

**NUCLEAR REGULATORY COMMISSION**

**10 CFR Parts 30, 36, 39, 40, 51, 70, and 150**

**RIN 3150-A179**

**[NRC-2010-0075]**

**Licenses, Certifications, and Approvals for Materials Licensees**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Final rule.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC or the Commission) is amending its regulations by revising the provisions applicable to the licensing and approval processes for byproduct, source and special nuclear materials licenses, and irradiators. The changes will clarify the definitions of “construction” and “commencement of construction” with respect to materials licensing actions conducted under the NRC’s regulations. The NRC is adopting these changes to further improve the effectiveness and efficiency of the licensing and approval processes for future materials license applications, as well as to eliminate certain inconsistencies that currently exist within the NRC’s regulations with respect to the use and definition of the terms “construction” or “commencement of construction” for certain materials licensees for purposes of its environmental reviews.

**DATES:** This final rule is effective on **[insert date 60 days from date of publication]**.

**ADDRESSES:** You can access publicly available documents related to this document using the following methods:

- **NRC's Public Document Room (PDR):** The public may examine and have copied, for a fee, publicly available documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

- **NRC's Agencywide Documents Access and Management System (ADAMS):** Publicly available documents created or received at the NRC are available electronically at the NRC Public Library at <http://www.nrc.gov/reading-rm/adams.html>. From this page, the public can gain entry into ADAMS, which provides text and image files of the NRC's public documents. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC's PDR reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov).

- **Federal Rulemaking Web Site:** Public comments and supporting materials related to this final rule can be found at <http://www.regulations.gov> by searching on Docket ID **NRC-2010-0075**. Address questions about NRC dockets to Carol Gallagher, telephone: 301-492-3668; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov).

**FOR FURTHER INFORMATION CONTACT:** Ms. Tracey Stokes, Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-1064; e-mail: [Tracey.Stokes@nrc.gov](mailto:Tracey.Stokes@nrc.gov).

**SUPPLEMENTARY INFORMATION:**

- I. Background
- II. Summary and Analysis of Public Comments on the Proposed Rule
- III. Discussion
- IV. Section-by-Section Analysis

- V. Agreement State Compatibility
- VI. Voluntary Consensus Standards
- VII. Environmental Impact – Categorical Exclusion
- VIII. Paperwork Reduction Act Statement
- IX. Regulatory Analysis
- X. Regulatory Flexibility Certification
- XI. Backfit Analysis
- XII. Congressional Review Act

## **I. Background**

On July 27, 2010 (75 FR 43865), the NRC published a proposed rule, “Licenses, Certifications, and Approvals for Materials Licenses.” The rule proposed to amend the NRC’s regulations to clarify the definitions of “construction” and “commencement of construction” applicable to the licensing and approval processes for byproduct, source and special nuclear materials licenses, and irradiators. The proposed rule sought to eliminate the differences that exist between the NRC’s definition of construction and its use for nuclear power reactor licensing, materials licensing, and for purposes of environmental reviews.

The inconsistencies that exist arose after the NRC modified the definition of “construction” applicable to nuclear power reactors and to the NRC environmental review regulations, but did not make comparable changes to its materials licensing regulations. On October 9, 2007 (72 FR 57416; corrected at 73 FR 22786 (April 28, 2008)), the NRC had amended the definition of “construction” for utilization and production facilities and amended the limited work authorization (LWA) procedures for nuclear power plants (LWA Rulemaking). As part of that rulemaking, the Commission revised the scope of activities that are considered construction and for which a construction permit, combined license, or LWA is necessary;

specified the scope of construction activities that may be performed under an LWA; changed the review and approval process for LWA requests; and clarified the environmental review process for these activities.

Since the completion of the LWA Rulemaking, activities that do not constitute construction under Title 10 of the *Code of Federal Regulations* (10 CFR) Parts 50, 51, and 52, are currently classified as construction under 10 CFR Parts 30, 36, 40, 70, and 150. As such, the site preparation activity from which a materials license applicant, including a licensee applying for an amendment to an existing license, is currently prohibited from engaging are the same activities that the NRC determined in the LWA Rulemaking were not within the scope of the NRC's licensing authority. Materials license applicants and licensees, as well as the NRC's staff, have struggled with this inconsistency. The rules adopted herein eliminate this inconsistency.

## **II. Summary and Analysis of Public Comments on the Proposed Rule**

### **A. Summary of Public Comments**

The proposed rule was published on July 27, 2010 (75 FR 43865), with a 60-day comment period, which ended on September 27, 2010. The comment period was subsequently reopened and extended to November 29, 2010 (75 FR 60341; September 30, 2010). The NRC received 12 public comments on the proposed rule. The commenters include four members of the public, three industry organizations, two public interest and consumer advocacy groups<sup>1</sup>, one company which indicated an intent to apply for a materials license, one law school environmental law clinic, and one anonymous commenter.

---

<sup>1</sup> One of the comments referenced was a joint submission on behalf of seven consumer advocacy organizations.

Two of the comments received generally supported the NRC's decision to issue the proposed rule. Three of the comments, while critical of the proposed rule or its applicability to certain materials licenses at all, provided specific comment with respect to the proposed language. Seven of the comments received were opposed to the proposed rule, stating as their main objection their belief that the proposed rule is contrary to, and would negatively impact the NRC's implementation of the National Environmental Policy Act of 1969, as amended (NEPA), and other Federal environmental or conservancy statutes such as, the Bald Eagle Protection Act of 1940, the Endangered Species Act of 1973, the Fish and Wildlife Coordination Act of 1934, the Migratory Bird Conservation Act, and the National Historic Preservation Act of 1966, as amended.

The proposed rule also solicited comments on the utility of an LWA process specific to materials licenses. Four of the twelve commenters addressed this issue, and of the four, one was opposed, claiming that such a process would violate NEPA, and the remaining three indicated that there was some merit in the endeavor, and provided comments on the potential designs of such a process.

## B. NRC Response to Public Comments

The NRC has carefully considered the public comments received. The comments have been organized by topic (e.g., Compliance with NEPA) followed by the NRC response. As will be further discussed, the NRC has decided to adopt a final rule substantially similar to that included in the proposed rule. As is also discussed, the NRC has decided not to adopt a specific LWA process for materials licenses, at this time.

1. Compliance with NEPA

*Comment:* Several of the commenters state that the proposed changes in the definitions of “construction” and “commencement of construction” would violate NEPA, as it would allow materials license applicants to take action that would have significant environmental impacts with no NRC oversight or environmental review. The commenters state that the proposed rule would allow the framework for an entire materials license facility to be prepared and significant environmental impacts to occur without undergoing any meaningful environmental or safety oversight, review or analysis. The commenters maintain that if the contemplated site preparation activities are permitted, the NRC would miss out on the opportunity to catch possible environmental damage early and to require mitigative measures necessary to lessen this damage. The commenters stress that the proposed rule would result in the impermissible segmentation of the licensing action, which could result in the NRC not considering the full effect of the Federal action upon the environment.

*Response:* As explained in more detail in Section III, Discussion, the NRC disagrees with the commenters. The rule being adopted by the NRC is not intended to thwart or avoid the environmental review requirements of NEPA. The NRC will continue to implement NEPA on the totality of its licensing action. Site preparation activities, which are private actions, will be considered by the NRC in accordance with its regulations in 10 CFR Part 51 as part of the agency’s cumulative impacts analysis.

The NRC, through this rulemaking, is not authorizing any individual to engage in specific site preparation activities. Rather, the NRC is identifying those specific activities that are not subject to its regulatory authority. The private site preparation activities that occur, while not subject to NRC authority, in all likelihood are subject to regulatory authority of another Federal, State or local agency, through either a permitting or licensing process. Such Federal, State or local authority with permitting or licensing jurisdiction over private site preparation activities

would be the proper entity to consider concerns pertaining to the activities, including the potential triggering of NEPA or State environmental review requirements as appropriate. The NRC would consider any request from another Federal, State or local agency with authority over the private action for the NRC to be a cooperating agency on a case-by-case basis within the scope of the NRC's jurisdictional authority and any applicable Memorandum of Understanding.

*Comment:* Several of the commenters state that the NRC's proposed rule does not fall within the categorical exclusions described in §§ 51.22(c)(1), (c)(2), and (c)(3)(1), as it is more than administrative in nature. Instead, the commenters stated that the proposed rule would have the effect of deregulating a substantial amount of construction activity related to materials licensing, and as such, is itself a major action that requires an NEPA environmental review.

*Response:* The NRC disagrees with this comment. The NRC's determination with respect to the definition of "construction" originally occurred in the 2007 LWA Rulemaking. This rule merely conforms the definitions in Parts 30, 36, 40, 70 and 150 to the definitions that have been present in Part 51 for several years through the LWA Rulemaking. The NRC is making no new determinations regarding the definition of construction for purposes of Part 51 through this rule, but rather is assuring Part 51's definition clearly applies consistently across NRC licensing activities. Accordingly, this rule meets the categorical exclusions described in § 51.22(c)(1) which expressly excludes amendments to Part 150; § 51.22(c)(2) which excludes amendments to the NRC regulations that are corrective or of a minor or nonpolicy nature; and § 51.22(3)(i) which excludes amendments to the NRC regulations that relate to procedures for filing and reviewing applications for licenses or other forms of permission.

*Comment:* Several commenters question whether the NRC has consulted with and obtained comments from other Federal agencies, including the Council on Environmental Quality, State Historic Preservation Officers, or Native American Tribes.

*Response:* This rule was available for public comment for four months, and any interested government or private agency or entity could have provided comments during that time. The NRC did not separately invite other Federal agencies, State Historic Preservation Officers, or Native American Tribes to comment on this rule. While the NRC did not separately invite these entities to comment on this rule, we note that in the LWA Rulemaking through which the amended “construction” definition was originally implemented with respect to some of the NRC’s licensees, the NRC did informally contact several Federal agencies for the purpose of seeking their comments on the supplemental proposed LWA rule. These Federal agencies were the Council on Environmental Quality, the U.S. Environmental Protection Agency (EPA), the Federal Energy Regulatory Commission, and the U.S. Department of the Interior, Fish, and Wildlife Service.

