



Implementing the Additional Protocol

**U.S. Department of Commerce
Bureau of Industry and Security
and**

**U.S. Nuclear Regulatory Commission
Office of Nuclear Material Safety and Safeguards**

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NMA/NRC Uranium Recovery Workshop
Denver, Co
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U.S. Additional Protocol Status

- Executive Order Directing Implementation – February 4, 2008
- DOC (15 CFR Parts 781-786) – October 31, 2008
- Regulations (10 CFR Parts 75 and 110) – December 24, 2008
- Ratification and Entry into Force – January 6, 2009
- Information Collection Complete - February 13, 2009
- Assessment/Vetting - March 31, 2009
- Formal Certification to the White House – April 17, 2009
- Submission of U.S. Initial AP Declaration – July 5, 2009



The U.S. Additional Protocol

- Expands U.S. declaration requirements and IAEA rights of access to nuclear-related activities
- Requires reporting of and access to all aspects of the nuclear fuel-cycle, such as:
 - Mining / ore processing
 - Nuclear-related equipment manufacturing
 - Nuclear-related imports (upon request by IAEA) and exports (quarterly) of equipment and materials
 - Research and development not involving nuclear material (both publicly and privately funded)
- Expands access to nuclear fuel cycle facilities, activities, and related locations (complementary access)



Additional Protocol Reportable Activities

- Article 2.a (i) - Fuel cycle-related R&D (Govt. Related)
- Article 2.a (iii) - Activities at nuclear facilities[†]
- Article 2.a (iv) - Certain fuel cycle-related manufacturing
- Article 2.a (v) – Uranium hard rock mines and concentration plants and mills
- Article 2.a (vi) - Import, export, or possession of source materials preceding starting point of IAEA safeguards
- Article 2.a (ix) - Export of nuclear fuel cycle-related equipment and non-nuclear material
- Article 2.b. (i) – Fuel cycle-related R&D (Private)

[†] Nuclear facilities previously selected for IAEA Safeguards.



Anticipated Impact on Industry

- Low verification burden
 - Minimal reporting requirements
 - User-friendly report forms
 - No systematic complementary access (only a few visits anticipated annually)
 - Complementary access to R&D and manufacturing locations preceded by request for clarification
- Possible co-located DOC and NRC-regulated activities
 - For complementary access at locations where co-located activities exist, the agency responsible for regulating the specific activity of interest will serve as the Lead Agency.



Implementation Responsibility

- NRC
 - All commercial industry locations that fall within the boundary of the controlled or restricted area delineated on an NRC license, **not** subject to DOD or DOE Additional Protocol reporting requirements
- DOC (Bureau of Industry and Security)
 - All commercial industry locations **not** licensed by NRC and **not** subject to DOD or DOE Additional Protocol reporting requirements



Corresponding NRC and DOC Regulations

- **NRC Regulations**
 - **(10 CFR Parts 75 and 110)**
 - Includes all NRC and Agreement State licensees versus only NRC licensed facilities
 - Published as a direct final rule (December 23, 2008)
- **DOC Regulations**
 - **(15 CFR Parts 781-786)**
 - Issuance of Proposed Rule (July 25, 2008)
 - Public comment period (closed August 25, 2008)
 - Final Rule (October 31, 2008)



Guidance Document Development

- Website with applicable references and documents, www.AP.gov
- Joint DOC/NRC Additional Protocol Reporting Handbooks
 - Reporting guidance
 - Forms
 - Step by step instructions



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Where Industry and Security Intersect

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News
U.S. Additional Protocol

Policies And Regulations
Welcome to the U.S. Additional Protocol (AP) Homepage. This page provides resources and educational tools to assist locations engaged in nuclear fuel cycle-related activities to comply with the Bureau of Industry and Security's (BIS) Additional Protocol Regulations (APR).

Licensing
BIS published its Additional Protocol Regulations (APR) in a Federal Register notice on October 31, 2008. All entities subject to reporting requirements under the AP have 30 days, or until November 30, 2008 to submit their initial nuclear fuel cycle-related activity declaration to BIS. For additional information contact the Treaty Compliance Division at 202-482-1001.

Compliance And Enforcement
The APR, promulgated by the Department of Commerce, shall apply to all persons and locations in the United States, except:

Seminars And Training
1. Locations that are subject to the regulatory authority of the Nuclear Regulatory Commission or one of their Agreement States.

