

# **DEPARTMENT OF ENVIRONMENTAL CONSERVATION**



**18 AAC XX**

**Nuclear Facility Siting**

**As amended through xx, 2023**

**Mike Dunleavy  
Governor**

**Jason W. Brune  
Commissioner**

18 AAC is amended by adding a new chapter to read:

**Chapter XX. Nuclear Facility Siting.**

**Article**

1. General Standards, Requirements, and Limitations (18 AAC XX.010)
2. Pre-Application Requirements (18 AAC XX.100)
3. Siting Permit Procedures (18 AAC XX 200 - 8 AAC XX.260)
4. Location Standards (18 AAC XX.300)
5. General Provisions (18 AAC XX.990)

**Article 1. General Standards, Requirements, and Limitations**

**Section**

10. Purpose and applicability

**18 AAC XX.010. Purpose and applicability.** (a) This chapter provides environmental review and promotes local involvement in siting nuclear facilities.

(b) This chapter applies to the construction or installation of a

- (1) nuclear fuel production facility;
- (2) nuclear utilization facility, including a microreactor;
- (3) utilization facility;
- (4) reprocessing facility; or
- (5) nuclear waste disposal facility.

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(c) Nothing in this chapter exempts the holder of a siting permit from other statutory or regulatory requirements to

(1) obtain other state permits; and

(2) comply with other state permit requirements. (Eff. \_\_\_\_/\_\_\_\_/\_\_\_\_, Register \_\_\_\_)

**Authority:** AS 18.45.020 AS 46.03.010 AS 46.03.020  
AS 18.45.025

## **Article 2. Pre-Application Requirements.**

### **Section**

100. Pre-application requirements

**18 AAC XX.100. Pre-application requirements.** (a) Not fewer than 120 days before submitting an application for siting approval under this chapter to the department, an applicant who proposes to construct or install a facility described in 18 AAC XX.010(b) shall

(1) prepare a preliminary application that contains

(A) the information required as set out under 18 AAC XX.200(b); and

(B) a fact sheet that describes the proposed facility and summarizes the content of the preliminary application;

(2) publish notice of the proposed facility in two editions of a newspaper of general circulation, and announce the notice at least twice a day for one week on a radio station

in the area where the facility is proposed to be located; and

(3) by certified mail, return receipt requested, send written notice of the proposed facility to the department and to the municipality with jurisdiction over the proposed facility site, or if the proposed facility site is located in the unorganized borough, to

(A) the legislature; and

(B) the mayor of the municipality located nearest to the proposed facility.

(b) The public notice required in (a) of this section must

(1) describe the proposed facility;

(2) identify

(A) the owner and operator of the facility;

(B) the proposed site for the facility; and

(C) the landowner of the proposed site;

(3) offer to any interested person, without charge, a copy of the fact sheet described in (a) of this section; and

(4) specify a location at which two copies of the preliminary application described in (a) of this section are available for public review.

(c) The written notice required by (a) of this section must

(1) include an offer to meet with the municipality with jurisdiction over the proposed facility site in one or more informal public meetings, to describe the proposed facility;

(2) discuss how the proposed facility will meet applicable state and federal requirements for the protection of public health and the environment; and

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(3) discuss public health and environmental issues, including how the applicant will monitor any facility emissions to the air, water, or land. (Eff. \_\_\_\_/\_\_\_\_/\_\_\_\_, Register \_\_\_\_)

**Authority:** AS 18.45.020 AS 46.03.010 AS 46.03.020  
AS 18.45.025

### **Article 3. Siting Permit Procedures.**

#### **Section**

- 200. Application requirements
- 210. Preliminary permit decision
- 220. Public notice procedures
- 230. Permit issuance
- 240. Procedures to modify permit
- 250. Permit termination
- 260. Appeals

**18 AAC XX.200. Application requirements.** (a) Upon completion of the pre-application requirements in 18 AAC XX.100, but not later than three years after the public notice, an applicant must submit a completed application to the department that must be signed as follows:

(1) for a corporation, a responsible corporate officer shall sign the application; in this paragraph, "responsible corporate officer" means

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(A) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

(B) the manager of one or more manufacturing, production, or operating facilities, if

(i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;

(ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and

(iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

(2) for a limited liability company, a member within the meaning given in AS 10.50.990 shall sign the application;

(3) for a partnership, limited partnership, or sole proprietorship, the general partner or the proprietor, as relevant, shall sign the application;

(4) for a municipality, state, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this paragraph, "principal

executive officer" means

- (A) the chief executive officer of the agency; or
  - (B) a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.
- (b) An application for siting approval must include
  - (1) a cover letter that
    - (A) describes the proposed facility;
    - (B) identifies the owner and operator of the facility;
    - (C) includes a general narrative description of the site topography, geology, climate, surface hydrology, and groundwater hydrology; and
    - (D) contains a statement that the applicant is aware of all applicable local ordinances and local planning or zoning requirements;
  - (2) a copy of an early site permit granted to the site under 10 C.F.R. 52.24 by the United States Nuclear Regulatory Commission;
  - (3) a completed permit application on a form supplied by the department, or on an equivalent form approved by the department;
  - (4) an aerial photograph, or set of photographs in each of the following scales:
    - (A) one centimeter to 60 meters; the photograph, or set of photographs, must
      - (i) be taken not more than one year before the date the permit application is submitted, during a period of either minimum spring snow cover or

minimal fall foliage cover; and

(ii) include an area extending out at least 3,500 meters in each direction from the proposed location of the active portions of the facility;

(B) one centimeter to 600 meters; the photograph, or set of photographs, must

(i) be taken not more than one year before the date the permit application is submitted, during a period of either minimum spring snow cover or minimal fall foliage cover; and

(ii) include an area extending out at least 5,000 meters in each direction from the location of the proposed active portions of the proposed facility;

(5) a map in each of the following scales:

(A) one centimeter to 60 meters; the map must clearly show

(i) the location of the proposed facility;

(ii) the property boundaries within which the proposed facility will operate;

(iii) the existing and proposed vehicular access to the proposed site;

(iv) the applicable separation distance requirements for the facility type as set out in 18 AAC XX.300(b);

(v) the location of known or inferred boundaries of permafrost or

discontinuous permafrost;

(vi) the location and boundaries of all rivers, lakes, streams, wetlands, floodplains, coastal areas, areas susceptible to landslides, and tidal and freshwater drainages within 500 feet of the proposed facility; and

(vii) the location of any drinking water wells located within 2,000 feet of the proposed facility;

(B) one centimeter to 600 meters; the map must clearly show

(i) the location of any area described in 18 AAC XX.300(e);

(ii) the nature, function, and land use zoning classification of each property contiguous to the proposed facility; and

(iii) areas subject to potential geophysical hazards;

(6) a discussion of how the applicant plans to monitor for facility emissions to the air, water, and land;

(7) a copy of the deed to the property for the facility, or of some other instrument that is routinely examined during a title search and that identifies the landowner; that copy must be accompanied by

(A) a copy of any lease agreement relevant to the proposed activity; or

(B) a written statement signed by the landowner, showing that the landowner consents to the proposed facility;

(8) a written statement confirming that the requirements of 18 AAC XX.100 are met, and

(A) a copy of all supporting documents, including a copy of each public notice required under 18 AAC XX.100(a) and the publisher's affidavit of publication for each notice published in a newspaper;

(B) a list of the names and addresses of all persons who were sent facility siting notification letters under 18 AAC XX.100(a); and

(C) a copy of the applicant's written responses to concerns expressed during the pre-application period, including commitments made by the applicant to address those concerns.

(c) If an application is deficient, the department will notify the applicant and will describe the application's deficiencies. When the applicant corrects the application's deficiencies, the department will consider the application complete and will continue processing the application.

