



LAWS OF ALASKA

1980

Source

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Chapter No.

175

AN ACT

Relating to state resources and the development of geothermal resources.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

THE ACT FOLLOWS ON PAGE 1, LINE 9

UNDERLINED MATERIAL INDICATES TEXT THAT IS BEING ADDED TO THE LAW AND BRACKETED MATERIAL IN CAPITAL LETTERS INDICATES DELETIONS FROM THE LAW; COMPLETELY NEW TEXT OR MATERIAL REPEALED AND RE-ENACTED IS IDENTIFIED IN THE INTRODUCTORY LINE OF EACH BILL SECTION.

Approved by the Governor: July 3, 1980
Actual Effective Date: October 1, 1980

AN ACT

Relating to state resources and the development of
geothermal resources.

* Section 1. DECLARATION OF POLICY. It is declared to be in the public interest to foster and promote the discovery, development, production, primary and cascaded use, and disposal of geothermal resources in the state in a manner that will prevent waste, provide for maximum economic recovery, protect correlative rights, and safeguard the natural environment and the public welfare.

* Sec. 2. AS 38.05.125 is amended to read:

Sec. 38.05.125. RESERVATION. Each contract for the sale, lease or grant of state land, and each deed to state land, properties or interest in state land, made under AS 38.05.315 - 38.05.325, 38.05.045 - 38.05.-120, AS 38.08, or AS 38.50 except as provided in AS 38.50.050 is subject to the following reservations: "The party of the first part, Alaska, hereby expressly saves, excepts and reserves out of the grant hereby made, unto itself, its lessees, successors, and assigns forever, all oils, gases, coal, ores, minerals, fissionable materials, geothermal resources, and fossils of every name, kind or description, and which may be in or upon said lands above described, or any part thereof, and the right to explore the same for such oils, gases, coal, ores, minerals, fissionable materials, geothermal resources, and fossils, and it also hereby expressly saves and reserves out of the grant hereby made, unto itself, its lessees, successors, and assigns forever, the right to enter

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1 by itself, its or their agents, attorneys, and servants upon said lands,
2 or any part or parts thereof, at any and all times for the purpose of
3 opening, developing, drilling, and working mines or wells on these or
4 other lands and taking out and removing therefrom all such oils, gases,
5 coal, ores, minerals, fissionable materials, geothermal resources, and
6 fossils, and to that end it further expressly reserves out of the grant
7 hereby made, unto itself, its lessees, successors, and assigns forever,
8 the right by its or their agents, servants and attorneys [ATTORNEY] at
9 any and all times to erect, construct, maintain, and use all such build-
10 ings, machinery, roads, pipelines, powerlines, and railroads, sink such
11 shafts, drill such wells, remove such soil, and to remain on said lands
12 or any part thereof for the foregoing purposes and to occupy as much of
13 said lands as may be necessary or convenient for such purposes hereby
14 expressly reserving to itself, its lessees, successors, and assigns, as
15 aforesaid, generally all rights and power in, to, and over said land,
16 whether herein expressed or not, reasonably necessary or convenient to
17 render beneficial and efficient the complete enjoyment of the property
18 and rights hereby expressly reserved."

19 * Sec. 3. AS 38.05.130 is amended to read:

20 Sec. 38.05.130. DAMAGES AND POSTING OF BOND. No rights shall be
21 exercised by the state, its lessees, successors or assigns under the
22 reservation as set out in AS 38.05.125 [OR] until the state, its lessees,
23 successors, or assigns make provision [PROVISIONS] to pay the owner of
24 the land full payment for all damages sustained by the owner, by reason
25 of entering upon the land. If the owner for any cause refuses or ne-
26 glects to settle the damages, the state, its lessees, successors,
27 assigns, or an applicant for a lease or contract from the state for the
28 purpose of prospecting for valuable minerals, or option, contract or
29 lease for mining coal or lease for extracting geothermal resources,

1 petroleum or natural gas, may enter upon the land in the exercise of the
2 reserved rights after posting a surety bond determined by the director,
3 after notice and an opportunity to be heard, to be sufficient as to
4 form, amount, and security to secure to the owner payment for damages,
5 and may institute legal proceedings in a court where the land is located,
6 as may be necessary to determine the damages which the owner may suffer.

