

Nancy Dahlstrom
Lieutenant Governor
State Capitol
Juneau, Alaska 99811
907.465.3520
WWW.LTGOV.ALASKA.GOV




530 West 7th Ave, Suite 1700
Anchorage, Alaska 99501
907.269.7460
LT.GOVERNOR@ALASKA.GOV

**OFFICE OF THE LIEUTENANT GOVERNOR
ALASKA**

M E M O R A N D U M

TO: Gary Mendivil, Department of Environmental Conservation

FROM: April Simpson, Office of the Lieutenant Governor 465.4081 

DATE: July 24, 2023

RE: Filed Permanent Regulations: Department of Environmental Conservation

Department of Environmental Conservation regulations re: MicroNuclear Reactor Siting
(18 AAC 87)

Attorney General File:	2022200538
Regulation Filed:	7/24/2023
Effective Date:	8/23/2023
Print:	247, October 2023

cc with enclosures: Colleen Bailey, Department of Law
Judy Herndon, LexisNexis



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

Department of Law

CIVIL DIVISION

P.O. Box 110300
Juneau, Alaska 99811
Main: 907.465.3600
Fax: 907.465.2520

July 14, 2023

The Honorable Nancy Dahlstrom
Lieutenant Governor
State of Alaska
P.O. Box 110015
Juneau, AK 99811-0015

Re: *18 AAC 87: DEC - MicroNuclear Reactor Siting*
Our file: 2022200538

Dear Lieutenant Governor Dahlstrom:

The Department of Law has reviewed the attached regulations of the Department of Environmental Conservation against the statutory standards of the Administrative Procedure Act. Based upon our review, we find no legal problems. This letter constitutes the written statement of approval under AS 44.62.060(b) and (c) that authorizes your office to file the attached regulations. The regulations were adopted by the Department of Environmental Conservation after the close of the public comment period.

In accordance with ch. 4, SLA 2022 (CSSB 177 (RES)), the regulations adopt standards for the siting of micronuclear reactors.

The March 9, 2023 public notice and the June 20, 2023 adoption order both state that this action is not expected to require an increased appropriation. Therefore, a fiscal note under AS 44.62.195 is not required.

We have made some technical corrections to conform the regulations in accordance with AS 44.62.060. The corrections are incorporated into the attached copy of the regulations. After edits, the regulations are now 18 pages, not the 20 pages referenced in the adoption order.

Sincerely,

TREG TAYLOR
ATTORNEY GENERAL

By: **Rebecca C. Polizzotto**
Rebecca C. Polizzotto
Chief Assistant Attorney General
Legislation, Regulations, and
Legislative Research Section

Digitally signed by
Rebecca C. Polizzotto
Date: 2023.07.14
13:35:52 -08'00'

RCP/scw

CC w/enclosure: Gary Mendivil, Regulations Contact
Department of Environmental Conservation

Jennifer J. Seely, Assistant Attorney General
Department of Law

Steven C. Weaver, Assistant Attorney General
Department of Law

ORDER ADOPTING CHANGES TO REGULATIONS
OF DEPARTMENT OF ENVIRONMENTAL CONSERVATION

The attached ^{eighteen} ~~twenty~~ pages of regulations, dealing with the micronuclear reactor regulations at 18 AAC 87, are adopted and certified to be a correct copy of the regulation changes that the Department of Environmental Conservation adopts under the authority of AS 46.03.320 and after compliance with the Administrative Procedure Act (AS 44.62), specifically including notice under AS 44.62.190 and 44.62.200 and opportunity for public comment under AS 44.62.210.

This action is not expected to require an increased appropriation.

In considering public comments, the Department of Environmental Conservation paid special attention to the cost to private persons of the regulatory action being taken the Department of Environmental Conservation.

The regulation changes adopted under this order take effect on the 30th day after they have been filed by the lieutenant governor as provided in AS 44.62.180.