(d) If an applicant fails to submit the application required under this chapter not more than three years after the date of the public notice required in the pre-application process, the applicant must repeat the requirements of 18 AAC XX.100. (Eff. \_\_/\_\_/\_\_, Register \_\_\_\_)

**Authority:** AS 18.45.020 AS 18.45.900 AS 46.03.020

AS 18.45.025 AS 46.03.010

**18 AAC XX.210. Preliminary permit decision.** (a) After receiving a complete application, the department will make a preliminary decision to issue or deny a permit after reviewing the information contained in the application and the public record, based on the

- (1) satisfactory completion of pre-application requirements in 18 AAC XX.100;
  - (2) location requirements and restrictions in 18 AAC XX.300;
  - (3) air quality control regulations in 18 AAC 50;
  - (4) water quality standards in 18 AAC 70;
  - (5) wastewater disposal regulations in 18 AAC 72;
  - (6) Alaska Pollutant Discharge Elimination System regulations in 18 AAC 83;
  - (7) long-term stability of the facility in areas subject to natural events such as aufeis, floods, earthquakes, avalanches, landslides, mudflows, land slippage, or thaw-unstable permafrosts; and
  - (8) applicant's compliance history while conducting other operations regulated by the department under this title, including any notice of violation, mandatory compliance order, consent order, and any other administrative, civil, or criminal enforcement action; an applicant's compliance history constitutes sufficient basis for denial of approval if, in the department's determination, that history shows a pattern or practice of noncompliance that demonstrates the applicant's unwillingness or inability to achieve or maintain compliance with provisions of this chapter.
- (b) If the application receives preliminary approval from the department, the department will
- (1) prepare a draft permit, and make the preliminary decision available for public comment, following procedures in 18 AAC XX.220;
  - (2) send a copy of the draft permit and preliminary decision to each of the entities

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in the pre-application process under 18 AAC XX.100(a)(3); and

(3) request approval or denial of the draft permit from

(A) the municipality with jurisdiction over the proposed facility site; or

(B) the legislature, if the proposed facility site is located in the

unorganized borough.

(d) If the permit application is denied by the department, the department will

(1) prepare and issue a response to the applicant which documents the reason for denial of the permit; and

(2) include a statement regarding the availability of informal review under 18 AAC 15.185 or an adjudicatory hearing under 18 AAC 15.195 - 18 AAC 15.340. (Eff.

\_\_\_/\_\_\_/\_\_\_, Register \_\_\_)

**Authority:** AS 18.45.025 AS 46.03.010 AS 46.03.020

**18 AAC XX.220. Public notice procedures.** (a) The department will give notice to the public that a draft permit has been prepared under 18 AAC XX.210.

(b) In a public notice, the department will allow at least 30 days for public comment on the draft permit.

(c) The department will give public notice of a draft permit

(1) by sending a copy of the notice to municipality with jurisdiction over the proposed facility site;

(2) by publishing a notice in a daily or weekly newspaper within the area affected

by the facility or activity; and

(3) in a manner constituting legal notice to the public under state law.

(d) A public notice issued under this section must contain at least the following information:

(1) the name and address of the office processing the permit action for which notice is being given and where comments may be submitted;

(2) the name and address of the permittee or permit applicant;

(3) a brief description of the proposed facility;

(4) a brief description of the location of the proposed facility;

(5) the landowner of the proposed location;

(6) the name, address, and telephone number of a person from whom interested persons may obtain further information, including copies of the draft permit and the application;

(7) a brief description of the comment procedures required by (e) of this section;

and

(8) any additional information that the department considers necessary or proper.

(e) During the public comment period, any interested person may submit written comments on the draft permit. The department will consider all comments in making the final decision and will issue a responsiveness summary that includes responses to all comments received. The department will make the summary available to the public. (Eff. \_\_\_\_/\_\_\_\_/\_\_\_\_, Register \_\_\_\_)

**Authority:** AS 18.45.025 AS 46.03.010 AS 46.03.020

**18 AAC XX.230. Permit issuance.** (a) The department will not issue a facility siting permit until the department has received approval from

- (1) the municipality with jurisdiction over the proposed facility site; or
- (2) the legislature if the proposed facility site is not within the jurisdiction of a municipality.