*Comment:* One commenter states that the proposed rule change is based on a false premise; i.e., that NEPA is a purely procedural statute.

*Response:* As discussed in more detail in Section III, Discussion, the Federal judiciary has consistently held that NEPA is a procedural statute, and as such it cannot expand the statutory authority of the NRC to regulate non-radiological hazards.

## 2. LWA Process for Materials Licenses

Four commenters provided comments in response to the NRC’s question regarding whether an LWA process is appropriate. One commenter opposed such a process, claiming that an LWA process for materials licenses would result in segmentation of the major Federal action and would violate NEPA. The remaining three commenters were supportive of an LWA process.



One commenter states that an LWA process would permit only limited construction activities and the environmental impacts associated with activities would be evaluated in an Environmental Impact Statement (EIS) before the LWAs would be issued. However, that commenter also suggests that the NRC lacks the statutory authority to restrict the construction activities of some materials licensees, although the commenter did not identify which materials licensees were affected. This commenter offered suggested changes to the proposed rule. As an initial matter, the commenter suggests that the NRC revise the proposed rule to eliminate the concept of “commencement of construction.” This particular proposal is based, in part, on the commenter’s belief that the NRC lacks the statutory authority necessary to prohibit a materials license applicant from engaging in construction. As is discussed further in Section III, Discussion, the NRC disagrees with this proposition. The Atomic Energy Act of 1954, as amended (AEA), confers on the NRC the authority to establish by rule and regulation such standards as the NRC “deems necessary or desirable” to ensure the public health and safety from radiological hazards, including limitations on an applicant’s or licensee’s ability to engage in construction. See § 161.b of the AEA. The NRC also disagrees with the commenter’s claim that the term “commencement of construction” is no longer necessary for materials licenses. The term “commencement of construction” operates to place the materials license applicant on notice that a site preparation activity may also be considered as construction requiring prior NRC approval if it has a reasonable nexus to radiological health and safety or common defense and security. Accordingly, this final rule language will retain the definition for “commencement of construction.” Finally, this commenter also suggested other minor textual changes to the proposed rule that the NRC does not believe necessary for the purposes of this rule.

The remaining two commenters address an LWA-like process that would be applicable primarily to *in situ* uranium recovery (ISR) licensees. The commenters state as an initial proposition that § 40.32(e) is not applicable to ISR licensees and is only applicable to conventional uranium mill operations which produce byproduct material as tailings. According

to the commenters, ISRs do not produce large quantities of uranium mill tailings and do not require any tailings disposal areas because liquid waste can be disposed of using a Class I underground-injection-control (UIC) deep-disposal well or evaporation ponds. The NRC disagrees with this rationale. The ISRs require a Part 40 license in order to operate a facility to process radioactive source material. The ISR process produces radioactive waste, in particular 11e.(2) byproduct material. As is discussed further in Section III of this Statement of Considerations (SOC), the NRC's prohibition against construction is applicable to all materials licenses issued under Parts 30, 40, and 70. There is no exception for ISR licensees.

With respect to the proposed rule, the commenters stated that the proposed rule is too narrowly interpreted to meet the needs of ISR licensees. The commenters propose that the list of items that are not construction be modified to include: wellfields (injection, production/extraction, and monitor well networks); administrative and other buildings and site roads and infrastructure intended to handle or process AEA material; and the central processing plant. The NRC is not adopting the commenters' proposal. Most of the listed construction activities when complete would be utilized to handle, use, process, or store radioactive material; therefore, such activities would be viewed as having a reasonable nexus to radiological health and safety or common defense and security, and hence would be considered construction. The only exception would be with respect to administrative and other buildings, and site roads and infrastructure. The commenter indicates that this category of actions would include not only construction of buildings that would eventually be used to handle AEA materials, but also construction of buildings and facilities that are not specific to the NRC license or radioactive materials. This latter category of buildings and facilities may fall within the definition of site preparation activity, but ultimately the determining factor will be whether the proposed activity has a reasonable nexus to radiological health and safety or the common defense and security. Objectively, the NRC can indicate that construction of a building or facility intended to house or

handle radioactive material would be considered a construction activity subject to the prohibition in § 40.32(3).

With respect to their proposed LWA-like process, these commenters also suggest a three-tier process that permits certain pre-licensing construction activities. Tier 1 would identify those construction activities that could occur prior to licensing without staff approval. Tier 2 would identify those construction activities that could occur prior to licensing with staff's approval. Tier 3 would identify those construction activities that could only occur after licensing.

Given the diverse nature of materials licensees, the NRC would need to develop a thorough and comprehensive LWA program that would be available to all materials licensees to the extent practicable and adequate to ensure that the radiological health and safety of the public and common defense and security is protected. There is insufficient information on the record of this rulemaking from which the NRC can develop such a process or even determine whether such a process is feasible. Thus, the NRC is not establishing an LWA process for materials licenses at this time. The NRC may consider this issue in more detail in a future rulemaking.

### 3. Scope of NRC Authority

*Comment:* One commenter states that a company clears land and drives piles for the specific purpose of constructing a materials processing facility; therefore, site preparation activities have a nexus to construction, and the activities fall within the NRC's jurisdiction under the AEA.

*Response:* As discussed in Section III, Discussion, the NRC statutory authority is limited to ensuring protection of the radiological public health and safety and common defense and security. Certain activities identified as site preparation activities are outside of the scope of the NRC's authority. This rule makes clear that any activity related to the radiological public health

and safety or common defense and security is subject to NRC review and regulations. Driving of piles is not specifically identified as a site preparation activity that can be conducted without an NRC license. The SOC on the LWA Rulemaking clarifies that the driving of piles for reactor licensees has a reasonable nexus to radiological health and safety, and/or common defense and security; and therefore would be considered construction subject to NRC authority for reactor licensees. (72 FR at 57428; October 9, 2007). Whether the driving of piles is a site preparation activity for materials licensees (that is, whether the driving of piles has a reasonable nexus to radiological health and safety or common defense and security) would have to be determined on a case-by-case basis with consideration of which activities would be subject to the materials license.

*Comment:* One commenter states that the NRC should exert jurisdiction over site preparation activities. The commenter concludes that if the NRC does not monitor and evaluate these actions, then no one will.

*Response:* The NRC is unable to extend its jurisdiction beyond the authority granted in the AEA. As discussed in Section III, Discussion, the AEA expressly limits the NRC's authority to matters concerning the radiological public health and safety and common defense and security and non-radiological hazards to the extent such hazards result from the actual processing or possession of by-product material, and the Commission has determined that this authority does not extend to site preparation activities having no nexus to radiological health and safety or common defense and security. As previously stated, the private site preparation activities that occur, while not subject to NRC authority, may be subject to the regulatory authority of another Federal, State or local agency through either a permitting or licensing process. It is during these other processes that concerns pertaining to the site preparation activities undertaken by potential materials license applicants could be considered by other Federal, State or local entities, including the potential triggering of NEPA or state environmental

review requirements as appropriate (for example, a Class III underground injection control permit may require State or EPA approval, and a stormwater discharge permit may require State approval).

*Comment:* One commenter states that without NRC regulation and approval of site preparation activities to ensure nuclear projects are conducted conscientiously, materials license applicants will be free to engage in activities that have a reasonable nexus to radiological health and safety at will.

*Response:* The commenter's assumption is at odds with the proposed rule and this final rule. This final rule expressly prohibits materials license applicants from taking any action, including site preparation activities, if the action has a reasonable nexus to radiological health and safety or the common defense and security.

*Comment:* One commenter states that just over a year ago, the NRC staff was not in agreement with the ISR industry, yet now the NRC is proposing a rule which largely concedes industry's position; i.e., that it should be free of the constraints of § 40.32(e).

*Response:* The NRC disagrees. As discussed, ISRs are subject to the constraints of § 40.32(e). This rule assures application of the Part 51 definition of construction consistently across NRC licensing actions and identifies certain site preparation activities that are not construction. The prohibition against construction of the licensed facility prior to the conclusion of the environmental review process remains applicable to all Part 40 materials licensees, including ISRs.

*Comment:* One commenter states that the AEA includes responsibility for environmental impacts from construction activities at the facility and environmental impacts associated with non-radiological contaminants; therefore, the NRC regulations must not only be protective of the

public health and safety and the environment but also include responsibilities for the impacts of non-radiological constituents, protection of cultural resources, and mitigation of any environmental impacts associated with the facility, not just those associated with radiological health and safety or the common defense and security.

*Response:* The NRC acknowledges that NEPA provides a Federal mandate to evaluate environmental impacts associated with licensing actions. The NRC remains committed to fulfilling these responsibilities. This final rule does not change this commitment. Rather, this final rule identifies certain actions that are outside of the scope of the NRC's licensing authority and for which prior approval from the NRC is not required. Those actions that are beyond the scope of the NRC's authority may later be considered as part of the cumulative impact analysis for purposes of the NRC's NEPA review, if, at a later date, the NRC receives an application for an NRC license for a facility at the site or an amendment to modify an existing materials license.

*Comment:* Several commenters state that § 40.32(e) does not apply to ISR facilities, as these facilities do not require the tailings management and disposal facilities required by conventional uranium milling facilities for operations and post-operational long-term control of § 11e.(2) byproduct material onsite.

*Response:* The NRC disagrees with these comments. As is more fully discussed in subsection (2) of this section and in Section III, Discussion, ISR facilities are subject to the requirements of § 40.32(e).

*Comment:* Several commenters question whether the NRC has statutory authority to license construction of materials and fuel cycle facilities.

*Response:* As is more fully discussed in Section III, Discussion, the NRC has authority under the AEA to regulate construction activities of materials and fuel cycle facilities when those

activities have a reasonable nexus to radiological health and safety or the common defense and security.

*Comment:* One commenter asks that the NRC reconcile its decision in *Nuclear Fuel Services, Inc. (Erwin, Tennessee)*, CLI-03-03, 57 NRC 239 (2003) (*Nuclear Fuel Services* or *NFS*), with its regulations imposing prohibitions on construction contained in §§ 30.33, 40.32, and 70.23.

