

Introduced: 4/7/71
Referred: Resources

1 IN THE SENATE

BY MERDES, PALMER AND THOMAS

2 SENATE BILL NO. 212

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 SEVENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act relating to geothermal resources."

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

8 * Section 1. AS 38.05 is amended by adding a new section to read:

9 Sec. 38.05.181. GEOTHERMAL RESOURCES. (a) PURPOSE. The legis-
10 lature finds and declares that

11 (1) the people of Alaska have an interest in the develop-
12 ment of the state's geothermal resources potential for

13 (A) use in the generation of electrical power that
14 may reduce the state's dependence on fossil fuel power plants
15 that seriously pollute the atmosphere in a number of areas;

16 (B) the production of geothermal steam that may pro-
17 vide central heat for urban areas close to geothermal areas;

18 (C) the production of valuable minerals and other by-
19 products associated with geothermal steam and accompanying brines;

20 and

21 (D) the distillation of fresh water;

22 (2) the State of Alaska, through the Department of Natural
23 Resources and its division of lands, should exercise its authority
24 to encourage the exploration for, discovery and production of, geo-
25 thermal resources in the public interest to

26 (A) encourage maximum economic recovery of this poten-
27 tially important natural resource and prevent its waste;

28 (B) ensure that the exploration for, and production of,
29 geothermal resources, and the disposal of wastes therefrom, are

1 carried on in a way that will safeguard life, health, property,
2 public welfare and the environment; and

3 (C) preserve the state's natural, scenic values es-
4 pecially in those areas where geothermal resources are or may be
5 found; although the need to develop new sources of energy rapidly
6 is becoming urgent, every effort also must be made to protect
7 those hot springs and geysers that are among nature's scenic
8 wonders.

9 (b) LAND SURVEY AND CLASSIFICATION. (1) Because of the absence
10 of detailed geothermal mapping and the limited geochemical, geological
11 or geophysical knowledge of the state's geothermal resources that is
12 available, a survey of geothermal resources shall be included in the
13 complete geological survey of the state authorized by AS 41.07.020, and
14 a statement of the progress of the geothermal resources survey shall
15 be contained in the annual report required by that section.

16 (2) The classification of known geothermal resources areas,
17 each of which shall contain at least one well capable of producing
18 geothermal resources in commercial quantities, shall be made by the
19 commissioner upon recommendations of the director, the state geologist
20 or the United States Geological Survey, under AS 41.07.040.

21 (3) Within 125 days after the effective date of this sec-
22 tion, the commissioner shall publish a statement of all lands which
23 were included within any known geothermal resources areas on the
24 effective date of the section. He shall also publish from time to
25 time his determination of other known geothermal resources areas
26 specifying in each case the date the lands were included in the area.

27 (c) AUTHORITY. (1) Under the provisions of this section and
28 subject to secs. 135 - 145 of this chapter, where applicable and not
29 in conflict with this section, the commissioner may issue prospecting

1 permits and leases for the exploration, discovery, development, utiliza-
2 tion, extraction and removal of geothermal resources in or from state
3 lands administered by him.

4 (2) Rights to develop and utilize geothermal resources
5 underlying lands owned by the State of Alaska may be acquired solely
6 in accordance with the provisions of this section.

7 (3) The commissioner shall prescribe those regu-
8 tions he considers appropriate to carry out the provisions of this
9 section. The regulations may include, without limitation, provisions
10 for

11 (A) the prevention of waste,

12 (B) development and conservation of geothermal and
13 other natural resources,

14 (C) the protection of the public interest,

15 (D) assignment, segregation, extension of terms,
16 relinquishment of leases, development contracts, unitization,
17 pooling, and drilling agreements,

18 (E) compensatory royalty agreements, suspension of
19 operations or production, and suspension or reduction of rentals
20 or royalties,

21 (F) the filing of surety bonds to assure compliance
22 with the terms of the lease and to protect surface use and
23 resources,

24 (G) use of the surface by a lessee or permittee of
25 the lands embraced in his lease or permit,

26 (H) the maintenance by the lessee of an active develop-
27 ment program, and

28 (I) protection of water quality and other environmental
29 qualities.

1 (d) ELIGIBILITY. Prospecting permits and leases under this sec-
2 tion may be issued only to or held by

3 (1) persons or associations of persons who are citizens
4 of the United States or who have declared their intention of becoming
5 such, or who are citizens of any country, dependency, colony, or
6 province, the laws, customs, and regulations of which permit the
7 grant of similar or like privileges to citizens of the United States;

8 (2) any corporation or corporations organized and existing
9 under and by virtue of the laws of the United States or of any state,
10 territory or the District of Columbia; or governmental units, including,
11 without limitation, municipalities or boroughs;

12 (3) any alien person entitled thereto by virtue of a treaty
13 between the United States and the nation or country of which the alien
14 person is a citizen or subject;

15 (4) in every case of joint bidding, the names of all persons,
16 firms, or corporations interested in a particular joint bid shall be
17 specified.