International Programs
2. The following U.S. Government locations:

- o Department of Energy locations
- o Department of Defense locations;
- o Central Intelligence Agency locations; and
- o Department of State locations

Chemical Weapons Convention
The following are nuclear fuel cycle-related activities which are subject to BIS regulations:

Additional Protocol

- Certain publicly and privately sponsored nuclear fuel cycle-related research and development (not involving nuclear material).
- Uranium mining and ore beneficiation
- Manufacturing, construction and assembly of specified equipment and non-nuclear material
- Imports of specified equipment and non-nuclear material

Defense Industrial Base Programs

AP Pages

- [Recent Changes](#)
- [Handbooks and Forms](#)
- [Outreach Events](#)
- [Informational Publications](#)
- [Press Releases](#)

Related Links

- [Department of Energy \(DOE\) Homepage](#)
- [Nuclear Regulatory Commission \(NRC\) Homepage](#)

Additional Protocol Related Documents:

- [Additional Protocol Treaty](#)
- [Legislation 109-721](#)
- [Executive Order](#)
- [Final AP Rule](#)
- [Handbooks and Forms](#)
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DOC/NRC AP Reporting Forms

FORM APPROVED: OMB NO. (TBD)

U.S. DEPARTMENT OF COMMERCE Bureau of Industry and Security U.S. NUCLEAR REGULATORY COMMISSION Office of Nuclear Material Safety and Safeguards		Date Received (Leave Blank)
ADDITIONAL PROTOCOL REPORT		
FORM AP-6: URANIUM HARD-ROCK MINE OR ORE BENEFICIATION PLANT		
Submit a separate form for each uranium hard rock mine or ore beneficiation plant. (NOTE: Provide information on In Situ Leach Mines on Form AP-7):		
6.1	Reporting Code (once assigned):	
6.2	Activity Reporting Status:	
	<input type="checkbox"/> New activity <input type="checkbox"/> Activity with no changes <input type="checkbox"/> Activity with changes <input type="checkbox"/> Ceased activity (closed down)	
6.3	Type of Operation <input type="checkbox"/> Open-pit / Surface Mine <input type="checkbox"/> Underground Mine <input type="checkbox"/> Ore Beneficiation (physical concentration of ore)	
6.4	Operational Status: <input type="checkbox"/> Operating (mine that produces ore on a routine basis) <input type="checkbox"/> Suspended (mine or its infrastructure is capable of operation but production has ceased) <input type="checkbox"/> Closed-down (production has ceased and mine or its infrastructure is not capable of further operation)	
6.5	Annual Uranium Production Capacity (in metric tons):	
	Percentage of Production Capacity Used:	
6.6	<input type="checkbox"/> Check this box if a Continuation Form (Form AP-16) has been used to provide additional information for any of the above questions.	

6.3	Type of Operation <input type="checkbox"/> Open-pit / Surface Mine <input type="checkbox"/> Underground Mine <input type="checkbox"/> Ore Beneficiation (physical concentration of ore)
6.4	Operational Status: <input type="checkbox"/> Operating (mine that produces ore on a routine basis) <input type="checkbox"/> Suspended (mine or its infrastructure is capable of operation but production has ceased) <input type="checkbox"/> Closed-down (production has ceased and mine or its infrastructure is not capable of further operation)
6.5	Annual Uranium Production Capacity (in metric tons): Percentage of Production Capacity Used:



DOC/NRC AP Reporting Instructions

FORM AP-6: Uranium Mine or Ore Beneficiation Plant

Reporting requirements are set forth in 15 CFR Part 783 of the U.S. Department of Commerce (DOC) Regulations.

INSTRUCTIONS:

Submit a separate Form AP-6 for each mine or ore beneficiation plant at your location where uranium ore is or was extracted or is physically concentrated. In-situ leach mines should be reported using Form AP-7. A separate report form package should be submitted for each location.

Question 6.1 Reporting Code: A unique reporting code will be assigned and reported to each location by BIS once an Initial Report has been submitted. The Reporting Code must appear on all future forms pertaining to the location after it is assigned.

Question 6.2 Activity Reporting Status: Indicate the current reporting status by checking the appropriate box (i.e., "New Activity" to report an activity for the first time, "Activity with changes" or "Activity with no changes" if a report for this activity was previously submitted, or "Ceased activity" for an activity that ended during the reporting year and will not be reported in future years). If the information previously reported for this specific activity has not changed, you are not required to complete the rest of this form, instead check the "Activity with no changes" box and submit

along with Forms AP-1, AP-2 and any other required activity forms.

Question 6.3 Type of Operation: Check the appropriate box to indicate the type of operation for each mine or plant where uranium is/was extracted, uranium was produced as a by product, or where uranium is concentrated.