*Response:* In *Nuclear Fuel Services*, an existing licensee, NFS, requested NRC authority to amend its license to permit the production of low enriched uranium (LEU) oxide, receipt and storage of LEU nitrate, downblending of high enriched uranium to LEU, and conversion of LEU nitrate to LEU oxide. The license amendment(s) resulted in the creation of an additional complex (three new buildings) on the licensee's site. The applicable regulation, § 70.23(e), prohibits construction at the facility prior to conclusion of the environmental review. Violation of this prohibition could result in denial of the license amendments. The NRC staff had completed the environmental review for the first of the three license amendments. Several organizations jointly petitioned the NRC to enjoin all construction activities that had begun on the building associated with the first amendment, as well as enjoin NFS from commencing construction on the buildings associated with the remaining two license amendments. The Petitioners acknowledged that some of the activities for which it was seeking the injunction did not require NRC approval. The Commission treated the Petitioners' request as a petition for enforcement under 10 CFR 2.206, the end result of which would be an enforcement action against the licensee – suspension of construction activities. *Id.* at 245. The Commission, after finding it unnecessary to order NFS to cease all construction activities associated with the overall project, denied the Petitioners' request. In reaching this decision, the Commission questioned whether, in the circumstances of that case, it had the authority to halt NFS' pre-licensing construction. *Id.* at 246 – 250. The Commission further went on to opine:

We, too, do not understand applicable NRC regulations or statutes to prohibit outright NFS's construction activities. But the Petitioners undoubtedly are correct that our rules "*contemplate* that construction . . . should not begin until the NRC has completed its environmental review." To that effect, both 10 C.F.R. § 51.101(s) and 10 C.F.R. § 70.23(a)(7) discourage construction activities until the Staff has completed an environmental review. . . . Thus, while not absolutely barring preclicensing construction, NRC rules provide a disincentive to early construction by raising the possibility of ultimate denial of the license application should an applicant move forward precipitously, despite open environment issues.

In short, NFS proceeds at its own risk with construction activities. If NFS begins or continues to construct buildings associated with license amendments for which the Staff's environmental review is incomplete, NFS's construction may prove grounds for denial of one or more of the license amendments.

*Id.* at 246 – 247 (footnotes omitted).

The decision in *NFS* is not contrary to the determinations in this rule, nor does this rule purport to amend the NRC's regulations to impose an **outright** prohibition on construction activities at the facilities of materials licensees and applicants. Rather, by this rule, the NRC is clarifying that, consistent with 10 CFR Part 51, certain site preparation activities undertaken by materials license applicants do not constitute construction. With respect to those activities that could be considered construction, the same regulatory provisions that were applicable in *NFS* remain applicable today. As the Commission indicated in *NFS*, the NRC's regulations discourage materials license applicants and licensees applying for an amendment to an existing license from engaging in construction activities until after the NRC staff has completed its environmental review, and caution that should an applicant or licensee chose to act prior to that time, that action could result in denial of the license application. Nothing in this rule proposes to change or modify this "discouragement." Although the industry and the NRC frequently refer to the discouraging provisions in §§ 30.33(a)(5), 40.32(e), and 70.23(a)(7) as a prohibition for ease of reference, it is more of an admonition of the potential consequence of certain actions.

As is discussed in more detail in Section III, Discussion, NEPA is largely a procedural statute, which requires that the NRC undertake environmental review of its licensing actions. In



implementing the requirements of NEPA, the NRC has determined in § 51.101(a)(2) that taking action that would have an adverse environmental impact, or would limit the choice of reasonable alternatives may be grounds for denial of a license, and includes within these designations the provisions in §§ 30.33(a)(5), 40.32(e), and 70.23(a)(7). Furthermore, as is also discussed further in Section III, Discussion, § 161.b of the AEA confers on the NRC the authority to establish by rule and regulation such standards as the NRC “deems necessary or desirable” to ensure the public health and safety from radiological hazards, including limitations on an applicant’s or licensee’s ability to engage in construction, which it did when it initially promulgated §§ 30.33(a)(5), 40.32(e), and 70.23(a)(7). See § 161.b of the AEA. Although the AEA expressly grants the NRC the authority to license power reactors in separate construction and operational phases, this bi-furcated process is not contemplated within the AEA for materials licenses. Instead, licensing of materials users and their facilities is presumed to be an all-in-one action resulting in a single license authorizing both construction and operations. For example, with respect to enrichment facilities, the AEA indicates that the license being issued is one for construction and operation of a facility. See § 193 of the AEA. Therefore, while neither NEPA nor the AEA, on their face, specifically require that the NRC establish regulations regarding the timing of the commencement of construction activities by materials applicants and licensees, neither do they prohibit such regulations. Instead, the NRC has been given the authority to promulgate those rules and regulations which it finds necessary or desirable to fulfill its statutory obligation of ensuring the public health and safety from radiological hazards and conducting its regulatory licensing in a manner receptive to environmental concerns. See § 51.10(b).

It is also important to note that the Commission limited its finding in *Nuclear Fuel Services* to the circumstances of that case. Those circumstances consisted of a licensee that had submitted three amendments, NRC staff that had completed its environmental review of the first amendment, and a licensee that had commenced construction on the building contemplated

in the first amendment. In accordance with § 70.23(e), this licensee waited until after the staff's environmental review to commence construction on the building covered by the license amendment. The petition to enjoin the construction activities was directed not only towards this activity, but any future construction activity related to the remaining two amendments. The Commission questioned the extent and nature of the prohibition of construction in the materials license context, but did not negate the intent or the effect of its regulations on such activity. The NRC's regulations today continue to contain a "prohibition" against construction activity by materials licensees and applicants prior to the conclusion of the NRC staff's environmental review. This "prohibition" is unaffected by this final rule, as is the potential penalty for its violation. As previously indicated, this rule is primarily aimed at clarifying in the materials context when "construction" will be considered to have commenced to determine which activities, if taken prior to the completion of the NRC's environmental review, could be grounds for denial of a license. As the Commission indicated in *NFS*, "[i]t obviously makes sense for NRC licensees not to proceed with construction that, after a NEPA and licensing review, might prove fruitless. That is the purpose underlying §§ 51.101 and 70.23(a)(7), which seek to discourage premature construction." *Id.* 250. These considerations continue to be equally applicable to the NRC's regulations as provided for in this rule.

#### 4. Site Preparation Activities

*Comment:* One commenter states that the proposed regulations will cause regulatory confusion. By way of example, the commenter indicates that the new regulations exempt "excavation" from the definition of "construction"; however, the excavation of an area for the creation of a uranium mill tailings impoundment must take place in an approved location and under specific construction and quality assurance requirements.

*Response:* The answer to this comment depends upon the nature and purpose of the excavation. For example, if the materials license applicant is planning to excavate for the purpose of laying a foundation for a building that will be used to enrich uranium or for the purpose of creating a mill tailings impoundment, an evaporation pond, a tailings impoundments, a central processing plant, a satellite plant, or a pipeline that will be used to transport radioactive material where such excavation directly impacts the functions or the NRC's safety evaluation of these structures as related to radiological health and safety or the common defense and security, then these actions would be prohibited by virtue of the "commencement of construction" definition, which precludes site preparation activities that have a reasonable nexus to radiological health and safety or the common defense and security. The varied nature of materials facilities requires that the rules establishing the criteria for permitted site preparation activities be applied to the specific activity being taken by the materials license applicant so as to determine whether that specific activity impacts radiological health and safety or common defense and security. The scenario presented by the commenter may involve excavation activities that require prior approval. The scenario presented by the commenter may also involve excavation in an inappropriate location or in accordance with specifications that could ultimately result in the NRC's non-approval of the license application.

*Comment:* One commenter states that pre-licensing activities should be limited and only occur when an applicant for a materials license has applied for and received specific permission to conduct such activities.

*Response:* The current requirements arguably are inconsistent with Commission pronouncements on the limits of its AEA authority. Moreover, the NRC has in place inconsistent regulations regarding the definition of construction. It is inappropriate to leave in place inconsistent regulatory approaches.

By identifying those site preparation activities that are not considered construction, the NRC avoids piecemeal regulation and licensing actions and brings more uniformity to the application of the NRC's regulatory authority to matters of construction. The NRC cannot "choose" to extend its authority beyond the limits of the AEA and require applicants to get prior permission to perform activities that are not within our statutory authority.

*Comment:* One commenter notes that although the proposed rule identifies specific activities that would not constitute construction under Parts 30, 40, and 70, it does not apply the reasonable nexus standard to affirmatively identify those construction activities that have a reasonable nexus to protecting the public.

*Response:* The NRC agrees with the commenter that it did not affirmatively identify those construction activities that have a reasonable nexus to protecting the public. Radiological materials have the potential to be used in a number of different ways in manufacturing, construction, oil exploration, and medical uses, just to name a few. Because the nature of materials licenses and facilities has the potential to vary greatly, the NRC believes that it would be impractical and inadvisable to attempt to enumerate all activities that constitute construction for every possible materials licensee. Instead, the more prudent course adopted in this rule is to enumerate the attributes for determining those activities that are not construction and to establish criteria that may be used by materials license applicants to determine whether a contemplated action would constitute construction; i.e., if the contemplated action has a rational and direct link to the radiological use of the proposed facility.

## 5. Miscellaneous

*Comment:* Several commenters state that the proposed rule would allow for significant financial and structural investment on the part of the industry that would prejudice any

subsequent licensing challenges or licensing conditions that the agency might deem appropriate.

*Response:* Any site preparation activities that an applicant chooses to engage in are done so at the applicant's own risk. The NRC retains complete discretion to deny a license application or to impose licensing conditions, as needed. Previously expended resources do not enter into the NRC's decision as to whether or not a license application meets regulatory requirements.

*Comment:* One commenter states that the proposed regulations fail to state whether the installation of monitoring wells, a significant component of uranium recovery facilities, including in situ leach facilities, is a "construction" activity or is exempted from the definition of "construction."

*Response:* Installation of monitoring wells that are only intended to be used to collect background data or perform background aquifer testing would be permissible. However, monitoring wells that are part of an ISR wellfield monitoring network would not be permissible because such facilities are necessary to ensure the radiological health and safety of the public and that the licensed facility is operating within standards determined by the NRC; therefore, these wells have a reasonable nexus to radiological health and safety and do not qualify as a site preparation activity.