18 (e) LAND ADMINISTRATION. (1) Administration of this section
19 shall be under the principal of multiple use of public lands and
20 resources, and insofar as feasible, shall allow coexistence of other
21 permits or leases of the same lands for deposits of other minerals
22 under this chapter, and the existence of permits or leases issued
23 under this section does not preclude other uses of the areas covered
24 by them. However, operations under other permits or leases or other
25 uses may not unreasonably interfere with or endanger operations under
26 a permit or lease issued under this section, nor may operations under
27 permits or leases issued under this section unreasonably interfere
28 with or endanger operations under any permit or lease issued under
29 any other law. Nor may this section be construed as superseding the

1 authority which the head of a state department or agency has with
2 respect to the management, protection, and utilization of the state
3 lands and resources under his jurisdiction. The commissioner may
4 prescribe by regulations those conditions he considers necessary
5 for the protection of other resources.

6 (2) If the commissioner determines independently or on
7 advice of the director, the state geologist or the United States
8 Geological Survey that the production, use, or conversion of geothermal
9 steam is susceptible of producing a valuable byproduct, including
10 commercially demineralized water for beneficial uses in accordance
11 with applicable state water laws the commissioner shall require sub-
12 stantial beneficial production or use of these byproducts unless, in
13 individual circumstances he modifies or waives this requirement in the
14 interest of conservation of natural resources or for other reasons
15 satisfactory to him. However, the production or use of those byproducts
16 are subject to the rights of the holders of preexisting leases, claims,
17 or permits covering the same land or the same minerals, if any.

18 (3) For the purpose of properly conserving the natural re-
19 sources of any geothermal resources areas, or any part of them, the
20 lessees may unite with each other or with others in collectively
21 adopting and operating under a cooperative or unit plan of development
22 or operation of the geothermal resources lands. The commissioner
23 may, with the consent of the holders of leases involved, establish,
24 alter, change, and revoke any drilling and production requirements
25 of these leases, permit apportionment of production, and may make
26 those regulations with reference to these leases, with like consent
27 on the part of the lessees, in connection with the institution and
28 operation of any cooperative or unit plan, as the commissioner con-
29 siders necessary or proper to secure the proper protection of the

1 interests of the state.

2 (4) Any person engaged in the production of geothermal
3 resources under a lease issued by the commissioner may commingle geo-
4 thermal resources from any two or more wells without regard to whether
5 the wells are located on the lands for which the lease was issued
6 or elsewhere. However, the lessee shall install and maintain meters
7 or other measuring devices satisfactory to the commissioner to measure
8 the amount of geothermal resources produced from lands for which
9 leases were issued by the commissioner.

10 (f) STATE LANDS: LIMITATIONS, EXCLUSIONS. Leases or permits for
11 lands withdrawn or acquired in aid of the functions of the Department
12 of Natural Resources may be issued only under those reasonable terms
13 and conditions that the commissioner may prescribe by regulation to
14 insure adequate utilization of the land or its waters for the purposes
15 for which they were withdrawn or acquired. However, leases or permits
16 under this section may not be issued for

17 (1) lands administered as state parks, recreation or wilder-
18 ness areas, or

19 (2) lands in a fish hatchery, wildlife refuge, wildlife
20 range, game range, wildlife management area, waterfowl production
21 area, or for land acquired or reserved for the protection and conserva-
22 tion of fish and wildlife that are threatened with extinction.

23 (g) UNKNOWN LAND; PROSPECTING PERMITS. (1) Subject to the pro-
24 visions of (c) of this section, the commissioner shall issue a prospect-
25 ing permit to the first qualified applicant under this section and
26 those regulations as he may prescribe for lands which have not been
27 classified as known geothermal resources areas, upon the payment to
28 the commissioner of not less than \$1 an acre for each acre of land
29 included in the permit, in accordance with (k)(1)(C) of this section. An

1 application for a permit shall be denied if, before the issuance of
2 the permit, the land is classified or reclassified as known geothermal
3 resources land under (b)(2) of this section.

4 (2) A permit gives the permittee the exclusive right for
5 a period of three years to prospect for geothermal resources upon
6 land included within the permit. The commissioner may, in his discre-
7 tion, extend the primary term of a permit for a period not exceeding
8 two years, except that the combination of the primary term and
9 extension of a permit may not exceed a total of five years. The
10 commissioner may amend or terminate a permit issued by it within the
11 primary term period or within the extension, if any, with the consent
12 of the permittee.

13 (3) Upon the classification of any of the land included
14 within a permit issued under this section as known geothermal resources
15 land areas, the permittee is entitled to a lease for this land. The
16 classification of this land shall be made in accordance with (b)(2) of
17 this section. The terms of the lease shall include the royalties
18 and other terms contained in (j), (k) and (l) of this section on
19 the effective date of the lease.