Question 6.4 Operational Status: Check the appropriate box to indicate the current operational status of the mine

Question 6.5 Mine Production Capacity: Provide the design-basis annual production capacity for uranium or thorium at the mine in metric tons, rounded to the nearest ten if the amount is 10 metric tons or more (e.g., 27 to 30, 148 to 150, 1525 to 1500, 15782 to 16000, etc.). If the amount is less than 10 metric tons report that exact number (e.g., 2, 4, 9, etc.). Also provide the approximate percentage of the annual production capacity that was used during the reporting period, rounded to the nearest ten percent. Closed-down mines and plants have a production capacity of zero.

Question 6.6 Continuation Form: Check this box if a Continuation Form, Form AP-16, has been used to provide additional information for any of the above questions.

Question 6.4 Operational Status: Check the appropriate box to indicate the current operational status of the mine

Question 6.5 Mine Production Capacity: Provide the design-basis annual production capacity for uranium or thorium at the mine in metric tons, rounded to the nearest ten if the amount is 10 metric tons or more (e.g., 27 to 30, 148 to 150, 1525 to 1500, 15782 to 16000, etc.). If the amount is less than 10 metric tons report that exact number (e.g., 2, 4, 9, etc.). Also provide the approximate percentage of the annual production capacity that was used during the reporting period, rounded to the nearest ten percent. Closed-down mines and plants have a production capacity of zero.

Question 6.6 Continuation Form: Check this box if a Continuation Form, Form AP-16, has been used to provide additional information for any of the above questions.



DOC/NRC AP Reporting Forms

FORM APPROVED: OMB NO. (TBD)	
U.S. DEPARTMENT OF COMMERCE Bureau of Industry and Security U.S. NUCLEAR REGULATORY COMMISSION Office of Nuclear Material Safety and Safeguards	
Date Received (Leave Blank)	
ADDITIONAL PROTOCOL REPORT	
FORM AP-7: CONCENTRATION PLANT OPERATIONS	
Submit a separate form for each concentration plant.	
7.1	Reporting Code (once assigned):
7.2	Activity Reporting Status: <input type="checkbox"/> New activity <input type="checkbox"/> Activity with no changes <input type="checkbox"/> Activity with changes <input type="checkbox"/> Ceased activity (Closed-down)
7.3	Identify building name(s)/number(s) and any additional information that may more precisely define where the reported activity occurs (e.g. room numbers):
7.4	Concentration Plant Type: <input type="checkbox"/> Conventional Mill <input type="checkbox"/> Phosphate by-product plant <input type="checkbox"/> In-situ Leach Mine <input type="checkbox"/> Other Concentration Plant: _____
7.5	Operational Status: <input type="checkbox"/> Operating (plant that operates on a routine basis) <input type="checkbox"/> Suspended (plant is capable of operation but production has ceased) <input type="checkbox"/> Closed-down (production has ceased and plant is not capable of operation)
7.6	Annual Uranium Production Capacity (in metric tons):
7.6	Percentage of Production Capacity Used:
7.7	Annual Thorium Production Capacity (in metric tons):
7.7	Percentage of Production Capacity Used:
7.8	<input type="checkbox"/> Check this box if a Continuation Form (Form AP-16) has been used to provide additional information for any of the above questions.

7.4

Concentration Plant Type:

☐ Conventional Mill

☐ Phosphate by-product plant

☐ In-situ Leach Mine

☐ Other Concentration Plant: _____

7.5

Operational Status:

☐ Operating (plant that operates on a routine basis)

☐ Suspended (plant is capable of operation but production has ceased)

☐ Closed-down (production has ceased and plant is not capable of operation)

7.6

Annual Uranium Production Capacity (in metric tons):

Percentage of Production Capacity Used:



DOC/NRC AP Reporting Instructions

FORM AP-7: Concentration Plant Operations

Reporting requirements are set forth in 10 CFR Parts 75 and 110 of the U.S. Nuclear Regulatory Commission (NRC) Regulations.

INSTRUCTIONS:

Submit a separate Form AP-7 for each in-situ leach mine and concentration plant at your location where uranium and/or thorium is processed or produced. A concentration plant is where uranium and/or thorium are chemically concentrated from ore or by-product materials into a form for further processing.

Question 7.1 Reporting Code: A unique reporting code will be assigned and reported to each location by BIS once an Initial Report has been submitted. The Reporting Code must appear on all future forms pertaining to the location after it is assigned.

Question 7.2 Activity Reporting Status: Indicate the current reporting status by checking the appropriate box (i.e., "New Activity" to report an activity for the first time, "Activity with changes" or "Activity with no changes" if a report for this activity was previously submitted, or "Ceased activity" for an activity that ended during the reporting year and will not be reported in future years). If the information previously reported for this specific activity has not changed, you are not required to complete the rest of this form, instead check the "Activity with no changes" box and submit along with Forms AP-1, AP-2 and any other required activity forms.