By virtue of the exemption process that exists in Part 40, the NRC has had the opportunity to identify some activities that have a reasonable nexus to radiological health and safety and would therefore constitute construction. For instance, most recently in response to an exemption request submitted by Lost Creek ISR, LLC (ADAMS Accession No. ML091940438) the NRC has previously determined that certain activities are "construction," including construction of the processing plant, which serves to concentrate, precipitate, and dry

yellowcake; and construction of any structure or system to manage waste, such as deep disposal wells (ADAMS Accession No. ML093350365).

*Comment:* One commenter states that the term “reasonable nexus” is vague and will lead to regulatory conflict and confusion.

*Response:* The NRC disagrees. An activity or action has a “reasonable nexus” to radiological health and safety or the common defense and security if that activity or action has a rational, direct link to ensuring that a licensed materials facility is operating in accordance with the NRC’s regulations and in a manner that protects the public health and safety or the common defense and security from radiological hazards. Given the varied nature of activities involving materials licensing, the appropriate method of determining the application of this rule is to apply these standards to the specific proposed action rather than to attempt to list activities that are universally defined as falling within or outside of the definition of construction.

*Comment:* Several commenters ask how the proposed rule will affect the NRC compliance with other Federal laws such as the Bald Eagle Protection Act of 1940, the Endangered Species Act of 1973, the Fish and Wildlife Coordination Act of 1934, the Migratory Bird Conservation Act, and the National Historic Preservation Act of 1966, as amended (NHPA).

*Response:* The NRC will remain in compliance with other Federal laws. As required by those laws, the NRC will evaluate its licensing action to ensure that the action is appropriate within the confines of the NRC’s responsibilities under applicable statutes. As previously explained, the NRC’s licensing actions, consistent with the limitations of the AEA, do not include site preparation activities that are not related to the radiological health and safety of the public or the common defense and security.

*Comment:* One commenter asks whether site preparation activities are part of the Federal undertaking that is subject to the NHPA.

*Response:* The NRC views site preparation activities with no nexus to radiological health and safety or common defense and security as private actions and would not be subject to NHPA through the NRC. Under the NHPA, an undertaking is “a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including: (A) those carried out by or on behalf of the agency; (B) those carried out with Federal financial assistance; (C) those requiring a Federal permit or license, or approval; and (D) those subject to State or local regulation administered pursuant to a delegation or approval by a Federal agency.” The site preparation activities identified in the rule do not fall within this definition and would therefore not be considered a Federal undertaking subject to NHPA. It may be possible that the site preparation activities require other Federal approvals. For instance, if the site preparation activities occur on Bureau of Land Management land, this could trigger NHPA responsibilities or responsibilities under other statutes through approvals by other Federal agencies.

It would, however, be prudent of a materials license applicant that is engaging in site preparation activities to be mindful of the NRC’s obligations under the NHPA, including the requirements to identify any historic properties within the area of potential effects, to consult with the State Historic Preservation Officer (SHPO) and any other relevant stakeholders (such as Native American Tribes), and to attempt to resolve any adverse effects upon such historic properties. These procedural requirements must be satisfied by the NRC before it can approve the subject application (assuming all radiological health and safety and common defense and security requirements are met). For example, § 110k. of the NHPA requires that before granting a license the NRC ensure that an applicant has not “intentionally significantly adversely affected a historic property to which the [license] would relate, or having legal power to prevent it, allowed such significant adverse effect to occur . . .” with the intent of avoiding NRC review of

the effect of the proposed licensing action on “any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register.” Section 106 of the NHPA.

Accordingly, a materials license applicant should proceed carefully when engaging site preparation activities undertaken lest the outcome impacts the NRC’s ability to issue a license.

In order to facilitate and expedite the NRC’s NHPA process, materials license applicants are encouraged to contact any potential stakeholders who may have an interest in any historic properties on or near the site and to take steps to prevent or minimize any disturbance to such historic properties. In this regard, materials license applicants are also encouraged, upon the discovery of previously unknown historic properties, archeological resources or other cultural artifacts, to cease any such activities that may disturb or damage such resources and, inventory and evaluate the discovery in accordance with accepted historic preservation and archeological practices (see the U.S. Secretary of the Interior’s Standards and Guidelines for Identification at [http://www.nps.gov/history/local-law/arch\\_stnds\\_2.htm](http://www.nps.gov/history/local-law/arch_stnds_2.htm)).

*Comment:* One commenter asks whether the NRC will consider the effect of site preparation activities on minority or low income people before the activities and damage occur.

*Response:* Under this rule, site preparation activities that fall outside the NRC’s scope of authority would not be subject to prior review by the NRC. However, these site preparation activities might be subject to review by other State or Federal authorities. However, if there is an application for an NRC license following site preparation activities that requires that an EIS be prepared, then the NRC will evaluate environmental justice issues in the EIS in accordance with the guidance provided in the NRC’s “Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions.” (69 FR 52040; August 24, 2004). Under this scenario, when evaluating environmental justice issues in the EIS, the NRC would then consider the environmental impacts of the proposed project activities on low-income or



minority populations. The NRC would conduct any such evaluation in a manner consistent with the NRC's normal consideration of these impacts in licensing actions.

*Comment:* One commenter asks whether the NRC will provide guidance regarding the definitions contained in the proposed rule.

*Response:* The NRC will provide guidance on the definitions in the final rule.

### **III. Discussion**

#### **A. NRC Authority Pursuant to the AEA**

Comments received on this rule have questioned whether the NRC is unnecessarily limiting its authority to matters concerning "radiological" health and safety or common defense and security considerations. The majority of the commenters opposed to this rule believe that the AEA confers much broader authority to the NRC to consider a broader range of health and safety or common defense and security concerns.

As indicated in the proposed rule, the NRC has determined that the AEA does not authorize the NRC to require an applicant for an NRC license to obtain the NRC's permission before undertaking site preparation activities that do not implicate radiological health and safety or common defense and security considerations. This interpretation is not new and has been reviewed and upheld repeatedly by the Courts. In 1969, the U.S. Court of Appeals for the First Circuit reviewed this issue in *New Hampshire v. the Atomic Energy Commission [AEC]*, 406 F.2d 170 (1<sup>st</sup> Cir. 1969), cert. denied, 395 U.S. 962 (1969). The First Circuit, after noting that the scope of the term "public health and safety" was not specifically defined in the statute, reviewed the legislative history. Based upon its review, the First Circuit concluded that the AEC's (the NRC's predecessor agency) regulatory authority was limited to the scrutiny of and

protection against radiation hazards. More recently, the U.S. Court of Appeals for the District of Columbia Circuit similarly agreed that the AEA limits the NRC's consideration of health and safety to the special hazards of radioactivity. *People Against Nuclear Energy v. Nuclear Regulatory Commission*, 678 F.2d 222 (D.C. Cir. 1982), rev'd on other grounds, *Metropolitan Edison Company v. People Against Nuclear Energy*, 460 U.S. 766 (1983).

It is important to note that while the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA) amended the AEA to give the NRC the authority necessary "to protect the public health and safety and the environment from radiological and non-radiological hazards associated with the processing and with the possession of such material . . ." with respect to certain byproduct material (§ 84.a.(1) of the AEA), the NRC's authority over non-radiological hazards is limited to those hazards specifically associated with the processing and possession of byproduct material. Contrary to some of the commenters assertions, UMTRCA did not operate to expand the NRC's jurisdiction to private actions not specifically associated with the processing or possession of radioactive material.

A second set of commenters also questions whether the NRC has authority to impose a prohibition against construction on materials licensees. While the NRC's authority to protect the public health and safety may be limited to radiological hazards, its primary authority under the AEA is grounded in its authority to grant, deny and condition licenses for certain nuclear materials and facilities. With respect to materials licenses, the NRC has authority over the manufacture, production, transfer, possession, use, ownership, import and export of radioactive material. See AEA §§ 51, 53, 61, 62, 63, and 81. Section 161.b authorizes the NRC to—

Establish by rule, regulation, or order, such standards and instructions to govern the possession and use of special nuclear material, source material, and byproduct material as the Commission may deem necessary or desirable to promote the common defense and security or to protect [the radiological] health or to minimize danger to life or property [from radiological hazards].

It is this grant of authority that allows the NRC to establish as a condition of licensing that materials license applicants not engage in construction impacting common defense and security or public health and safety with respect to radiological hazards prior to the completion of the environmental review for the licensed facility.

#### B. NRC Compliance with NEPA and Other Environmental Statutes

As previously indicated, the AEA does not authorize the NRC to require an applicant to obtain permission before undertaking site preparation activities that do not implicate radiological health and safety or common defense and security. These activities, being outside of the scope of the NRC's jurisdiction are, therefore, considered to be non-Federal actions, at least with respect to the NRC's licensing actions. Such activities might trigger other Federal authority if, for example, they were to take place on Federal lands in accordance with a Bureau of Land Management lease. As set forth in the Statement of Consideration for the proposed rule, the NRC believes that this rule is fully compliant with the requirements of NEPA. The NEPA obligations and responsibilities arise only when the Commission undertakes a Federal action within the NRC's statutory responsibility. See *Department of Transportation, et al. v. Public Citizen, et al.*, 541 U.S. 752, 771 (2004) (“[A]n agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant action.”)

Contrary to the statements of some commenters, the courts have consistently determined that NEPA is a procedural statute, and as such it cannot and does not expand the NRC's jurisdiction beyond the scope of the AEA; i.e., to give the NRC authority to decide non-radiological public health and safety issues. See *Vermont Yankee Nuclear Power Corp v. Natural Resources Defense Council*, 435 U.S. 519, 558 (1978) (“NEPA does set forth significant substantive goals for the Nation, but its mandate to the agencies is essentially procedural.”); see also *Natural Resources Defense Council v. Environmental Protection Agency*, 822 F.2d 104,

129 (D.C. Cir 1987) (“NEPA, as a procedural device, does not work a broadening of the agency’s substantive powers”). This determination was also explained in the LWA Rulemaking, in which the NRC stated the following in its statements of consideration:

[W]hile NEPA may require the NRC to consider the environmental effects caused by the exercise of its permitting/licensing authority, the statute cannot be the source of the expansion of the NRC’s authority to require . . . other forms of permission for activities that are not reasonably related to radiological health and safety or protection of the common defense and security. Since NEPA cannot expand the Commission’s . . . authority under the AEA, the elimination of the blanket inclusion of site preparation activities in the [then existing] definition of construction does not violate NEPA.