7 * Sec. 4. AS 38.05.181 is repealed and re-enacted to read:

8 Sec. 38.05.181. GEOTHERMAL RESOURCES. (a) Permits and leases;
9 preference. The commissioner may, under regulations he adopts, grant
10 prospecting permits and leases to a qualified person to explore for,
11 develop, or use geothermal resources. When title to the surface parcel
12 is held by a person other than the state, that person shall have a pre-
13 ferential right to a geothermal prospecting permit or lease for the area
14 underlying the surface parcel. The surface owner must exercise the
15 preference right within 30 days after receiving notice of the applica-
16 tion for a permit, or by agreeing to meet the terms of a bid within 60
17 days after receiving notice of the acceptance of the bid for a lease.

18 (b) Competitive geothermal areas. The commissioner may designate
19 a geothermal area or portion of it a competitive geothermal area. A
20 designation as a competitive geothermal area must be on the basis of
21 substantial geologic indications of geothermal resources or on the basis
22 of competitive interest in geothermal resources of the area.

23 (c) Prospecting permits. On state land that has not been declared
24 a competitive geothermal area or withdrawn from geothermal prospecting,
25 the commissioner may issue a prospecting permit to the first qualified
26 applicant. The permit conveys an exclusive right, for a period of two
27 years, to prospect for geothermal resources on state land included under
28 the permit. The commissioner may, at his discretion, renew the permit
29 for an additional one-year term. A holder of a prospecting permit has

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1 the right, upon the showing of a discovery of geothermal resources in
2 commercial quantities and the submission of a development plan accept-
3 able to the commissioner, to convert the permit to a noncompetitive
4 lease at a royalty rate under (g) of this section. The conversion
5 privilege must be exercised not later than 30 days after the expiration
6 of the permit. If the land included within the permit is designated a
7 competitive geothermal area during the permit term, the permittee must
8 apply for a noncompetitive lease within 30 days after notification of
9 the designation or forfeit his conversion privileges and his exclusive
10 right to prospect.

11 (d) Competitive leasing. On state land that is designated a
12 competitive geothermal area and is not subject to an existing prospect-
13 ing permit, the commissioner may issue geothermal leases to the highest
14 bidder by competitive bidding procedures established by regulations
15 adopted by him. At the discretion of the commissioner, competitive
16 lease sales may be by oral or sealed bid, on the basis of a cash bonus,
17 profit share, or royalty share.

18 (e) Acreage limitations and rentals. Prospecting permits and
19 geothermal leases granted under this section must, except in the case of
20 parcels subject to a preference right under (b) of this section, be
21 issued for at least 40 acres but not more than 2,560 acres. A person
22 may not own, or hold an interest in, geothermal leases covering more
23 than 51,200 acres. However, geothermal leases in commercial production,
24 individually or under a unit operation or well spacing or pooling
25 arrangement, do not count against the acreage limitation. All pros-
26 pecting permits and geothermal leases are subject to an annual rental,
27 payable in advance, of \$3 per acre. The rental for a year shall be
28 credited against royalties accruing for that year.

29 (f) Lease term and renegotiation. A geothermal lease shall be

1 issued for a primary term of 10 years and may be renewed for an addi-
2 tional term of five years if the lessee is actively engaged in drilling
3 operations. A geothermal lease is valid for the duration of commercial
4 production. Beginning 20 years after the initiation of commercial
5 production and at 10-year intervals thereafter, the commissioner may
6 renegotiate the rentals and royalties due on a geothermal lease.

7 (g) Royalties. Each geothermal lease shall be conditioned upon
8 payment by the lessee of a royalty of not less than 10 percent but not
9 more than 15 percent of the gross revenues derived from the production,
10 sale, or use of geothermal resources under the lease. Royalties may be
11 taken in kind rather than in value if the commissioner determines that
12 taking in kind would be in the best interest of the state.

13 (h) Regulations. Regulations adopted by the commissioner to
14 implement this section shall be adopted in accordance with the Adminis-
15 trative Procedure Act (AS 44.62).

16 * Sec. 5. AS 38.05.365 is amended by adding a new paragraph to read:

17 (24) "geothermal resources" means the natural heat of the
18 earth at temperatures greater than 120 degrees Celsius, measured at the
19 point where the highest-temperature resources encountered enter or
20 contact a well or other resource extraction device, and includes

21 (A) the energy, including pressure, in whatever form
22 present in, resulting from, created by, or that may be extracted
23 from that natural heat;

24 (B) the material medium, including the geothermal fluid
25 naturally present, as well as substances artificially introduced to
26 serve as a heat transfer medium; and

27 (C) all dissolved or entrained minerals and gases that
28 may be obtained from the material medium, but excluding hydrocarbon
29 substances and helium.

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* Sec. 6. AS 41 is amended by adding a new chapter to read:

CHAPTER 06. GEOTHERMAL RESOURCES.

Sec. 41.06.010. WASTE PROHIBITED. The waste of geothermal resources in the state is prohibited.

