



# LAWS OF ALASKA

2010

**Source**

HCS CSSB 243(RES)

**Chapter No.**

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**AN ACT**

Relating to geothermal resources; relating to the royalty obligation for geothermal resources; transferring from the Department of Natural Resources to the Alaska Oil and Gas Conservation Commission authority over permitting and inspection of geothermal wells; providing for a regulatory cost charge for geothermal wells; and providing for an effective date.

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

THE ACT FOLLOWS ON PAGE 1



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2 transferring from the Department of Natural Resources to the Alaska Oil and Gas  
3 Conservation Commission authority over permitting and inspection of geothermal wells;  
4 providing for a regulatory cost charge for geothermal wells; and providing for an effective  
5 date.

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7 \* **Section 1.** AS 31.05.030 is amended by adding a new subsection to read:

8 (m) The commission has jurisdiction and authority over all persons and  
9 property, public and private, necessary to carry out the purposes and intent of  
10 AS 41.06, except for provisions in AS 41.06 for which the Department of Natural  
11 Resources has jurisdiction.

12 \* **Sec. 2.** AS 38.05.181(g) is amended to read:

13 (g) Each geothermal lease shall be conditioned upon payment by the lessee of

1 a royalty of **1.75 percent** [NOT LESS THAN 10 PERCENT BUT NOT MORE  
2 THAN 15 PERCENT] of the gross revenues derived from the production, sale, or use  
3 of geothermal resources under the lease **during the first 10 years immediately**  
4 **following the date the geothermal resource first generates gross income and 3.5**  
5 **percent of the gross revenues derived from the production, sale, or use of**  
6 **geothermal resources under the lease after that first 10-year period.** Royalties  
7 may be taken in kind rather than in value if the commissioner determines that taking in  
8 kind would be in the best interest of the state.

9 \* **Sec. 3.** AS 41.06 is amended by adding a new section to read:

10 **Sec. 41.06.005. Jurisdiction over geothermal resources.** (a) The commission  
11 has jurisdiction under this chapter over geothermal wells to prevent waste, to protect  
12 correlative rights, and to ensure public safety.

13 (b) The Department of Natural Resources has jurisdiction under this chapter  
14 over management of geothermal leases and units in the public interest and to effect  
15 development.

16 \* **Sec. 4.** AS 41.06.010 is amended to read:

17 **Sec. 41.06.010. Waste prohibited; investigation.** The waste of geothermal  
18 resources in the state is prohibited. **The commission may investigate to determine**  
19 **whether waste exists or is imminent, or whether other facts exist that justify or**  
20 **require action by the commission to prohibit waste.**

21 \* **Sec. 5.** AS 41.06.020 is repealed and reenacted to read:

22 **Sec. 41.06.020. Authority of commission; application.** (a) The commission  
23 has jurisdiction over all persons and property, public and private, necessary to carry  
24 out the purposes and intent of this chapter.

25 (b) The authority of the commission applies to all land in the state lawfully  
26 subject to the police power of the state, including private land, municipal land, state  
27 land, land of the United States, and land subject to the jurisdiction of the United  
28 States, and to all land included in a voluntary cooperative or unit plan of development  
29 or operation entered into in accordance with AS 38.05.181. When land that is subject  
30 to the commission's authority is committed to a unit agreement involving land subject  
31 to federal jurisdiction, the operation of this chapter or a part of this chapter may be

1 suspended if

2 (1) the unit operations are regulated by the United States; and

3 (2) the conservation of geothermal resources is accomplished under the  
4 unit agreement.

5 (c) This chapter applies

6 (1) to wells drilled in search of, in support of, or for the recovery or  
7 production of geothermal resources;

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

12 (3) in areas and under conditions in which the commission determines  
13 that drilling may encounter geothermal resources, fluid, or water of sufficient heat or  
14 pressure to constitute a threat to human life or health.

15 (d) To the extent the provisions of AS 31.05 do not conflict with the  
16 provisions of this chapter, the provisions of AS 31.05 are applicable to wells drilled in  
17 search of, in support of, or for the recovery or production of geothermal resources.

18 (e) Nothing in this chapter limits the authority of the department

19 (1) over geothermal resources under AS 38.05.181; or

20 (2) to approve and manage geothermal units or operations that include  
21 state land.

22 \* **Sec. 6.** AS 41.06.030(a) is amended to read:

23 (a) The commissioner shall require the filing and approval of a plan of  
24 development and operation on **a** [EACH PRODUCING] geothermal system **that**  
25 **includes state land** [AND MAY ISSUE WELL-SPACING AND POOLING  
26 ORDERS, LIMITS ON PRODUCTION, AND REINJECTION REQUIREMENTS,  
27 IN ORDER TO PREVENT WASTE, PROMOTE MAXIMUM ECONOMIC  
28 RECOVERY, AND PROTECT CORRELATIVE RIGHTS].

29 \* **Sec. 7.** AS 41.06.030(b) is amended to read:

30 (b) Lessees of all or part of a geothermal system **that includes state land** may  
31 enter into a unit agreement for cooperative development, with the approval of the

1 commissioner. The commissioner may suspend or modify the approved development  
2 plan in accordance with the unit agreement.