(72 FR 57416, 57427; October 9, 2007).

The commenters also claim that the NRC is inappropriately segmenting the site preparation activities from the licensed facility construction activities at the site to avoid NEPA. This is not the case. Generally, the NEPA segmentation problem arises when the environmental impacts of Federal actions are evaluated in a piecemeal fashion and, as a result, the comprehensive environmental impacts of the entire Federal action are never considered or are only considered after the agency has committed itself to continuation of the project. Another associated segmentation problem arises when pieces of a Federal action are evaluated separately and, as a result, none of the individual pieces are considered “major Federal actions” requiring an EIS.

The site preparation activities identified in the rule are activities that any private entity can undertake on property that they own or to which they have legal rights. Site preparation activities are separate and independent from construction of any aspect of the proposed facility that would be directly related to the manufacture, production, use, transfer, or ownership of an NRC-licensed material. The question of whether site preparation activities are impermissibly segmented from the facility construction turns on whether these activities are viewed as “connected actions.” The courts have determined that “projects which have “independent utility”

are not "connected actions." *Utahns for Better Transportation, et al. v. U.S. Dep't of Transp., et al.*, 305 F.3d 1152, 1183 (10th Cir. 2002). Whether two actions have independent utility depends on "whether each of two projects would have taken place with or without the other . . . ." *Wilderness Workshop, et al. v. U.S. Bureau of Land Mgmt., et al.*, 531 F.3d 1220, 1229 (10th Cir. 2008). In this rule, site preparation activities are independent of facility construction. As such, site preparation activities do not violate NEPA's prohibition against segmentation.

While the effects of any non-Federal site preparation activities undertaken by a materials license applicant will not be considered effects of the NRC's licensing action, the effects of the site preparation activities would be considered as part of the NRC's cumulative impact analysis performed during the environmental review of the licensing action. Cumulative impacts are defined as the "impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." 40 CFR 1508.7. In accordance with its guidance on this issue, the NRC staff's cumulative impacts analysis will identify and describe effects of past, proposed, and reasonably foreseeable future actions to the extent that they are relevant and useful in determining the magnitude and significance of the effects of the proposed NRC licensing action. See NUREG-1748, "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs." Similar to the LWA Rulemaking, the NRC is revising § 51.60 to require that the environmental report submitted with an application for a materials license or an amendment to a materials license include a description of the site preparation activities undertaken at the proposed site; a description of the impacts of such site preparation activities; and an analysis of the cumulative impacts of the site preparation activities on the proposed licensing action.

With respect to the comments regarding other environmental protection statutes, the NRC remains committed to fulfilling its obligations under these statutes during its review of any license action. It is important to note, however, that each of the statutes applies specifically to the NRC only to the extent that an activity comes within the NRC's licensing authority or is a

“Federal undertaking” by the NRC. For the same reasons previously stated, site preparation activities are not part of the NRC licensing action process and as such do not constitute either a “major Federal action,” or a “Federal undertaking” by the NRC.

#### **IV. Section-by-Section Analysis**

Section 30.4, Definitions.

Section 30.4 is amended by adding definitions for the terms “construction” and “commencement of construction.”

Section 30.33, General requirements for issuance of specific licenses.

The amendment to § 30.33(a)(5) deletes the definition of “commencement of construction” contained in the last two sentences of the paragraph. “Commencement of construction” is now defined in § 30.4.

Section 36.2, Definitions.

Section 36.2 is amended by adding definitions for the terms “construction” and “commencement of construction.”

Section 36.13, Specific licenses for irradiators.

Section 36.13(a) is amended to exclude § 30.33(a)(5) as a requirement for an applicant to receive a specific license under this part. The provision in § 30.33(a)(5) pertains to

“commencement of construction.” “Commencement of construction” provisions for Part 36 licenses are already contained in § 36.15.

Section 36.15, Start of construction.

The amendment in § 36.15 revises the section title “Start of construction” to “Commencement of construction” and deletes the definition of “construction.” The definitions of “commencement of construction” and “construction” are now defined in § 36.2.

Section 39.13, Specific licenses for well-logging.

Section 39.13 is amended to change the reference to § 70.33 to § 70.23.

Section 40.4, Definitions.

Section 40.4 is amended by adding definitions for the terms “construction” and “commencement of construction.”

Section 40.32, General requirements for issuance of specific licenses.

The amendment to § 40.32(e) deletes the definition of “commencement of construction” contained in the last two sentences of the paragraph. “Commencement of construction” is now defined in § 40.4.

Section 51.4, Definitions.

The amendment to § 51.4 clarifies that the definition of “construction” applies to materials licenses.

Section 51.45, Environmental report.

The amendment to § 51.45(c) corrects the reference to § 51.4, and describes additional information that the environmental report for materials licenses should contain.

Section 70.4, Definitions.

Section 70.4 is amended by adding definitions for the terms “construction” and “commencement of construction.”

Section 70.23, Requirements for the approval of applications.

The amendment to § 70.23(a)(7) deletes the definition of “commencement of construction” contained in the last two sentences of the paragraph. “Commencement of construction” is now defined in § 70.4.

Section 150.31, Requirements for Agreement State regulation of byproduct material.

Section 150.31(b)(3)(iv) is revised to include definitions for “commencement of construction” and “construction.”



## V. Agreement State Compatibility

Under the “Policy Statement on Adequacy and Compatibility of Agreement State Programs” which became effective on September 3, 1997 (62 FR 46517), this final rule is a matter of compatibility between the NRC and Agreement States, thereby providing consistency among the Agreement States and the NRC’s requirements. The NRC program elements (including regulations) are placed into Compatibility Categories A, B, C, D, NRC, or adequacy category, Health and Safety (H&S). Category A includes program elements that are basic radiation protection standards or related definitions, signs, labels, or terms necessary for a common understanding of radiation protection principles and should be essentially identical to those of the NRC. Category B includes program elements that have significant direct transboundary implications and should be essentially identical to those of the NRC.

Compatibility Category C includes those program elements that do not meet the criteria of Categories A or B but nonetheless are consistent with an Agreement State’s efforts to avoid conflict, duplication, gaps, or other conditions that would jeopardize an orderly pattern in the regulation of agreement material on a nationwide basis. Therefore, the program elements in Compatibility Category C should be adopted by Agreement States.

Compatibility Category D includes those program elements that do not meet any of the criteria of Category A, B, or C, and do not need to be adopted by Agreement States.

Compatibility Category NRC consists of those program elements that address areas of regulation that cannot be relinquished to Agreement States pursuant to the AEA or provisions of Title 10 of the *Code of Federal Regulations* and should not be adopted by Agreement States.

Category H&S consist of program elements that are not required for compatibility, but have a particular health and safety role (e.g., adequacy) in the regulation of agreement material and the State should adopt the essential objectives of the NRC program elements.

The NRC has analyzed this final rule in accordance with the procedure established within Part III, “Categorization Process for NRC Program Elements,” of Handbook 5.9 to Management Directive 5.9, “Adequacy and Compatibility of Agreement State Programs” (a copy of which may be viewed at <http://www.nrc.gov/reading-rm/doc-collections/management-directives/>). The amendments are categorized in Table 1.

**Table 1  
Compatibility for Final Rule**

NRC Regulation Section	Change	Section Title	Compatibility Category	
			Existing	New
30.4	Amend	Definition – Commencement of Construction – Paragraph 1.	D	D
30.4	New	Definition – Commencement of Construction – Paragraph 2.	–	NRC
30.4	New	Definition – Construction – Paragraphs 1 – 8 and 9(i).	–	D
30.4	New	Definition – Construction – Paragraph 9(ii).	–	NRC
30.33(a)(5)	Amend	General requirements for issuance of specific licenses.	D	D
36.2	New	Definition – Commencement of Construction – Paragraph 1.	–	D
36.2	New	Definition – Commencement of Construction – Paragraph 2.	–	NRC
36.2	New	Definition – Construction – Paragraphs 1 – 8 and 9(i).	–	D
36.2	New	Definition – Construction – Paragraph 9(ii).	–	NRC

NRC Regulation Section	Change	Section Title	Compatibility Category	
			Existing	New
36.13(a)	Amend	Specific licenses for irradiators.	H&S	H&S
36.15	Amend	Commencement of construction.	D	D
39.13(a)	Amend	Specific licenses for well-logging.	H&S	H&S
40.4	Amend	Definition – Commencement of Construction – Paragraph 1.	C - States with authority to regulate uranium mill activities (11e.(2) byproduct material)  D - States without authority	C - States with authority to regulate uranium mill activities (11e.(2) byproduct material)  D - States without authority
40.4	New	Definition – Commencement of Construction – Paragraph 2.	–	NRC
40.4	New	Definition – Construction – Paragraphs 1 – 8 and 9(i).	–	C - States with authority to regulate uranium mill activities (11e.(2) byproduct material)  D - States without authority
40.4	New	Definition – Construction – Paragraph 9(ii).	–	NRC

NRC Regulation Section	Change	Section Title	Compatibility Category	
			Existing	New
40.32(e)	Amend	General requirements for issuance of specific licenses.	H&S – States with authority to regulate uranium mill activities (11e.(2) byproduct material) NRC – States without authority	H&S – States with authority to regulate uranium mill activities (11e.(2) byproduct material) NRC – States without authority
51.4	Amend	Definitions.	NRC	NRC
51.45	Amend	Environmental Report – Paragraph (c)	NRC	NRC
70.4	Amend	Definition – Commencement of Construction – Paragraph 1.	D	D
70.4	New	Definition – Commencement of Construction – Paragraph 2.	–	NRC
70.4	New	Definition – Construction – Paragraphs 1 – 8 and 9(i).	–	D
70.4	New	Definition – Construction – Paragraph 9(ii).	–	NRC
70.23(a)(7)	Amend	Requirements for the approval of applications.	NRC	NRC

NRC Regulation Section	Change	Section Title	Compatibility Category	
			Existing	New
150.31(b)(3)(iv)	Amend	Requirements for Agreement State regulation of byproduct material.	C - States with authority to regulate uranium mill activities (11e.(2) byproduct material)  D - States without authority	C - States with authority to regulate uranium mill activities (11e.(2) byproduct material)  D - States without authority
150.31(b)(3)(iv) (A)	New	Requirements for Agreement State regulation of byproduct material.	–	C - States with authority to regulate uranium mill activities (11e.(2) byproduct material)  D - States without authority
150.31(b)(3)(iv) (B)	New	Requirements for Agreement State regulation of byproduct material.	–	C - States with authority to regulate uranium mill activities (11e.(2) byproduct material)  D - States without authority

## **VI. Voluntary Consensus Standards**

The National Technology Transfer and Advancement Act of 1995 (Pub. L. 104-113), requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies, unless the use of such a standard is inconsistent with applicable law or otherwise impractical. In this final rule, the NRC is clarifying those activities that constitute “construction” for materials licenses. This action does not constitute the establishment of a standard that contains generally applicable requirements.