20 (h) KNOWN AREAS: LEASES. (1) If the land to be leased under
21 this section is within a known geothermal resources area and no
22 prospecting permit thereon has been issued, this land shall be leased
23 to the highest responsible qualified bidder under this section and those
24 regulations the commission may prescribe for notice to the public of
25 terms and conditions of the sale, conduct of the sale, receipt of
26 bid, and awarding of the lease, and bidding shall be by competitive
27 bid, oral or sealed at the discretion of the commissioner, under regu-
28 lations he promulgates, and on the basis of a cash bonus, net profit,
29 or other single biddable factor.

1 (2) In leasing land under this section, the commissioner
2 may prescribe a development program. In prescribing the program,
3 the commissioner shall consider all applicable economic factors,
4 including market conditions and the cost of drilling for, producing,
5 processing and utilizing of geothermal resources.

6 (i) CONVERSION OF LEASES, PERMITS. Notwithstanding any other
7 provisions of this section, at any time within 180 days following the
8 effective date of this section,

9 (1) with respect to all land which was subject to valid
10 leases or permits issued under secs. 135 - 180 of this chapter or to
11 existing mining claims located on or before the effective date of this
12 section, the lessees or permittees or claimants or their successors
13 in interest who are qualified to hold geothermal leases may convert
14 their leases or permits or claims to geothermal leases covering the
15 same land;

16 (2) where there are conflicting claims, leases, or permits
17 embracing the same land, the person who first was issued a lease or
18 permit, or who first recorded the mining claim is entitled to first
19 consideration;

20 (3) with respect to all land which was on the effective
21 date of this section, the subject of applications for leases or permits
22 under secs. 135 - 180 of this chapter, the applicants may convert
23 their applications to applications for geothermal leases having
24 priorities dating from the time of filing of such applications under
25 this chapter.

26 (4) no person may convert mineral leases, permits, applica-
27 tions therefor, or mining claims for more than 10,240 acres;

28 (5) the conversion of leases, permits, and mining claims
29 and applications for leases and permits shall be accomplished in

1 accordance with regulations promulgated by the commissioner; no right
2 to conversion to a geothermal lease accrues to a person under this
3 section unless the person shows to the reasonable satisfaction of the
4 commissioner that substantial expenditures for the exploration,
5 development, or production of geothermal steam or other resources
6 have been made by the applicant who is seeking conversion, on the land
7 for which a lease is sought or on adjoining, adjacent, or nearby
8 federal or state land;

9 (6) with respect to land within a known geothermal resources
10 area and which are subject to a right to conversion to a geothermal
11 lease, the land shall be leased by competitive bidding, except that,
12 the competitive geothermal lease shall be issued to the person
13 owning the right to conversion to a geothermal lease if he makes
14 payment of an amount equal to the highest bona fide bid for the competi-
15 tive geothermal lease, plus the rental for the first year, within 30
16 days after he receives written notice from the commissioner of the
17 amount of the highest bid.

18 (j) ACREAGE, LIMITATIONS. (1) An application for a prospecting
19 permit or lease shall not be made for less than 640 acres nor more
20 than 2,560 acres and shall embrace a reasonably compact area. However,
21 a permit or lease may be issued for a parcel less than 640 acres if
22 that parcel is isolated from or not contiguous with other parcels of
23 land available for permit or lease under this section, or if the land
24 is irregularly subdivided.

25 (2) Prospecting permits or leases for land beneath lakes
26 and rivers, and below the mean high tide level of tide and submerged
27 land, may be issued for not less than 640 acres nor more than 5,760
28 acres and shall embrace a reasonably compact area, except that a permit
29 or lease may be issued for a parcel less than 640 acres if such parcel

1 is isolated from or not contiguous with other parcels of land available
2 for permit or lease under this section.

3 (3) Except as otherwise provided in this section, no person,
4 association or corporation may take, hold, own, or control at one time,
5 whether acquired directly from the commissioner under this section or
6 otherwise, any direct or indirect interest in state geothermal leases
7 exceeding 25,600 acres, including leases acquired under the provisions
8 of (i) of this section.

9 (4) At any time after 15 years from the effective date of
10 this section the commissioner, after public hearings, may increase this
11 maximum holding by regulations, not to exceed 51,200 acres.

12 (5) Subject to the other provisions of this section, the
13 permittee or lessee shall be entitled to use as much of the surface
14 of the land covered by his geothermal lease or permit as may be found
15 by the commissioner to be reasonably necessary for the exploration,
16 production, utilization, and conservation of geothermal resources.
17 However, any well drilled for the discovery and production of geothermal
18 resources, which is located within 300 feet of an outer boundary of the
19 parcel of land on which the well is situated or within 300 feet of a
20 public road, street or highway dedicated before the commencement of
21 drilling of the well, is a public nuisance. Where several contiguous
22 parcels of land in one or different ownerships are operated as a
23 single geothermal resources lease or operating unit, the term "outer
24 boundary" means the outer boundary line of the land included in the
25 lease or unit. In determining the contiguity of any of these parcels
26 of land, no street, road or alley lying within the lease or unit is
27 considered to interrupt that contiguity.