Sec. 41.06.020. APPLICATION. (a) The commissioner has jurisdiction over all persons and property, public and private, necessary to carry out the purposes and intent of this chapter.

(b) The authority of the commissioner applies to all private, municipal, state, and federal land in the state lawfully subject to the police power of the state. When any of that land is committed to a unit agreement involving land subject to federal jurisdiction, the operation of this chapter or a part of this chapter may be suspended, if the unit operations are regulated by the United States and if the conservation of geothermal resources is accomplished under the unit agreement.

(c) The provisions of this chapter apply

(1) when a person engaged in drilling activity not subject to the provisions of this chapter encounters geothermal fluid or water of sufficient heat or pressure to constitute a threat to human life or health, unless the drilling operation is subject to oil and gas drilling regulation under AS 31.05;

(2) in areas and under conditions in which the commissioner determines that drilling activity may encounter geothermal fluid or water of sufficient heat or pressure to constitute a threat to human life or health.

Sec. 41.06.030. RESERVOIR MANAGEMENT. (a) The commissioner shall require the filing and approval of a plan of development and operation on each producing geothermal system and may issue well-spacing and pooling orders, limits on production, and reinjection requirements, in order to prevent waste, promote maximum economic recovery, and protect

1 correlative rights.

2 (b) Lessees of all or part of a geothermal system may enter into a
3 unit agreement for cooperative development, with the approval of the
4 commissioner. The commissioner may suspend or modify the approved
5 development plan in accordance with the unit agreement.

6 (c) If the owners of at least two-thirds of the leasehold in-
7 terests in a geothermal system ratify a unit agreement approved by the
8 commissioner, the commissioner may enforce the agreement as to lessees
9 not a party to the agreement by allocating production under the prin-
10 ciple of correlative rights and by apportioning costs and revenues.

11 (d) Lease operations under an approved development plan or unit
12 agreement are considered to be in compliance with individual lease
13 requirements.

14 Sec. 41.06.040. DRILLING REGULATIONS. (a) The commissioner shall
15 adopt regulations in accordance with the Administrative Procedure Act
16 (AS 44.62) relating to the siting, spacing, drilling, casing, cementing,
17 testing, logging, operating, producing, and abandonment of geothermal
18 wells so as to prevent

- 19 (1) geothermal resources, water or other fluids, and gases
20 from escaping into strata other than that in which they are found (un-
21 less in accordance with an approved reinjection program);
22 (2) contamination of surface and groundwater;
23 (3) premature degradation of a geothermal system by water en-
24 croachment or otherwise;
25 (4) blowouts, cavings and seepage; and
26 (5) unreasonable disturbance or injury to neighboring proper-
27 ties, prior water rights, human life, health and the natural environ-
28 ment.

29 (b) The commissioner shall cause the operator of a geothermal well

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1 or wells to file adequate individual or blanket surety bonds to ensure
2 compliance with his regulations.

3 (c) The commissioner shall require a geothermal operator to notif
4 the department if the operator discovers significant quantities of
5 hydrocarbon substances, helium or fissionable materials.

6 (d) The commissioner may enter upon any property, public or pri-
7 vate, to inspect a geothermal operation for compliance with his regu-
8 lations.

9 (e) Geothermal fluid and water of sufficient heat or pressure to
10 constitute a threat to human life or health, which are regulated by the
11 commissioner under this chapter, are exempt from the jurisdiction of the
12 Alaska Oil and Gas Conservation Commission under AS 31.05.030(g).

13 Sec. 41.06.050. RELATIONSHIP OF GEOTHERMAL RESOURCES TO WATER.

14 (a) An operator shall, before drilling or constructing a geothermal
15 well or group of wells to be operated in concert, file an application
16 with the commissioner for approval to drill the well or wells. The date
17 of filing of the application establishes priority as to later appro-
18 priators of non-geothermal fluids. The application must contain suffi-
19 cient information to enable the commissioner to determine whether the
20 operation of the well or wells will interfere with or impair a prior
21 water right.

22 (b) An operator may not begin well drilling or construction with-
23 out the approval of the commissioner. The commissioner shall approve
24 the well construction upon the conditions he considers necessary to
25 protect the public interest, if

26 (1) the proposed geothermal operation will not significantly
27 interfere with or substantially impair a prior water right;

28 (2) the geothermal owner has acquired through purchase or
29 condemnation adequate water rights to offset the potential interference

1 or impairment; or

2 (3) the geothermal owner has obtained and dedicated to the
3 affected party or parties an equivalent amount of replacement water
4 of comparable quality.