## **VII. Environmental Impact – Categorical Exclusion**

The NRC has determined that this final rule is the type of action described as a categorical exclusion in 10 CFR 51.22(c)(1), (c)(2), and (c)(3)(i). Section 51.22(c)(1) provides a categorical exclusion for amendments to various parts of the NRC’s regulations, including Part 150. Section 51.22(c)(2) provides a categorical exclusion for amendments to the NRC’s regulations which are of a corrective or minor or nonpolicy nature and do not substantially modify existing regulations. Section 51.22(c)(3)(i) provides a categorical exclusion for amendments to any part of the NRC’s regulations which relate to procedures for filing and reviewing applications, amendments, or renewals for licenses or other forms of permission. In this final rule, the amendments to Parts 30, 40, 36, and 70 relate to the procedures for reviewing applications, amendments, and renewals of materials licenses subject to these parts. The amendments to Part 39 correct a typographical error, and the remaining amendments are to Part 150. Because these amendments belong to a category of actions which the NRC has previously found do not individually or cumulatively have a significant effect on the human environment, neither an environmental impact statement nor an environmental assessment has been prepared for this rule.

### **VIII. Paperwork Reduction Act Statement**

This final rule does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget (OMB), Control Numbers 3150-0017, 3150-0158, 3150-0130, 3150-0020, 3150-0021, 3150-0009, and 3150-0032.

#### Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

### **IX. Regulatory Analysis**

A regulatory analysis has not been prepared for this regulation. This rule amends the NRC's regulations to conform the definitions of "construction" and "commencement of construction" as they appear in Parts 30, 36, 40, 70, and 150, to the Parts 50, 51, and 52 definitions implemented by the LWA Rulemaking, revised to reference non-nuclear power plant licensees. This amendment does not impose any new burden or reporting requirements on the licensee or the NRC for compliance. Also, this rule does not involve an exercise of NRC discretion and therefore does not necessitate preparation of a regulatory analysis.

## **X. Regulatory Flexibility Certification**

In accordance with the Regulatory Flexibility Act (5 U.S.C. 605(b)), the NRC certifies that this rule will not have a significant economic impact on a substantial number of small entities. This rule affects only materials licensees. The companies that apply for a license in accordance with the regulations affected by this rule do not fall within the scope of the definition of “small entities” set forth in the Regulatory Flexibility Act or the size standards established by the NRC (10 CFR 2.810).

## **XI. Backfit Analysis**

The NRC has determined that this final rule is not subject to any of the backfitting provisions in 10 CFR 50.109, 70.76, 72.62, 76.76, or the finality provision of 10 CFR Part 52. The amendments in this rule do not involve any provisions that would impose backfits on nuclear power plant licensees as defined in 10 CFR Parts 50 or 52, or on licensees for gaseous diffusion plants, independent spent fuel storage installations or special nuclear material as defined in 10 CFR Parts 70, 72 and 76, respectively; therefore, a backfit analysis is not required. With respect to Parts 30, 36, 39, and 40 licensees, the NRC has determined that there are no provisions for backfit in these parts; therefore, the NRC has not prepared a backfit analysis or any other documentation for this final rule.

## **XII. Congressional Review Act**

In accordance with the Congressional Review Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs of OMB.



## **List of Subjects**

### 10 CFR Part 30

Byproduct material, Criminal penalties, Government contracts, Intergovernmental relations, Isotopes, Nuclear materials, Radiation protection, Reporting and recordkeeping requirements.

### 10 CFR Part 36

Byproduct material, Criminal penalties, Nuclear materials, Reporting and recordkeeping requirements, Scientific equipment, Security measures.

### 10 CFR Part 39

Byproduct material, Criminal penalties, Nuclear materials, Oil and gas exploration - well logging, Reporting and recordkeeping requirements, Scientific equipment, Security measures, Source material, Special nuclear material.

### 10 CFR Part 40

Criminal penalties, Government contracts, Hazardous materials transportation, Nuclear materials, Reporting and recordkeeping requirements, Source material, Uranium.

### 10 CFR Part 51

Administrative practice and procedure, Environmental impact statement, Nuclear materials, Nuclear power plants and reactors, Reporting and recordkeeping requirements.

## 10 CFR Part 70

Criminal penalties, Hazardous materials transportation, Material control and accounting, Nuclear materials, Packaging and containers, Radiation protection, Reporting and recordkeeping requirements, Scientific equipment, Security measures, Special nuclear material.

## 10 CFR Part 150

Criminal penalties, Hazardous materials transportation, Intergovernmental relations, Nuclear materials, Reporting and recordkeeping requirements, Security measures, Source material, Special nuclear material.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 552 and 553; the NRC is adopting the following amendments to 10 CFR parts 30, 36, 39, 40, 51, 70, and 150.

### **PART 30 - RULES OF GENERAL APPLICABILITY TO DOMESTIC LICENSING OF BYPRODUCT MATERIAL**

1. The authority citation for part 30 continues to read as follows:

**AUTHORITY:** Secs. 81, 82, 161, 182, 183, 186, 68 Stat. 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2111, 2112, 2201, 2232, 2233, 2236, 2282); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note); Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 549 (2005).

Section 30.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102-486, sec. 2902, 106 Stat. 3123 (42 U.S.C. 5851). Section 30.34(b) also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 30.61 also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

2. In § 30.4, the definition for the term “commencement of construction” is revised, and the term “construction” is added in alphabetical order to read as follows:

**§ 30.4 Definitions.**

\* \* \* \* \*

*Commencement of construction* means taking any action defined as “construction” or any other activity at the site of a facility subject to the regulations in this part that has a reasonable nexus to:

- (1) Radiological health and safety; or
- (2) Common defense and security.

\* \* \* \* \*

*Construction* means the installation of foundations, or in-place assembly, erection, fabrication, or testing for any structure, system, or component of a facility or activity subject to the regulations in this part that are related to radiological safety or security. The term “construction” does not include:

- (1) Changes for temporary use of the land for public recreational purposes;

(2) Site exploration, including necessary borings to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability of the site, the environmental impacts of construction or operation, or the protection of environmental values;

(3) Preparation of the site for construction of the facility, including clearing of the site, grading, installation of drainage, erosion and other environmental mitigation measures, and construction of temporary roads and borrow areas;

(4) Erection of fences and other access control measures that are not related to the safe use of, or security of, radiological materials subject to this part;

(5) Excavation;

(6) Erection of support buildings (e.g., construction equipment storage sheds, warehouse and shop facilities, utilities, concrete mixing plants, docking and unloading facilities, and office buildings) for use in connection with the construction of the facility;

(7) Building of service facilities (e.g., paved roads, parking lots, railroad spurs, exterior utility and lighting systems, potable water systems, sanitary sewerage treatment facilities, and transmission lines);

(8) Procurement or fabrication of components or portions of the proposed facility occurring at other than the final, in-place location at the facility; or

(9) Taking any other action that has no reasonable nexus to:

(i) Radiological health and safety, or

(ii) Common defense and security.

\* \* \* \* \*

3. In § 30.33, paragraph (a)(5) is revised to read as follows:

**§ 30.33 General requirements for issuance of specific licenses.**

(a) \* \* \*

(5) In the case of an application for a license to receive and possess byproduct material for the conduct of any activity which the NRC determines will significantly affect the quality of the environment, the Director, Office of Federal and State Materials and Environmental Management Programs or his/her designee, before commencement of construction of the plant or facility in which the activity will be conducted, on the basis of information filed and evaluations made pursuant to subpart A of part 51 of this chapter, has concluded, after weighing the environmental, economic, technical, and other benefits against environmental costs and considering available alternatives, that the action called for is the issuance of the proposed license, with any appropriate conditions to protect environmental values. Commencement of construction prior to such conclusion shall be grounds for denial of a license to receive and possess byproduct material in such plant or facility. Commencement of construction as defined in section 30.4 may include non-construction activities if the activity has a reasonable nexus to radiological safety and security.

\* \* \* \* \*

## PART 36 – LICENSES AND RADIATION SAFETY REQUIREMENTS FOR IRRADIATORS

4. The authority citation for part 36 continues to read as follows:

**AUTHORITY:** Secs. 81, 82, 161, 182, 183, 186, 68 Stat. 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2111, 2112, 2201, 2232, 2233, 2236, 2282); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

5. In § 36.2, definitions for the terms “commencement of construction” and “construction” are added in alphabetical order to read as follows:

### § 36.2 Definitions.

\* \* \* \* \*

*Commencement of construction* means taking any action defined as “construction” or any other activity at the site of a facility subject to the regulations in this part that has a reasonable nexus to:

- (1) Radiological health and safety; or
- (2) Common defense and security.

*Construction* means the installation of foundations, or in-place assembly, erection, fabrication, or testing for any structure, system, or component of a facility or activity subject to the regulations in this part that are related to radiological safety or security. The term “construction” does not include:

- (1) Changes for temporary use of the land for public recreational purposes;
- (2) Site exploration, including necessary borings to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability of the site, the environmental impacts of construction or operation, or the protection of environmental values;
- (3) Preparation of the site for construction of the facility, including clearing of the site, grading, installation of drainage, erosion and other environmental mitigation measures, and construction of temporary roads and borrow areas;
- (4) Erection of fences and other access control measures that are not related to the safe use of, or security of, radiological materials subject to this part;
- (5) Excavation;
- (6) Erection of support buildings (e.g., construction equipment storage sheds, warehouse and shop facilities, utilities, concrete mixing plants, docking and unloading facilities, and office buildings) for use in connection with the construction of the facility;

(7) Building of service facilities (e.g., paved roads, parking lots, railroad spurs, exterior utility and lighting systems, potable water systems, sanitary sewerage treatment facilities, and transmission lines);

(8) Procurement or fabrication of components or portions of the proposed facility occurring at other than the final, in-place location at the facility; or

(9) Taking any other action that has no reasonable nexus to:

(i) Radiological health and safety, or

(ii) Common defense and security.