28 (k) ROYALTIES AND RENTALS. (1) Each permit or lease issued
29 under this section shall provide for

1 (A) a royalty of not less than 10 per cent nor more
2 than 15 per cent of the gross revenue, exclusive of charges, approved
3 by the commissioner made or incurred with respect to transmission
4 or other services or processes, received from the sale of steam,
5 brines, from which no minerals have been extracted, and associated
6 gases at the point of delivery to the purchaser of them;

7 (B) a royalty of not less than two per cent nor more
8 than 10 per cent of the gross revenue received from the sale of
9 mineral products or chemical compounds recovered from geothermal
10 fluids in the first marketable form as to each mineral product
11 or chemical compound for the primary term of the lease;

12 (C) an annual rental payable in advance of not less
13 than \$1 an acre or fraction of an acre for each year of a permit
14 or lease;

15 (D) if, after the discovery of geothermal resources in
16 commercial quantities, the total royalties due to the state during
17 any calendar year do not equal or exceed a sum equal to \$2 an
18 acre for each acre or fraction of an acre then included in the
19 permit or lease, the permittee or the lessee shall, within 60
20 days after the end of the year, pay whatever sum is necessary to
21 equal a minimum royalty of \$2 an acre.

22 (2) The royalties specified in this section are subject to
23 renegotiation under (m) of this section based upon recommendations of
24 the director and the renegotiations are not limited by the maximum
25 royalties specified in (1)(A) and (B) of this subsection.

26 (3) Royalty payments shall be made for all geothermal
27 resources used by the lessee, but which he does not sell. The value
28 of these geothermal resources used, but not sold, shall be determined
29 by the commissioner and set out in the terms of the lease. The

1 commissioner shall consider the cost of exploration and production and
2 the economic value of the resource in terms of its ultimate utiliza-
3 tion.

4 (4) Upon request of the commissioner, other state departments
5 and agencies shall furnish him with any relevant data then in their
6 possession or knowledge concerning or having bearing upon fair and
7 adequate charges to be made for geothermal steam produced or to be
8 produced for conversion to electric power or other purposes. Data
9 given to a department or agency as confidential under law may not be
10 furnished in a way which identifies or tends to identify the business
11 entity whose activities are the subject of the data or the person or
12 persons who furnished the information.

13 (5) The commissioner independently or upon the advice of the
14 director, may waive, suspend, or reduce the rental or minimum royalty
15 for the land included in any permit or lease, or any portion of it,
16 and waive, suspend, alter or amend the operating requirements contained
17 in the lease or regulations promulgated under this section affecting
18 operations of the lease or permit, in the interests of conservation,
19 and to encourage the greatest ultimate recovery of geothermal re-
20 sources if he determines that that action is necessary or beneficial
21 to promote development or finds that the permit or lease cannot be
22 successfully operated under the permit or lease terms or under the
23 regulations.

24 (1) TERM OF LEASES. (1) Leases under this section shall be
25 for a primary term of 10 years. If geothermal resources are produced
26 or utilized in commercial quantities within this term, the lease shall
27 continue for as long as geothermal steam or other byproducts are pro-
28 duced or utilized in commercial quantities, but the continuation may
29 not exceed an additional 40 years.

1 (2) If, at the end of that 40 years, steam or other geo-
2 thermal resources are in commercial quantities and the land is not
3 needed for other purposes, the lessee has a preferential right to a
4 renewal of the lease for a second 40-year term in accordance with the
5 terms and conditions as the commissioner considers appropriate; but
6 in any event a lease may not exceed a cumulative total of primary and
7 subsequent terms of 99 years.

8 (3) A lease for land on which, or for which under an ap-
9 proved cooperative or unit plan of development or operation, actual
10 drilling operations were started before the end of its primary term
11 and are being diligently prosecuted at that time shall be extended for
12 five years and as long thereafter, but not more than 35 years, as
13 geothermal resources are produced or utilized in commercial quantities.
14 If at the end of the extended term, steam or other resources are being
15 produced or utilized in commercial quantities and the land is not
16 needed for other purposes, the lessee has a preferential right to a
17 renewal of the lease for a second term in accordance with this section
18 and those terms and conditions the commissioner considers appropriate.

19 (4) For purposes of (1) of this subsection, production or
20 utilization of geothermal resources in commercial quantities includes
21 the completion of one or more wells producing or capable of producing
22 geothermal resources in commercial quantities and a bona fide sale
23 of geothermal resources for delivery to or utilization by a facility
24 or facilities not yet installed but schedules for installation not
25 later than 15 years from the date of commencement of the primary term
26 of the lease.

