protection Against Radiation"
- 10 CFR Part 40, "Domestic Licensing of Source Material"
- Appendix A to 10 CFR Part 40, "Criteria Relating to the Operation of Uranium Mills and the Disposition of Tailings or Wastes Produced by the Extraction or Concentration of Source Material from Ores Processed Primarily for Their Source Material Content"

**Actors**

**Nuclear Regulatory Commission (NRC)**

The NRC regulates in situ recovery, where uranium ore is chemically altered underground before being pumped to the surface for further processing, as well as uranium mills and waste disposal from uranium operations (including mill tailings).

**Environmental Protection Agency**

The EPA sets standards controlling hazards from uranium mill tailings, under the authority of the Uranium Mill Tailings Radiation Control Act of 1978. These standards provide for the cleanup and disposal of mill tailings at abandoned sites and the disposal of tailings at licensed sites after cessation of operations.

They are implemented by DOE, NRC, and some states through agreements with NRC, and require a combination of active and passive controls to clean up contaminated ground water as well as tailings that have been misused at off-site locations, and to dispose of tailings in a manner that will prevent misuse, limit radon emissions, and protect ground water.

**Department of Energy (DOE)**

Under Title I of the UMTRCA, the U.S. DOE is responsible for cleanup and remediation, as well as long-term care and maintenance of Title I disposal and processing sites, under a general license from the U.S. Nuclear Regulatory Commission (NRC). Remediation actions by the DOE under Title I require the NRC’s concurrence and to confirm with generally applicable standards developed by the EPA for the protection of public health and safety and the environment from potential radiological and non-radiological hazards associated with tailings and other uranium milling wastes. Following remediation of inactive sites, title to the tailings and wastes reside with the DOE and the sites are to be maintained by DOE in perpetuity pursuant to license by the NRC.
Office of Surface Mining, the U.S. Department of the Interior

The Office of Surface mining regulates conventional mining (i.e. open pit or deep underground) along with the individual States where mines are located.

The NRC’s Agreement State Program allows the NRC to withdraw its regulatory authority and enter into an ‘agreement’ permitting State regulatory authorities to regulate such materials. Applicants for a license for handling the designated nuclear materials under the Agreement State program must file those applications with the Agreement State government, not with the NRC. However, even if a state makes an ‘agreement’ with the NRC, the NRC still provides substantial input into decision-making, and state regulations must conform to NRC regulations. State regulations should not be less stringent than those of the NRC, and sometimes state regulations may be more stringent than NRC rules. The majority of the 50 states are Agreement States, the non-Agreement States are: Idaho, Montana, Wyoming, South Dakota, Michigan, Indiana, Missouri, West Virginia, Vermont, Connecticut, Delaware and the District of Columbia.

Operating Mines and Mills

Operating mill: White Mesa Mill in Blanding, Utah, operated by Energy Fuels

Operating in-situ leach (ISL) facilities

<table>
<thead>
<tr>
<th>In-Situ-Leach Plant Owner</th>
<th>Google maps link</th>
<th>In-Situ-Leach Plant Name</th>
<th>State and location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameco</td>
<td><a href="https://goo.gl/maps/u7aMG">https://goo.gl/maps/u7aMG</a></td>
<td>Crow Butte Operation</td>
<td>Dawes, Nebraska</td>
</tr>
<tr>
<td>South Texas Mining Venture, dba. Uranium Energy Corp</td>
<td><a href="https://goo.gl/maps/cnSWn">https://goo.gl/maps/cnSWn</a>, located about 100 miles northwest of Corpus Christi in Karnes County, Texas</td>
<td>Hobson ISR Plant</td>
<td>Karnes, Texas</td>
</tr>
<tr>
<td>South Texas Mining Venture dba. Uranium Energy Corp</td>
<td><a href="https://goo.gl/maps/WvGZ6">https://goo.gl/maps/WvGZ6</a></td>
<td>La Palangana</td>
<td>Duval, Texas</td>
</tr>
<tr>
<td>Uranium One USA. Inc.</td>
<td><a href="https://goo.gl/maps/XzTX0">https://goo.gl/maps/XzTX0</a></td>
<td>Willow Creek Project (Christensen Ranch and Irigaray)</td>
<td>Campbell and Johnson, Wyoming</td>
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link to google maps

The White Mesa Mill is the only conventional operating uranium mill in the United States. It has a licensed capacity of 1,814 short tons per day and output of 3,629 metric tons of natural uranium annually. See more here:
Conversion

One conversion plant is operating in the United States, 3 km northwest of Metropolis, Illinois. The Honeywell Metropolis Works (Honeywell-MTW) is owned by Honeywell International Inc and is capable of converting over 36 million pounds of U3O8 into UF6 annually. ConverDyn is the exclusive agent for conversion sales from Honeywell-MTW.

https://goo.gl/maps/R1CSv

Transport Routes

Ports:

Oakland, California, Port of Oakland
Tacoma, Washington, Port of Tacoma
Baltimore, Maryland, Port of Baltimore