Date: June 20, 2023

Jason W. Brune
Digitally signed by
Jason W. Brune
Date: 2023.06.20
08:16:45 -08'00'

Jason W. Brune, Commissioner

FILING CERTIFICATION

^{April Simpson for}
I, Nancy Dahlstrom, Lieutenant Governor for the State of Alaska, certify that on July 24, 2023, at 2:37 p.m., I filed the attached regulations according to the provisions of AS 44.62.040 - 44.62.120.

^{for} April Simpson

Nancy Dahlstrom, Lieutenant Governor

Effective: August 23, 2023.

Register: 247, October 2023.

FOR DELEGATION OF THE LIEUTENANT GOVERNOR'S AUTHORITY

I, NANCY DAHLSTROM, LIEUTENANT GOVERNOR OF THE STATE OF ALASKA, designate the following state employees to perform the Administrative Procedures Act filing functions of the Office of the Lieutenant Governor:

April Simpson, Regulations and Initiatives Specialist

IN TESTIMONY WHEREOF, I have signed and affixed the Seal of the State of Alaska, in Juneau, on May 15th, 2023.



A handwritten signature in blue ink, reading "Nancy Dahlstrom", is written over a horizontal dotted line.

**NANCY DAHLSTROM
LIEUTENANT GOVERNOR**

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

Chapter 87. Nuclear Facility Siting.

Article

1. General Standards, Requirements, and Limitations (18 AAC 87.010)
2. Pre-Application Requirements (18 AAC 87.100)
3. Siting Permit Procedures (18 AAC 87.200 - 18 AAC 87.260)
4. Location Standards (18 AAC 87.300)
5. General Provisions (18 AAC 87.990)

Article 1. General Standards, Requirements, and Limitations.

Section

18 AAC 87.010. Purpose and applicability.

18 AAC 87.010. Purpose and applicability. (a) This chapter provides environmental review and promotes local involvement in siting nuclear facilities. It does not regulate any aspect of radioactive or nuclear safety, which is preempted by federal law and exclusively regulated by the federal government.

(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.

(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. 8 / 23 / 2023 ,

Register 247)

Authority: AS 18.45.020

AS 46.03.010

AS 46.03.020

AS 18.45.025

Article 2. Pre-Application Requirements.

Section

18 AAC 87.100. Pre-application requirements.

18 AAC 87.100. 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 87.010(b) shall

(1) prepare a preliminary application that contains

(A) the information required as set out under 18 AAC 87.200(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; and

(B) the proposed site for the facility;

(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) include information on how to submit comments to the applicant;

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

(4) discuss public health and environmental issues, including how the applicant will monitor any facility emissions to the air, water, or land. (Eff. 8 / 23 / 2023, Register

247)

Authority: AS 18.45.020

AS 46.03.010

AS 46.03.020

AS 18.45.025

Article 3. Siting Permit Procedures.

Section

18 AAC 87.200. Application requirements.

18 AAC 87.210. Preliminary permit decision.

18 AAC 87.220. Public notice procedures.

18 AAC 87.225. Municipal approval.

18 AAC 87.230. Permit issuance.

18 AAC 87.240. Procedures to modify permit.

18 AAC 87.250. Permit termination.

18 AAC 87.260. Appeals.

18 AAC 87.200. Application requirements. (a) Upon completion of the pre-application requirements in 18 AAC 87.100, 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

(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 a letter accepting a complete application for licensing from 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 87.300(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 or avalanches, 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 87.300(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 87.100 are met, and

(A) a copy of all supporting documents, including a copy of each public notice required under 18 AAC 87.100(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 87.100(a); and

(C) a copy of comments submitted and 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 87.100. (Eff. 8 / 23 / 2023, Register 247)

Authority: AS 18.45.020 AS 18.45.900 AS 46.03.020
AS 18.45.025 AS 46.03.010

18 AAC 87.210. 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 87.100;
- (2) location requirements and restrictions in 18 AAC 87.300;
- (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;

and

(7) 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 87.220;

(2) send a copy of the draft permit and preliminary decision to each of the entities in the pre-application process under 18 AAC 87.100(a)(3); and

(3) request approval of the department's proposal to issue a 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.

9 / 23 / 2023, Register 247)

Authority: AS 18.45.025 AS 46.03.010 AS 46.03.020

18 AAC 87.220. Public notice procedures. (a) The department will give notice to the public that a draft permit has been prepared under 18 AAC 87.210.