Question 7.3 Place Where Activity Occurs: Identify building name(s)/number(s) and any additional information that may more precisely define where the reported activity

occurs (e.g. room numbers). If many rooms are used, you may describe areas within the building (e.g. 1st floor of the north wing).

Question 7.4 Concentration Plant Type:

For each concentration plant where uranium or thorium is chemically processed or produced, check the appropriate box to indicate whether it is a conventional mill, a phosphate or other by-product plant, or an in-situ leach mine. If none of these options is applicable for your concentration plant, select the box labeled "Other Concentration Plant" and identify your concentration plant type in the space provided.

Question 7.5 Operational Status: Check the appropriate box to indicate the current operational status of the concentration plant.

Questions 7.6 and 7.7 Production Capacity: Provide the design-basis annual production capacity of uranium and/or thorium at the concentration plant in metric tons, rounded to the nearest ten if the amount is ten metric tons or more (e.g., 27 to 30, 142 to 140, 1525 to 1500, 15782 to 16000, etc.). If the amount is less than 10 metric tons report that exact number (e.g., 2, 5, 9, etc.). Also provide the approximate percentage of the annual production capacity that was used during the reporting period, rounded to the nearest ten percent. Closed-down plants have a production capacity of zero.

Question 7.8 Continuation Form: Check this box if a Continuation Form, Form AP-16, has been used to provide additional information for any of the above questions.

Question 7.5 Operational Status: Check the appropriate box to indicate the current operational status of the concentration plant.

Questions 7.6 and 7.7 Production Capacity: Provide the design-basis annual production capacity of uranium and/or thorium at the concentration plant in metric tons, rounded to the nearest ten if the amount is ten metric tons or more (e.g., 27 to 30, 142 to 140, 1525 to 1500, 15782 to 16000, etc.). If the amount is less than 10 metric tons report that exact number (e.g., 2, 5, 9, etc.). Also provide the approximate percentage of the annual production capacity that was used during the reporting period, rounded to the nearest ten percent. Closed-down plants have a production capacity of zero.



Information Collection Process

- **NRC and DOC use a joint information collection process**
 - Paper-based forms
 - Annual reports submitted to DOC/BIS by January 31st of each year
- **All AP reporting forms will be sent to the DOC/BIS**
 - DOC/BIS segregates information (DOC vs. NRC)
- **Future plans to develop and implement a computerized reporting system utilizing web-based forms**



Information Collection Timelines

- **Annual reports**
 - Submitted to DOC by January 31st of each year
 - Starting in 2010
- **Export reports**
 - Submitted to DOC 15 days after each quarter
 - April 15th, July 15th, October 15th, and January 15th



Outreach to industry

- **2008 Outreach**

- The 2008 Annual NMMSS Users Group meeting, May
- The 3rd Annual Fuel Cycle Information Exchange, June
- The INMM 49th Annual Meeting, July
- The Annual TRTR Conference, September
- The NEI International Uranium Fuel Seminar, October
- Joint DOC/NRC Informational Seminars (2), November

- **2009 Meetings**

- NRC / Organization of Agreement States / Conference of Radiation Control Program Directors conference call, January
- The 2009 Annual NMMSS Users Group meeting, May
- The 4th Annual Fuel Cycle Information Exchange, June
- **The 2009 NMA/NRC Uranium Recovery Workshop, July**
- The INMM 50th Annual Meeting, July



Reported Activities

- Article 2.a (i) – Fuel-cycle related R&D (Govt. Related)
 - DOC – 18 entries; NRC – 4 entries
 - Total US – 128 entries
- Article 2.a (iii) – Buildings at Nuclear Facilities
 - NRC – 8 “Sites”, 118 Buildings
 - Total US – 11 “Sites”, 121 Buildings
- Article 2.a (iv) – Fuel-cycle related manufacturing
 - DOC – 15 entries; NRC – 3 entries
 - Total US – 19 entries



Reported Activities

- Article 2.a (v) – Uranium hard rock mines, concentration plants and mills
 - DOC – 21 entries; NRC – 12 entries
 - Total US – 33 entries
- Article 2.a (vi) – Import, export, or possession of source materials preceding starting point of IAEA safeguards
 - NRC – 1 location
 - Total US – 1 location



Reported Activities

- Article 2.b (i) – Fuel-cycle related R&D (Private)
 - DOC – 2 entries
 - Total US – 2 entries
- Article 2.a (ix) – Exports of nuclear related equipment
 - NRC – 47 entries for 1st quarter 2009
 - Total US – 47 entries for 1st quarter 2009



Points of contact

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