\* \* \* \* \*

6. In § 36.13, paragraph (a) is revised to read as follows:

**§ 36.13 Specific licenses for irradiators.**

\* \* \* \* \*

(a) The applicant shall satisfy the general requirements specified in §§ 30.33(a)(1)-(4) and 30.33(b) of this chapter and the requirements contained in this part.

\* \* \* \* \*

7. Section 36.15 is revised to read as follows:



### **§ 36.15 Commencement of construction.**

Commencement of construction of a new irradiator may not occur prior to the submission to the NRC of both an application for a license for the irradiator and the fee required by § 170.31 of this chapter. Any activities undertaken prior to the issuance of a license are entirely at the risk of the applicant and have no bearing on the issuance of a license with respect to the requirements of the Atomic Energy Act of 1954 (Act), as amended, and rules, regulations, and orders issued under the Act. Commencement of construction as defined in section 36.2 may include non-construction activities if the activity has a reasonable nexus to radiological safety and security.

### **PART 39 - LICENSES AND RADIATION SAFETY REQUIREMENTS FOR WELL LOGGING**

8. The authority citation for part 39 continues to read as follows:

**AUTHORITY:** Secs. 53, 57, 62, 63, 65, 69, 81, 82, 161, 182, 183, 186, 68 Stat. 929, 930, 932, 933, 934, 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2112, 2201, 2232, 2233, 2236, 2282); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note).

9. In § 39.13, paragraph (a) is revised to read as follows:

**§ 39.13 Specific licenses for well logging.**

\* \* \* \* \*

(a) The applicant shall satisfy the general requirements specified in § 30.33 of this chapter for byproduct material, in § 40.32 of this chapter for source material, and in § 70.23 of this chapter for special nuclear material, as appropriate, and any special requirements contained in this part.

\* \* \* \* \*

**PART 40 – DOMESTIC LICENSING OF SOURCE MATERIAL**

10. The authority citation for part 40 continues to read as follows:

**AUTHORITY:** Secs. 62, 63, 64, 65, 81, 161, 182, 183, 186, 68 Stat. 932, 933, 935, 948, 953, 954, 955, as amended, secs. 11e(2), 83, 84, Pub. L. 95-604, 92 Stat. 3033, as amended, 3039, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2014(e)(2), 2092, 2093, 2094, 2095, 2111, 2113, 2114, 2201, 2232, 2233, 2236, 2282); sec. 274, Pub. L. 86-373, 73 Stat. 688 (42 U.S.C. 2021); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); sec. 275, 92 Stat. 3021, as amended by Pub. L. 97-415, 96 Stat. 2067 (42 U.S.C. 2022); sec. 193, 104 Stat. 2835, as amended by Pub. L. 104-134, 110 Stat. 1321, 1321-349 (42 U.S.C. 2243); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note); Energy Policy Act of 2005, Pub. L. No. 109-59, 119 Stat. 594 (2005).

Section 40.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102-486, sec. 2902, 106 Stat. 3123 (42 U.S.C. 5851). Section 40.31(g) also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Section 40.46 also issued under sec. 184, 68

Stat. 954, as amended (42 U.S.C. 2234). Section 40.71 also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

11. In § 40.4, the definition for the term “commencement of construction” is revised, and the term “construction” is added in alphabetical order to read as follows:

**§ 40.4 Definitions.**

\* \* \* \* \*

*Commencement of construction* means taking any action defined as “construction” or any other activity at the site of a facility subject to the regulations in this part that has a reasonable nexus to:

- (1) Radiological health and safety; or
- (2) Common defense and security.

\* \* \* \* \*

*Construction* means the installation of wells associated with radiological operations (e.g., production, injection, or monitoring well networks associated with in-situ recovery or other facilities), the installation of foundations, or in-place assembly, erection, fabrication, or testing for any structure, system, or component of a facility or activity subject to the regulations in this part that are related to radiological safety or security. The term “construction” does not include:

- (1) Changes for temporary use of the land for public recreational purposes;

(2) Site exploration, including necessary borings to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability of the site, the environmental impacts of construction or operation, or the protection of environmental values;

(3) Preparation of the site for construction of the facility, including clearing of the site, grading, installation of drainage, erosion and other environmental mitigation measures, and construction of temporary roads and borrow areas;

(4) Erection of fences and other access control measures that are not related to the safe use of, or security of, radiological materials subject to this part;

(5) Excavation;

(6) Erection of support buildings (e.g., construction equipment storage sheds, warehouse and shop facilities, utilities, concrete mixing plants, docking and unloading facilities, and office buildings) for use in connection with the construction of the facility;

(7) Building of service facilities (e.g., paved roads, parking lots, railroad spurs, exterior utility and lighting systems, potable water systems, sanitary sewerage treatment facilities, and transmission lines);

(8) Procurement or fabrication of components or portions of the proposed facility occurring at other than the final, in-place location at the facility; or

(9) Taking any other action that has no reasonable nexus to:

- (i) Radiological health and safety, or
- (ii) Common defense and security.

\* \* \* \* \*

12. Section 40.32, paragraph (e) is revised to read as follows:

**§ 40.32 General requirements for issuance of specific licenses.**

\* \* \* \* \*

(e) In the case of an application for a license for a uranium enrichment facility, or for a license to possess and use source and byproduct material for uranium milling, production of uranium hexafluoride, or for the conduct of any other activity which the NRC determines will significantly affect the quality of the environment, the Director, Office of Federal and State Materials and Environmental Management Programs or his/her designee, before commencement of construction, on the basis of information filed and evaluations made pursuant to subpart A of part 51 of this chapter, has concluded, after weighing the environmental, economic, technical and other benefits against environmental costs and considering available alternatives, that the action called for is the issuance of the proposed license, with any appropriate conditions to protect environmental values. Commencement of construction prior to this conclusion is grounds for denial of a license to possess and use source and byproduct material in the plant or facility. Commencement of construction as defined in section 40.4 may include non-construction activities if the activity has a reasonable nexus to radiological safety and security.

\* \* \* \* \*

**PART 51 – ENVIRONMENTAL PROTECTION REGULATIONS FOR DOMESTIC LICENSING  
AND RELATED REGULATORY FUNCTIONS**

13. The authority citation for part 51 continues to read as follows:

**AUTHORITY:** Sec. 161, 68 Stat. 948, as amended, sec. 1701, 106 Stat. 2951, 2952, 2953, (42 U.S.C. 2201, 2297f); secs. 201, as amended, 202, 88 Stat. 1242, as amended, 1244 (42 U.S.C. 5841, 5842); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note). Subpart A also issued under National Environmental Policy Act of 1969, secs. 102, 104, 105, 83 Stat. 853-854, as amended (42 U.S.C. 4332, 4334, 4335); and Pub. L. 95-604, Title II, 92 Stat. 3033-3041; and sec. 193, Pub. L. 101-575, 104 Stat. 2835 (42 U.S.C. 2243). Sections 51.20, 51.30, 51.60, 51.80. and 51.97 also issued under secs. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241, and sec. 148, Pub. L. 100-203, 101 Stat. 1330-223 (42 U.S.C. 10155, 10161, 10168). Section 51.22 also issued under sec. 274, 73 Stat. 688, as amended by 92 Stat. 3036-3038 (42 U.S.C. 2021) and under Nuclear Waste Policy Act of 1982, sec. 121, 96 Stat. 2228 (42 U.S.C. 10141). Sections 51.43, 51.67, and 51.109 also issued under Nuclear Waste Policy Act of 1982, sec. 114(f), 96 Stat. 2216, as amended (42 U.S.C. 10134(f)).

14. In § 51.4, the definition for the term “construction” is revised to read as follows:

**§ 51.4 Definitions.**

\* \* \* \* \*

*Construction* means:

(1) For production and utilization facilities, the activities in paragraph (i) of this definition, and does not mean the activities in paragraph (ii) of this definition.

(i) Activities constituting construction are the driving of piles, subsurface preparation, placement of backfill, concrete, or permanent retaining walls within an excavation, installation of foundations, or in-place assembly, erection, fabrication, or testing, which are for:

(A) Safety-related structures, systems, or components (SSCs) of a facility, as defined in 10 CFR 50.2;

(B) SSCs relied upon to mitigate accidents or transients or used in plant emergency operating procedures;

(C) SSCs whose failure could prevent safety-related SSCs from fulfilling their safety-related function;

(D) SSCs whose failure could cause a reactor scram or actuation of a safety-related system;

(E) SSCs necessary to comply with 10 CFR part 73;

(F) SSCs necessary to comply with 10 CFR 50.48 and criterion 3 of 10 CFR part 50, appendix A; and

(G) Onsite emergency facilities (i.e., technical support and operations support centers), necessary to comply with 10 CFR 50.47 and 10 CFR part 50, appendix E.

(ii) Construction does not include:

(A) Changes for temporary use of the land for public recreational purposes;

(B) Site exploration, including necessary borings to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability of the site, the environmental impacts of construction or operation, or the protection of environmental values;

(C) Preparation of a site for construction of a facility, including clearing of the site, grading, installation of drainage, erosion and other environmental mitigation measures, and construction of temporary roads and borrow areas;

(D) Erection of fences and other access control measures that are not safety or security related, and do not pertain to radiological controls;

(E) Excavation;

(F) Erection of support buildings (e.g., construction equipment storage sheds, warehouse and shop facilities, utilities, concrete mixing plants, docking and unloading facilities, and office buildings) for use in connection with the construction of the facility;



(G) Building of service facilities (e.g., paved roads, parking lots, railroad spurs, exterior utility and lighting systems, potable water systems, sanitary sewerage treatment facilities, and transmission lines);

(H) Procurement or fabrication of components or portions of the proposed facility occurring at other than the final, in-place location at the facility;

(I) Manufacture of a nuclear power reactor under a manufacturing license under subpart F of part 52 of this chapter to be installed at the proposed site and to be part of the proposed facility; or

(J) With respect to production or utilization facilities, other than testing facilities and nuclear power plants, required to be licensed under section 104.a or section 104.c of the Act, the erection of buildings which will be used for activities other than operation of a facility and which may also be used to house a facility (e.g., the construction of a college laboratory building with space for installation of a training reactor).