27 (5) Leases which have extended by reasons of production, or
28 which have produced geothermal resources and have been determined by
29 the commissioner to be incapable of further commercial production and

1 utilization of geothermal resources may be further extended for a
2 period of not more than five years from the date of that determination
3 but only for as long as one or more valuable byproducts are produced in
4 commercial quantities. If the byproducts are leasable under this
5 chapter and the leasehold is primarily valuable for the production of
6 these byproducts, the lessee is entitled to convert his geothermal
7 lease to a mineral lease under, and subject to all the terms and condi-
8 tions of, this chapter upon application at any time before expiration
9 of the lease extension by reason of byproduct production. The lessee
10 is entitled to locate under the mining laws all minerals which are not
11 leasable and which would constitute a byproduct if commercial produc-
12 tion or utilization of geothermal resources continued. The lessee in
13 order to acquire the rights granted him by this section shall complete
14 the location of mineral claims within 90 days after the termination of
15 the lease for geothermal resources.

16 (m) READJUSTMENT OF LEASE TERMS, CONDITIONS. (1) Except as
17 otherwise provided the commissioner may readjust the terms and condi-
18 tions of any lease issued under this section at not less than 10-year
19 intervals beginning 10 years after the date the geothermal resources
20 are produced, as determined by the commissioner. Each lease issued
21 under this section shall provide for that readjustment. The commissioner
22 shall give notice of any proposed readjustment of terms and conditions,
23 and, unless the lessee files with the commissioner objection to the
24 proposed terms or relinquishes the lease within 30 days after receipt
25 of the notice, the lessee conclusively shall be considered to have
26 agreed to those terms and conditions. If the lessee files objections,
27 and no agreement can be reached between the commissioner and the lessee
28 within a period of not less than 60 days, the lease may be terminated
29 by either party.

1 (2) The commissioner may readjust the rentals and royalties
2 of any geothermal lease issued under this section at not less than 20-
3 year intervals beginning 35 years after the date geothermal resources
4 are produced, as determined by the commissioner. In the event of any
5 readjustment neither the rental nor royalty may be increased by more
6 than 50 per cent over the rental or royalty paid during the preceding
7 period, and in no event may the royalty payable exceed 22 1/2 per cent.
8 Each geothermal lease issued under this section shall provide for that
9 readjustment. The commissioner shall give notice of any proposed
10 readjustment of rentals and royalties, and, unless the lessee files
11 with the commissioner objection to the proposed rentals and royalties
12 or relinquishes the lease within 30 days after receipt of the notice,
13 the lessee conclusively shall be considered to have agreed to those
14 terms and conditions. If the lessee files objections, and no agreement
15 can be reached between the commissioner and the lessee within a period
16 of not less than 60 days, the lease may be terminated by either party.

17 (n) RIGHTS OF LANDOWNERS TO PERMITS OR LEASES. In case of an
18 application for a permit or lease covering land which has been sold
19 by the state, subject to a reservation by the state of the geothermal
20 resources in them by anyone other than the owner of that land, the
21 owner has six months from the date of service of notice on the owner
22 of the application within which to file his application for a permit
23 or lease. The notice shall be served by the applicant together with a
24 copy of the application. If the owner exercises his rights and is a
25 qualified person, his application shall be granted but subject to all
26 the other provisions of this section. If the owner fails to exercise
27 the rights granted by this section, then the owner's rights under it shall
28 immediately cease and terminate and the original applicant shall be
29 permitted to proceed with his application. If the lands subject to

1 classification are classified as within a known geothermal resource
2 area, then, after the commissioner has determined the highest competi-
3 tive bid on it the owner may within 10 days after notification by the
4 commissioner submit a bid identical to the highest acceptable bid,
5 in which case the commissioner shall issue a lease to the surface land-
6 owner. If the surface landowner does not file a bid within that period
7 of time, the commissioner may proceed with the award of the bid to
8 other than the surface landowner.

9 (o) TERMINATION OF PERMITS OR LEASES. (1) A permit or lease
10 may be terminated by the commissioner, lessee or permittee only under
11 the provisions of this section, or under the terms of the lease or
12 permit or both. The commissioner shall insert in every permit or
13 lease issued under this section appropriate provisions for its cancella-
14 tion in accordance with the provisions of this section.

15 (2) The commissioner reserves the authority to cancel any
16 prospecting permit or lease upon which a commercially valuable deposit
17 of geothermal resources has not been discovered in paying quantities
18 upon failure of the permittee or lessee (after 30 days written notice
19 and demand for performance) to exercise diligence and care in the
20 prosecution of the prospecting or development work in accordance with
21 the terms and conditions of the permit or lease. After discovery of
22 a commercially valuable deposit of geothermal resources on lands subject
23 to any permit or lease issued under this section, the permit or lease
24 may be forfeited and canceled only upon failure of the lessee after
25 90 days written notice and demand to comply with any of the provisions
26 of the permit or lease or of the regulations applicable to it and in
27 force at the date of the permit or lease. However, in the event of a
28 cancellation the permittee or lessee under any geothermal resource
29 permit or lease may retain under the permit or lease all drilling or

1 producing wells as to which no default exists, together with a parcel
2 of land surrounding each well and the rights-of-way through the land
3 under permit or lease, that may be reasonably necessary to enable the
4 permittee or lessee to drill and operate the retained well or wells.
5 In the event of the cancellation of a permit or lease the permittee
6 or lessee has a reasonable time within which to remove all property,
7 equipment and facilities owned or used by the permittee or lessee in
8 connection with operations under the permit or lease.