(b) The department will notify the applicant, entities listed in 18 AAC XX.100(a), and each person who submitted timely comments on the draft permit of its final decision. In the final decision, the department will include

- (1) written approval or disapproval of the site proposed in the application, and a summary of the basis for the decision; and
- (2) a statement that the permittee and interested parties listed in 18 AAC XX.260 may request informal review under 18 AAC 15.185 or an adjudicatory hearing under 18 AAC 15.200.

(c) The department may attach terms and conditions to its approval

- (1) to ensure compliance with applicable state laws and regulations; and
- (2) that incorporate the standards of this chapter relating to siting of the facility.

(d) The department may include in its approval any commitments that were made by the applicant during the pre-application period described in 18 AAC XX.100.

(e) The permittee shall provide timely, adequate notice to the department of any change in the permittee's mailing address or physical residence. (Eff. \_\_/\_\_/\_\_, Register \_\_\_\_)

**Authority:** AS 18.45.025 AS 46.03.010 AS 46.03.020

**18 AAC XX.240. Procedure to modify permit.** (a) If the permittee becomes aware of a significant environmental change or impact attributable to the facility or a facility expansion, the permit holder shall submit, as soon as possible, a written report to the department describing the impact on the facility and any affected site certification conditions.

(b) If the department tentatively decides to modify the permit based on information from the permittee in (a) of this section, the department will prepare a draft permit incorporating the proposed changes.

(c) The draft modified permit must undergo public notice in accordance with 18 AAC XX.220. (Eff. \_\_\_\_/\_\_\_\_/\_\_\_\_, Register \_\_\_\_)

**Authority:** AS 18.45.025 AS 46.03.010 AS 46.03.020

**18 AAC XX.250. Permit termination.** (a) The department may terminate a siting permit

(1) for any false statement in the application or additional materials submitted when a true answer would have warranted a denial of the permit; or

(2) for failure to comply with the terms or conditions of the siting permit.

(b) Not later than 30 days before terminating a permit, the department will issue a written notice of termination. In the notice, the department will

(1) include a clear, detailed statement describing reasons for the department's decision, including acts or omissions of the permittee that led to the department's decision to terminate the permit;

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(2) clearly specify the statute, regulation, or permit condition that the permittee is alleged to have violated, including the nature of the violation; and

(3) state that the permittee and interested parties listed in 18 AAC XX.260 may request informal review under 18 AAC 15.185 or an adjudicatory hearing under 18 AAC 15.200 concerning the department's permit termination decision. (Eff. \_\_/\_\_/\_\_, Register \_\_\_\_)

**Authority:** AS 18.45.025 AS 46.03.010 AS 46.03.020

**18 AAC XX.260. Appeals.** A person authorized under 18 AAC 15.200 may request an informal review under 18 AAC 15.185 or an adjudicatory hearing under 18 AAC 15.195 - 18 AAC 15.340 to review a final department decision to issue, deny, modify, or terminate a permit under 18 AAC XX.230, 18 AAC XX.240, and 18 AAC XX.250. (Eff. \_\_/\_\_/\_\_, Register \_\_\_\_)

**Authority:** AS 18.45.025 AS 46.03.010 AS 46.03.020

#### **Article 4. Location Requirements and Restrictions.**

##### **Section**

300. Location requirements for a microreactor facility

**18 AAC XX.300. Location requirements for a microreactor facility.** (a) The location of a microreactor facility must meet the location requirements in this section.

(b) The location of a microreactor must comply with the following separation distances:

(1) the minimum separation distance between a microreactor and any property boundary of a microreactor facility is 50 feet, measured horizontally;

(2) the minimum separation distance between a microreactor and any public right-of-way is 100 feet, measured horizontally; and

(3) the minimum separation distance between a microreactor and the nearest residence is 2,700 feet, measured horizontally.