(2) For materials licenses, taking any site-preparation activity at the site of a facility subject to the regulations in 10 CFR parts 30, 36, 40, and 70 that has a reasonable nexus to radiological health and safety or the common defense and security; provided, however, that construction does not mean:

(i) Those actions or activities listed in paragraphs (1)(ii)(A) – (H) of this definition; or

(ii) Taking any other action that has no reasonable nexus to radiological health and safety or the common defense and security.

\* \* \* \* \*

15. Section 51.45, paragraph (c) is revised to read as follows:

**§ 51.45 Environmental Report.**

\* \* \* \* \*

(c) Analysis. The environmental report must include an analysis that considers and balances the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects. An environmental report required for materials licenses under § 51.60 must also include a description of those site preparation activities excluded from the definition of construction under § 51.4 which have been or will be undertaken at the proposed site (i.e., those activities listed in paragraphs 2(i) and 2(ii) in the definition of construction contained in § 51.4); a description of the impacts of such excluded site preparation activities; and an analysis of the cumulative impacts of the proposed action when added to the impacts of such excluded site preparation activities on the human environment. An environmental report prepared at the early site permit stage under § 51.50(b), limited work authorization stage under § 51.49, construction permit stage under § 51.50(a), or combined license stage under § 51.50(c) must include a description of impacts of the preconstruction activities performed by the applicant at the proposed site (i.e., those activities listed in paragraph (1)(ii) in the definition of "construction" contained in § 51.4), necessary to support the construction and operation of the facility which is the subject of the early site permit, limited work authorization, construction permit, or combined license application. The environmental report must also contain an analysis of the cumulative impacts of the activities to be authorized by the limited work authorization, construction permit, or combined license in light of the preconstruction impacts described in the environmental

report. Except for an environmental report prepared at the early site permit stage, or an environmental report prepared at the license renewal stage under § 51.53(c), the analysis in the environmental report should also include consideration of the economic, technical, and other benefits and costs of the proposed action and its alternatives. Environmental reports prepared at the license renewal stage under § 51.53(c) need not discuss the economic or technical benefits and costs of either the proposed action or alternatives except if these benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. In addition, environmental reports prepared under § 51.53(c) need not discuss issues not related to the environmental effects of the proposed action and its alternatives. The analyses for environmental reports shall, to the fullest extent practicable, quantify the various factors considered. To the extent that there are important qualitative considerations or factors that cannot be quantified, those considerations or factors shall be discussed in qualitative terms. The environmental report should contain sufficient data to aid the Commission in its development of an independent analysis.

\* \* \* \* \*

## **PART 70 – DOMESTIC LICENSING OF SPECIAL NUCLEAR MATERIAL**

16. The authority citation for part 70 continues to read as follows:

**AUTHORITY:** Secs. 51, 53, 161, 182, 183, 68 Stat. 929, 930, 948, 953, 954, as amended, sec. 234, 83 Stat. 444, as amended, (42 U.S.C. 2071, 2073, 2201, 2232, 2233, 2282, 2297f); secs. 201, as amended, 202, 204, 206, 88 Stat. 1242, as amended, 1244, 1245, 1246 (42 U.S.C. 5841, 5842, 5845, 5846). Sec. 193, 104 Stat. 2835 as amended by Pub.L. 104-134, 110 Stat. 1321, 1321-349 (42 U.S.C. 2243); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note); Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 194 (2005).

Sections 70.1(c) and 70.20a(b) also issued under secs. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161).

Section 70.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102-486, sec. 2902, 106 Stat. 3123 (42 U.S.C. 5851). Section 70.21(g) also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Section 70.31 also issued under sec. 57d, Pub. L. 93-377, 88 Stat. 475 (42 U.S.C. 2077). Sections 70.36 and 70.44 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 70.81 also issued under secs. 186, 187, 68 Stat. 955 (42 U.S.C. 2236, 2237). Section 70.82 also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138).

17. In § 70.4 the definition for the term “commencement of construction” is revised and the term “construction” is added in alphabetical order to read as follows:

**§ 70.4 Definitions.**

\* \* \* \* \*

*Commencement of construction* means taking any action defined as “construction” or any other activity at the site of a facility subject to the regulations in this part that has a reasonable nexus to:

- (1) Radiological health and safety; or
- (2) Common defense and security.

\* \* \* \* \*

*Construction* means the installation of foundations, or in-place assembly, erection, fabrication, or testing for any structure, system, or component of a facility or activity subject to the regulations in this part that are related to radiological safety or security. The term “construction” does not include:

- (1) Changes for temporary use of the land for public recreational purposes;
- (2) Site exploration, including necessary borings to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability of the site, the environmental impacts of construction or operation, or the protection of environmental values;
- (3) Preparation of the site for construction of the facility, including clearing of the site, grading, installation of drainage, erosion and other environmental mitigation measures, and construction of temporary roads and borrow areas;
- (4) Erection of fences and other access control measures that are not related to the safe use of, or security of, radiological materials subject to this part;
- (5) Excavation;
- (6) Erection of support buildings (e.g., construction equipment storage sheds, warehouse and shop facilities, utilities, concrete mixing plants, docking and unloading facilities, and office buildings) for use in connection with the construction of the facility;

(7) Building of service facilities (e.g., paved roads, parking lots, railroad spurs, exterior utility and lighting systems, potable water systems, sanitary sewerage treatment facilities, and transmission lines);

(8) Procurement or fabrication of components or portions of the proposed facility occurring at other than the final, in-place location at the facility; or

(9) Taking any other action that has no reasonable nexus to:

(i) Radiological health and safety, or

(ii) Common defense and security.

\* \* \* \* \*

18. In § 70.23, paragraph (a)(7) is revised to read as follows:

**§ 70.23 Requirements for the approval of applications.**

(a) \* \* \*

(7) Where the proposed activity is processing and fuel fabrication, scrap recovery, conversion of uranium hexafluoride, uranium enrichment facility construction and operation, or any other activity which the NRC determines will significantly affect the quality of the environment, the Director of Nuclear Material Safety and Safeguards or his/her designee, before commencement of construction of the plant or facility in which the activity will be conducted, on

the basis of information filed and evaluations made pursuant to subpart A of part 51 of this chapter, has concluded, after weighing the environmental, economic, technical, and other benefits against environmental costs and considering available alternatives, that the action called for is the issuance of the proposed license, with any appropriate conditions to protect environmental values. Commencement of construction prior to this conclusion is grounds for denial to possess and use special nuclear material in the plant or facility. Commencement of construction as defined in section 70.4 may include non-construction activities if the activity has a reasonable nexus to radiological safety and security.

\* \* \* \* \*

**PART 150 - EXEMPTIONS AND CONTINUED REGULATORY AUTHORITY IN AGREEMENT  
STATES AND IN OFFSHORE WATERS UNDER SECTION 274**

19. The authority citation for part 150 continues to read as follows:

**AUTHORITY:** Sec. 161, 68 Stat. 948, as amended, sec. 274, 73 Stat. 688 (42 U.S.C. 2201, 2021); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note); Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 (2005).

Sections 150.3, 150.15, 150.15a, 150.31, 150.32 also issued under secs. 11e(2), 81, 68 Stat. 923, 935, as amended, secs. 83, 84, 92 Stat. 3033, 3039 (42 U.S.C. 2014e(2), 2111, 2113, 2114). Section 150.14 also issued under sec. 53, 68 Stat. 930, as amended (42 U.S.C. 2073).

Section 150.15 also issued under secs. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161). Section 150.17a also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Section 150.30 also issued under sec. 234, 83 Stat. 444 (42 U.S.C. 2282).

20. In § 150.31, paragraph (b)(3)(iv) is revised to read as follows:

**§ 150.31 Requirements for Agreement State regulation of byproduct material.**

\* \* \* \* \*

(b) \* \* \*

(3) \* \* \*

(iv) Prohibit commencement of construction with respect to such material prior to complying with the provisions of paragraph (b)(3)(C)(iii) of this section. As used in this paragraph:

(A) The term *commencement of construction* means taking any action defined as “construction” or any other activity at the site of a facility subject to the regulations in this part that has a reasonable nexus to radiological health and safety.

(B) The term *construction* means the installation of foundations, or in-place assembly, erection, fabrication, or testing for any structure, system, or component of a facility or activity subject to the regulations in this part that have a reasonable nexus to radiological safety or security. The term “construction” does not include:

(1) Changes for temporary use of the land for public recreational purposes;

(2) Site exploration, including necessary borings to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability



of the site, the environmental impacts of construction or operation, or the protection of environmental values;

(3) Preparation of the site for construction of the facility, including clearing of the site, grading, installation of drainage, erosion and other environmental mitigation measures, and construction of temporary roads and borrow areas;

(4) Erection of fences and other access control measures that are not related to the safe use of or security of radiological materials subject to this part;

(5) Excavation;

(6) Erection of support buildings (e.g., construction equipment storage sheds, warehouse and shop facilities, utilities, concrete mixing plants, docking and unloading facilities, and office buildings) for use in connection with the construction of the facility;

(7) Building of service facilities (e.g., paved roads, parking lots, railroad spurs, exterior utility and lighting systems, potable water systems, sanitary sewerage treatment facilities, and transmission lines);

(8) Procurement or fabrication of components or portions of the proposed facility occurring at other than the final, in-place location at the facility; or

(9) Taking any other action which has no reasonable nexus to radiological health and safety.

\* \* \* \* \*

Dated at Rockville, Maryland, this 9<sup>th</sup> day of September, 2011.

For the Nuclear Regulatory Commission.

*/RA/*

---

Annette Vietti-Cook,  
Secretary of the Commission.