5 (c) Geothermal fluid is not subject to appropriation under
6 AS 46.15 and no priority may be established among geothermal owners in a
7 geothermal system.

8 Sec. 41.06.060. DEFINITIONS. In this chapter

9 (1) "commissioner" means the commissioner of natural re-
10 sources;

11 (2) "correlative rights" means the right of each geothermal
12 owner in a geothermal system to produce without waste his just and
13 equitable share of the geothermal resources in the geothermal system;

14 (3) "geothermal fluid" means liquids and steam at tempera-
15 tures greater than 120 degrees Celsius naturally present in a geothermal
16 system;

17 (4) "geothermal resources" means the natural heat of the
18 earth at temperatures greater than 120 degrees Celsius, measured at the
19 point where the highest-temperature resources encountered enter or
20 contact a well or other resource extraction device, and includes

21 (A) the energy, including pressure, in whatever form
22 present in, resulting from, created by, or that may be extracted
23 from that natural heat;

24 (B) the material medium, including the geothermal fluid
25 naturally present, as well as substances artificially introduced to
26 serve as a heat transfer medium; and

27 (C) all dissolved or entrained minerals and gases that
28 may be obtained from the material medium, but excluding hydrocarbon
29 substances and helium;

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1 (5) "geothermal system" means a stratum, pool, reservoir, or
2 other geologic formation containing geothermal resources;

3 (6) "operator" means a person drilling, maintaining, operat-
4 ing, producing, or in control of a well;

5 (7) "owner" means a person who, by reason of an interest in
6 real property, has the right to drill into, produce, and make use of
7 geothermal resources;

8 (8) "waste" means an inefficient, excessive, or improper
9 production, use, or dissipation of geothermal resources, including, but
10 not limited to,

11 (A) drilling, transporting, or storage methods that
12 cause or tend to cause unnecessary surface loss of geothermal
13 resources;

14 (B) locating, spacing, drilling, equipping, operating,
15 producing, or venting of a well in a manner that results or tends
16 to result in reducing the ultimate economic recovery of geothermal
17 resources;

18 (9) "well" means a well drilled, converted, or reactivated
19 for the discovery, testing, production, or subsurface injection of
20 geothermal resources.

21 * Sec. 7. AS 41.08.020(a) is amended to read:

22 (a) The state geologist shall conduct geological and geophysical
23 surveys to determine the potential of Alaskan lands for production of
24 metals, minerals, [AND] fuels, and geothermal resources; the locations
25 and supplies of groundwaters and construction materials; the potential
26 geologic hazards to buildings, roads, bridges and other installations
27 and structures; and shall conduct such other surveys and investigations
28 as will advance knowledge of the geology of Alaska. With the approval
29 of the commissioner, the state geologist may acquire, by gift or pur-

1 chase, geological and geophysical reports, surveys and similar informa-
2 tion.

3 * Sec. 8. AS 46.15 is amended by adding a new section to read:

4 Sec. 46.15.145. TERMINATION OF PERMITS. (a) If the commissioner
5 has reason to believe that a person who holds an appropriation permit
6 under this chapter is wilfully violating or has wilfully violated a
7 term, condition, restriction or limitation of his permit, he may
8 commence proceedings to terminate the appropriation permit under the
9 Administrative Procedure Act (AS 44.62.330 - 44.62.630).

10 (b) When an appropriation permit is terminated under this section,
11 the appropriation of water made by the permit reverts to the state and
12 becomes unappropriated water.

13 * Sec. 9. AS 46.15.120 is amended to read:

14 Sec. 46.15.120. CERTIFICATES. Upon completion of construction of
15 the works and commencement of use of water, the permit holder shall
16 notify the commissioner that he has perfected his appropriation. If the
17 commissioner determines that the appropriation has been perfected in
18 substantial accordance with the permit, he shall issue the permit holder
19 a certificate of appropriation. The certificate shall set out any con-
20 dition which [SUCH INFORMATION AS] the commissioner may prescribe by
21 regulation, including conditions that are necessary to protect the prior
22 rights of other persons and the public interest.

23 * Sec. 10. AS 46.15.260(5) is amended to read:

24 (5) "water" means all water of the state, surface and subsur-
25 face [SUBSURFACES], occurring in a natural state, except mineral and
26 medicinal water;

27 * Sec. 11. AS 46.15.260 is amended by adding a new paragraph to read:

28 (9) "mineral and medicinal water" means

29 (A) water of a hot spring or spring with curative pro-

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1 perties which has been reserved by the federal government under
2 Public Land Order No. 399; and

3 (B) geothermal fluid, as the term is defined in AS 41.-
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