9 (3) If there is no well on the leased lands capable of
10 producing geothermal resources in commercial quantities, the failure
11 to pay rental on or before the anniversary date terminates the lease by
12 operation of law. However, whenever the commissioner discovers that
13 the rental payment due under a lease is paid timely but the amount
14 of the payment is deficient because of an error or other reason and
15 the deficiency is nominal, as determined by the commissioner under
16 regulations promulgated by him, he shall notify the lessee of the
17 deficiency and the lease shall not automatically terminate unless the
18 lessee fails to pay the deficiency within the period prescribed in
19 the notice. If a lease has been terminated automatically by operation
20 of law under this paragraph for failure to pay rental timely and it is
21 shown to the satisfaction of the commissioner that the failure to pay
22 rental timely and it is shown to the satisfaction of the commissioner
23 that the failure to pay timely the lease rental was justifiable or
24 not due to a lack of reasonable diligence, he in his judgment may
25 reinstate the lease if .

26 (A) a petition for reinstatement, together with the
27 required rental, is filed with the commissioner, and

28 (B) no valid lease has been issued affecting any of
29 the lands in the terminated lease before the filing of the petition

1 for reinstatement.

2 (4) A permit or lease issued under this section may be
3 assigned, transferred, or sublet as provided for by law, or under regu-
4 lations promulgated by the commissioner.

5 (5) The holder of a geothermal lease or permit at any time
6 may make and file in the appropriate land office a written relinquish-
7 ment or quit claim of all rights under the lease or permit or of any
8 legal subdivision of the area covered by the lease or permit. The
9 relinquishment is effective as of the date of its filing. Thereupon
10 the lessee or permittee is released of all obligations accruing under
11 the lease or permit with respect to the land relinquished, but no
12 relinquishment releases the lessee or permittee, or his surety or
13 bond, from liability for breach of any obligation of th lease or
14 permit, other than an obligation to drill, accrued at the date of
15 the relinquishment, or from the continued obligation, in accordance
16 with the applicable lease or permit, terms and regulations,

17 (A) to make payment of all accrued rentals and royalties,

18 (B) to place all wells on the relinquished lands in
19 condition for suspension or abandonment, and

20 (C) to protect or restore substantially the surface
21 and surface resources.

22 (6) The commissioner, upon application by the lessee or
23 permittee, may authorize the lessee or permittee to suspend operations
24 and production on a producing lease or permit and he may, on his own
25 motion in the interest of conservation suspend operations on any
26 lease or permit but in either case he may extend the lease term for
27 the period of any suspension, and he may waive, suspend, or reduce
28 the rental or royalty required in the lease or permit.

29 (7) Leases or permits may be terminated by the commissioner

1 for any violation of the regulations or lease or permit terms, or of this
2 section after 30 days notice provided that the violation is not
3 corrected within the notice period, or in the event the violation is
4 of a nature that it cannot be corrected within the notice period then
5 provided that lessee or permittee has not started in good faith
6 within the notice period to correct the violation and thereafter to
7 proceed diligently to correct the violation. The lessee or permittee
8 is entitled to a hearing on the matter of the claimed violation or
9 proposed termination of lease or permit if request for a hearing is
10 made to the commissioner within the 30-day period after notice. The
11 period for correction of violation or commencement to correct the
12 violation of regulations or of lease terms or of this section shall be
13 extended to 30 days after the commissioner's decision after the hearing
14 if the commissioner finds that a violation exists.

15 (p) CONSERVATION; PREVENTION OF WASTE, POLLUTION. (1) All
16 leases or permits under this section are subject to the condition
17 that the lessee or permittee will, in conducting his exploration,
18 development and production operations, use all reasonable precautions
19 to protect the environment and to prevent pollution of the state's
20 waters and waste of geothermal resources developed in the land leased
21 or granted for prospecting under a permit.

22 (2) With the approval of the commissioner, a permittee or
23 lessee may drill special wells, convert producing wells or reactive
24 and convert abandoned wells for the sole purpose of reinjecting geo-
25 thermal resources of their residue.

26 (3) The owner or operator of a geothermal well on land
27 producing or reasonably presumed to contain geothermal resources
28 shall properly construct the well in accordance with methods approved
29 by the commissioner. The owner or operator shall make every reasonable

1 effort to prevent damage to life, health, property and natural re-
2 sources, to protect the geothermal resources deposits from damage or
3 waste, to shut out detrimental substances from underground strata
4 containing water suitable for irrigation or domestic purposes and from
5 surface water suitable for these purposes, and to prevent the infil-
6 tration of detrimental substances into these strata and into surface
7 water.