(c) The location of a microreactor facility must comply with the following location requirements:

(1) a facility may not be located within any coastal area that is vulnerable to storm surge;

(2) a facility may not be located within 500 feet of known, suspected, or likely-to-occur erosion, on a time scale of twice the lifecycle of the proposed facility;

(3) a facility may not be located in a drinking water protection area as delineated under 18 AAC 80.015 for an active public water system source, unless the applicant demonstrates, to the satisfaction of the department, that there is no potential adverse impact to drinking water;

(4) a facility may not be located within 300 feet of an area subject to high risks from volcanic activity, ice floes, or avalanches; and

(5) a facility may not be located in state waters except to the extent permitted by 33 U.S.C. 1344 (Clean Water Act, section 404), and applicable state water laws.

(d) The portion of the facility that contains radioactive material may not be located

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within a 100-year floodplain. If other portions of the facility used to support the operations of the microreactor are located within a 100-year floodplain, the owner or operator shall demonstrate that the facility will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout or damage to the facility that would pose a hazard to public health or the environment.

(e) A microreactor facility may not be located closer than 300 feet to

(1) a critical habitat area, state game refuge, state game sanctuary, state range area, or state wildlife reserve designated under state law;

(2) a critical habitat area designated by the federal government under 16 U.S.C. 1531 - 1543 (Endangered Species Act of 1973); or

(3) a national wildlife refuge, national monument, or national park. (Eff. \_\_\_\_/\_\_\_\_/\_\_\_\_, Register \_\_\_\_)

**Authority:** AS 18.45.025 AS 46.03.010 AS 46.03.020

## **Article 5. General Provisions.**

### **Section**

900. Definitions

**18 AAC XX.990. Definitions.** In this chapter,

(1) "approved" means approved by the department;

(2) "aufeis" means ice that is formed as water flows over a frozen surface;

- (3) "construct" means to build, erect, or install a
  - (A) nuclear fuel production facility;
  - (B) nuclear utilization facility, including a microreactor;
  - (C) reprocessing facility; or
  - (D) nuclear waste disposal facility;
- (4) "department" means the Department of Environmental Conservation;
- (5) "facility" means a structure, other appurtenance, or improvement that is
  - (A) used for nuclear fuel production, use, or disposal; and
  - (B) located on land contiguous to the microreactor;
- (6) "floodplain" means a lowland or relatively flat area adjoining inland or coastal waters or area of an offshore island that is susceptible to inundation by the 100-year flood; in this paragraph, "100-year flood" means a flood that has a one percent or greater chance of recurring in any given year or a flood of a magnitude equaled or exceeded once in 100 years on the average over a significantly long period;
- (7) "microreactor" has the meaning given in AS 18.45.900;
- (8) "municipality with jurisdiction" means the municipal entity with land use regulation authority over the proposed facility site;
- (9) "nearest residence" means an occupied dwelling and adjacent property commonly used by inhabitants of the dwelling;
- (10) "nuclear fuel production facility" has the meaning given in AS 18.45.900;
- (11) "nuclear utilization facility" has the meaning given in AS 18.45.900;

(12) "operator" means the person or persons responsible for the overall operation of a facility;

(13) "owner" means the person who owns a facility and is the holder of the permit issued under this chapter;

(14) "production facility" has the meaning given in AS 18.45.900;

(15) "site" means the land, structures, and equipment at a location associated with a facility subject to this chapter;

(16) "storm surge" means a rising of the sea as a result of atmospheric pressure changes and wind associated with a storm;

(17) "utilization facility" has the meaning given in AS 18.45.900;

(18) "state waters" has the meaning given "waters" in AS 46.03.900. (Eff.

\_\_\_/\_\_\_/\_\_\_, Register \_\_\_)

<b>Authority:</b>	AS 18.45.020	AS 18.45.900	AS 46.03.020
	AS 18.45.025	AS 46.03.010	