(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 the municipality with jurisdiction over the

proposed facility site; and

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

(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 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;

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

and

(7) 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.

9 / 23 / 2023, Register 247)

Authority: AS 18.45.025 AS 46.03.010 AS 46.03.020

18 AAC 87.225. Municipal approval. When the department requests the municipality's approval of the department's proposal to issue a permit under 18 AAC 87.210(b)(3)(A), but the municipality with jurisdiction does not issue an approval, the municipality shall provide the department with a detailed basis for the decision. The municipality may not base its decision upon radiological or nuclear safety. (Eff. 8 / 23 / 2023, Register 247)

Authority: AS 18.45.025 AS 46.03.010 AS 46.03.020

18 AAC 87.230. 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 87.100(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 87.260 may request informal review under 18 AAC 15.185 or an adjudicatory hearing under 18 AAC 15.195 - 18 AAC 15.340.

(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 87.100.

(e) The permittee shall provide timely, adequate notice to the department of any change in the permittee's mailing address or physical residence. (Eff. 8 / 23 / 2023, Register 247)

Authority: AS 18.45.025 AS 46.03.010 AS 46.03.020

18 AAC 87.240. 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 87.220. (Eff. 8 / 23 / 2023, Register 247)

Authority: AS 18.45.025 AS 46.03.010 AS 46.03.020

18 AAC 87.250. 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;

(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 87.260 may request informal review under 18 AAC 15.185 or an adjudicatory hearing under 18 AAC 15.195 - 18 AAC 15.340 concerning the department's permit termination decision. (Eff.

8 / 23 / 2023, Register 247)

Authority: AS 18.45.025 AS 46.03.010 AS 46.03.020

18 AAC 87.260. 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 87.230, 18 AAC 87.240, and 18 AAC 87.250. (Eff. 8 / 23 / 2023, Register 247)

Authority: AS 18.45.025 AS 46.03.010 AS 46.03.020

Article 4. Location Requirements and Restrictions.

Section

18 AAC 87.300. Location requirements for a microreactor facility.

18 AAC 87.300. 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 facility 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; and

(4) 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) If any part of the microreactor facility is located within a 100-year floodplain, the owner or operator shall demonstrate that a flood will not result in washout or damage to the facility that would pose a nonradioactive 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 - 1544 (Endangered Species Act of 1973); or

(3) a national wildlife refuge, national monument, or national park. (Eff.

8 / 23 / 2023, Register 247)

Authority: AS 18.45.025 AS 46.03.010 AS 46.03.020

Article 5. General Provisions.

Section

18 AAC 87.900. Definitions.

18 AAC 87.990. Definitions. In this chapter,

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

(2) "construction"

(A) means to build, erect, or install a

(i) nuclear fuel production facility;

(ii) nuclear utilization facility, including a microreactor;

(iii) reprocessing facility; or

(iv) nuclear waste disposal facility;

(B) does not include

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

(ii) 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; or

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

(3) "department" means the Department of Environmental Conservation;

(4) "facility" means all contiguous land and structures, other appurtenances, and improvements used for nuclear fuel production, use, or disposal;

(5) "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;

(6) "microreactor" has the meaning given in AS 18.45.900;

(7) "municipality with jurisdiction" means the municipal entity with land use

regulation authority under AS 29.40 over the proposed facility site;

(8) "nearest residence" means an occupied dwelling and adjacent property commonly used by inhabitants of the dwelling;

(9) "nuclear fuel production facility" has the meaning given in AS 18.45.900;

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

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

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

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

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

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

(16) "state waters" has the meaning given "waters" in AS 46.03.900;

(17) "twice the lifecycle" means two times the amount of time a microreactor can be in service; from the installation until after the unit is decommissioned;

(18) "utilization facility" has the meaning given in AS 18.45.900. (Eff.

8 / 23 / 2023, Register 247)

Authority:	AS 18.45.020	AS 18.45.900	AS 46.03.020
	AS 18.45.025	AS 46.03.010	