8 (4) The commissioner shall require those tests of remedial
9 work of the owner or operator of a geothermal well that in his judg-
10 ment are necessary to prevent damage to life, health, property, and
11 natural resources, to protect geothermal resources deposits from damage
12 or waste, or to prevent the pollution of the state's waters by the
13 infiltration of detrimental substances into underground or surface
14 water suitable for irrigation or domestic purposes, for the best
15 interests of the neighboring property owners and the public. To this
16 end he may request the assistance of the Department of Health and
17 Welfare under AS 46.05.

18 (5) Any act by a lessee or permittee, or by an owner or
19 operator of a geothermal well, that pollutes the state's waters in
20 violation of AS 46.05 shall be punished in accordance with AS 46.05 -
21 210.

22 (6) Subject to (n)(7) of this section, leases or permits
23 may be cancelled by the commissioner for any persistent, repeated
24 violations of the Water Pollution Control Act (AS 46.05). On recommenda-
25 tion of the director, the commissioner shall request the district at-
26 torney in the judicial district where the alleged violation occurs,
27 or the attorney general, to bring an action to enjoin the acts pro-
28 hibited by AS 46.05, or to impose the penalties authorized by AS 46.-
29 05.210. Nothing in this paragraph precludes the imposition of both

1 injunctive relief, the criminal penalties, and cancellation of the
2 lease or permit, or any combination of these remedies, that the com-
3 missioner or the court consider appropriate.

4 (q) DEFINITIONS. In this section

5 (1) "byproduct" means any mineral or minerals (exclusive
6 of oil, hydrocarbon gas, helium or other hydrocarbon substances)
7 which are found in solution or in association with geothermal resources
8 and which have a value of less than 75 per cent of the value of the
9 geothermal resource or are not, because of quantity, quality, or
10 technical difficulties in extraction and production, of sufficient
11 value to warrant extraction and production by themselves;

12 (2) "commissioner" means the commissioner of the Department
13 of Natural Resources;

14 (3) "department" means the Department of Natural Resources;

15 (4) "director" means the director of the division of lands
16 in the Department of Natural Resources;

17 (5) "division" means the division of lands in the Department
18 of Natural Resources;

19 (6) "geothermal resources" means the natural heat of the
20 earth, the energy, in whatever form, below the surface of the earth
21 present in, resulting from, or created by, or which may be extracted
22 from, the natural heat, and all minerals in solution or other products
23 obtained from naturally heated fluids, brines, associated gases, and
24 steam, in whatever form, found below the surface of the earth, ex-
25 clusive of oil, hydrocarbon gas, helium or other hydrocarbon sub-
26 stances, but including, specifically:

27 (A) all products of geothermal processes, embracing
28 indigenous steam, hot water and hot brines;

29 (B) steam and other gases, hot water and hot brines

1 resulting from water, gas, or other fluids artificially intro-
2 duced into geothermal formations;

3 (C) heat or other associated energy found in geo-
4 thermal formations; and

5 (D) any byproduct derived from them;

6 (7) "geothermal area" means a surface area which is under-
7 laid, or reasonably appears, to be underlaid by geothermal resources;

8 (8) "known geothermal resources area" means an area in
9 which the geology, nearby discoveries, competitive interests, or
10 other indicia would, in the opinion of the commissioner, engender
11 a belief in men who are experienced in the subject matter that the
12 prospects for extraction of geothermal resources are good enough to
13 warrant expenditures of money for that purpose;

14 (9) "lease" means a geothermal lease issued under this
15 section;

16 (10) "operator" means any person drilling, maintaining,
17 operating, pumping, or in control of any well; "owner" includes
18 "operator" when any well is operated or has been operated or is about
19 to be operated by any person other than the owner; "operator" includes
20 "owner" when any well is or has been or is about to be operated under
21 the direction of the owner;

22 (11) "permit" means a prospecting permit issued under this
23 section;

24 (12) "person" includes any individual, firm, association,
25 corporation or any other group or combination acting as a unit;

26 (13) "well" means any well for the discovery of geothermal
27 resources or any well on land producing geothermal resources or
28 reasonably presumed to contain geothermal resources, or any special
29 well, converted producing well or reactivated or converted abandoned

1 well employed for reinjecting geothermal resources or their residue.

2 (r) CONSTRUCTION. This section shall operate prospectively and
3 shall be liberally construed to meet its objectives, and the commis-
4 sioner and director have all the powers necessary to carry out the
5 purposes of this section.

6 (s) SHORT TITLE. This section may be cited as the Geothermal
7 Resources Act of 1971.

8 * Sec. 2. AS 38.05.135. is amended to read:

9 Sec. 38.05.135. GENERALLY. Except as otherwise provided, valu-
10 able minerals deposits in lands belonging to the state shall be open
11 to exploration, development, and the extraction of minerals. All lands
12 together with tide, submerged, or shorelands, to which the state holds
13 title or to which the state may become entitled, may be obtained by
14 permit or lease for the purpose or exploration, development, and the
15 extraction of minerals. Except as specifically limited by secs. 135 -
16 181 [180] of this chapter, lands may be withheld from lease application
17 on a first-come, first-served basis, and offered only on a competi-
18 tive bid basis when determined by the commissioner to be in the best
19 interests of the state. In unproven areas the commissioner may offer
20 additional incentives, including a reduction of royalty to a minimum
21 of five per cent in the case of oil and gas, and other terms in
22 granting permit or lease for exploration and development whenever it
23 appears to be in the best interests of the state to do so.

24 * Sec. 3. AS 38.05.140(a) is amended to read:

25 (a) No person may take or hold coal leases or permits during the
26 life of coal leases on state lands exceeding an aggregate of 46,080
27 acres, except that a person may apply for coal leases or permits
28 for acreage in addition to 46,080 acres, not exceeding a total of
29 5,120 additional acres of state land. The additional area applied

1 for shall be in multiples of 40 acres and the application shall contain
2 a statement that the granting of a lease for additional lands is
3 necessary for the person to carry on business economically and is in
4 the public interest. On the filing of the application, the coal
5 deposits in the lands covered by the application shall be temporarily
6 set aside and withdrawn from all other forms of disposal provided
7 under secs. 135 - 181 [180] of this chapter.

8 * Sec. 4. AS 38.05.140(d) is amended to read:

9 (d) The commissioner, for the purpose of encouraging the greatest
10 ultimate recovery of coal, oil, gas, oil shale, phosphate, sodium,
11 potassium, [AND] sulphur, and geothermal resources and in the interest
12 of conservation of natural resources, after public hearing, or, when
13 the state's title to land beneath navigable waters has been legally
14 challenged by the United States and litigation initiated, may waive,
15 suspend, refund, or reduce the rental, or minimum royalty, or reduce
16 the royalty on an entire leasehold, or on any tract or portion of a
17 leasehold segregated for royalty purposes, whenever in his judgment
18 it is necessary to do so in order to promote development, or whenever
19 in his judgment the lease cannot be successfully operated under its
20 terms. If the commissioner, in the interest of conservation, directs
21 or assents to the suspension of operations and production under a
22 lease granted, the payment of acreage rental or of minimum royalty
23 prescribed by the lease may be suspended during the period of sus-
24 pension of operations and production. The term of the lease shall be
25 extended by adding the period of suspension to the lease.

26 * Sec. 5. AS 38.05.145(a) is amended to read:

27 (a) Deposits of coal, phosphates, oil shale, sodium, potassium,
28 oil, gas, geothermal resources and state lands containing these
29 deposits are subject to disposition under rules and regulations,

1 recommended by the director and adopted by the commissioner, and the
2 provisions of secs. 145 - 181 [180] of this chapter. In applying
3 the acreage limitations the commissioner may apply the rule of approxi-
4 mation. The uses of the rule of approximation made before March 31,
5 1960, by the commissioner are ratified.

6 * Sec. 6. AS 38.05.145(b) is amended to read:

7 (b) If the state selects or otherwise acquires land other than
8 shorelands, title to which was in the federal government and which,
9 at the effective date of the selection or acquisition, is subject to
10 a valid existing offer for a noncompetitive United States oil and gas
11 lease, or application for a prospecting permit or noncompetitive
12 mining lease, for coal, phosphates, sulphur, oil shale, sodium, or
13 potassium under the federal act of February 25, 1920 (41 Stat. 437
14 as amended), for a noncompetitive United States geothermal lease,
15 or application for a prospecting permit or noncompetitive lease under
16 the federal act of December 24, 1970 (84 Stat. 1566). The [THE
17 offeror or applicant for the federal permit or lease, if a qualified
18 applicant hereunder, shall be considered the first qualified applicant
19 for a state noncompetitive oil and gas lease, prospecting permit, or
20 noncompetitive mining lease and is entitled to a state noncompetitive
21 lease or permit upon compliance with the provisions of the regulations
22 covering applications within 60 days after receipt of written notice
23 from the commissioner of selection or acquisition. These priorities
24 are not effective if the land covered by the federal offers or appli-
25 cations is classified by the commissioner as competitive land within
26 90 days after the selection of the land is finally approved by the
27 Secretary of the Interior or the land is otherwise acquired.

28 * Sec. 7. AS 38.05.182 is amended to read:

29 Sec. 38.05.182. ROYALTY ON NATURAL RESOURCES. Any royalty pro-

1 vided for in secs. 135 - 181 [180] of this chapter may be taken in
2 kind rather than in money at the discretion of the commissioner if he
3 determines that the taking in kind would be in the best interest of
4 the state.
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29