3 \* **Sec. 8.** AS 41.06.030(c) is amended to read:

4 (c) If the owners of at least two-thirds of the leasehold interests in a  
5 geothermal system ratify a unit agreement approved **under (b) of this section** by the  
6 commissioner, the commissioner may enforce the agreement as to lessees not a party  
7 to the agreement by allocating production under the principle of correlative rights and  
8 by apportioning costs and revenues.

9 \* **Sec. 9.** AS 41.06.030 is amended by adding a new subsection to read:

10 (e) The commissioner may adopt regulations under AS 44.62 to carry out the  
11 purposes and intent of this chapter for duties assigned to the department, including the  
12 promotion of maximum economic recovery.

13 \* **Sec. 10.** AS 41.06 is amended by adding a new section to read:

14 **Sec. 41.06.035. Reservoir management; commission's regulations.** (a) The  
15 commission may issue well-spacing and pooling orders, place limits on production,  
16 and impose reinjection requirements for the purpose of preventing waste and to protect  
17 correlative rights in a geothermal system.

18 (b) The commission may adopt regulations under AS 44.62 and issue orders  
19 appropriate to carry out the purposes and intent of this chapter for duties assigned to  
20 the commission, including orders regarding the establishment of drilling units for  
21 pools as set out in AS 31.05.100 and orders regarding unitized operation and  
22 integration of interests as set out in AS 31.05.110.

23 \* **Sec. 11.** AS 41.06.040(a) is repealed and reenacted to read:

24 (a) The commission shall adopt regulations under AS 44.62 (Administrative  
25 Procedure Act), issue orders, and take other appropriate action to carry out the  
26 purposes and intent of this chapter, including adopting regulations to prevent

27 (1) geothermal resources, water or other fluids, and gases from  
28 escaping into strata other than that in which they are found, unless in accordance with  
29 an approved reinjection program;

30 (2) contamination of surface and groundwater;

31 (3) premature degradation of a geothermal system by water

1 encroachment or otherwise;

2 (4) blowouts, cavings, and seepage; and

3 (5) unreasonable disturbance or injury to neighboring properties, prior  
4 water rights, prior oil or gas rights, human life, health, and the natural environment.

5 \* **Sec. 12.** AS 41.06.040(b) is amended to read:

6 (b) The **commission** [COMMISSIONER] shall **require** [CAUSE] the  
7 operator of a geothermal well [OR WELLS] to file **an** adequate individual or blanket  
8 surety **bond** [BONDS] to ensure compliance with regulations adopted under this  
9 section.

10 \* **Sec. 13.** AS 41.06.040(c) is amended to read:

11 (c) The **commission** [COMMISSIONER] shall require a geothermal operator  
12 to notify the **commission** [DEPARTMENT] if the operator discovers significant  
13 quantities of hydrocarbon substances, helium, or fissionable materials.

14 \* **Sec. 14.** AS 41.06.040(d) is amended to read:

15 (d) The **commission and its staff** [COMMISSIONER] may enter upon any  
16 property, public or private, to inspect a geothermal operation for compliance with  
17 regulations adopted under this section.

18 \* **Sec. 15.** AS 41.06.050 is repealed and reenacted to read:

19 **Sec. 41.06.050. Permits to drill.** (a) A person shall apply for and receive a  
20 permit from the commission before drilling a well in

21 (1) search of geothermal resources; or

22 (2) support of the recovery or production of geothermal resources.

23 (b) The application required in (a) of this section must contain sufficient  
24 information to enable the commission to determine if the operation of the well will  
25 interfere with or impair a prior water, oil, or gas right.

26 (c) A person must submit a separate permit application for each well. The  
27 permit application must be in the form or format required by the commission and  
28 include all information required by the commission.

29 (d) As soon as practicable after receiving an application under (a) of this  
30 section, the commission shall approve or deny the application for a permit to drill.

31 (e) In making the determination under (d) of this section, the commission shall

1 consider whether the

2 (1) proposed well will significantly interfere with or substantially  
3 impair a prior water, oil, or gas right;

4 (2) proposed well is contrary to a provision of this chapter, a regulation  
5 adopted by the commission, another law, or an order, stipulation, or term of a permit  
6 issued by the commission; and

7 (3) applicant is in violation of a provision of this chapter, a regulation  
8 adopted by the commission, another law, or an order, stipulation, or term of a permit  
9 issued by the commission; the commission shall consider the magnitude of the  
10 violation.

11 \* **Sec. 16.** AS 41.06 is amended by adding a new section to read:

12 **Sec. 41.06.055. Regulatory cost charge for geothermal wells.** (a) Each  
13 person that, on the first day of a state fiscal year, operates a well within the jurisdiction  
14 of the commission for which a permit to drill has been issued under AS 41.06.050  
15 shall pay to the commission an annual regulatory charge for each well that has not,  
16 before the first day of that state fiscal year, been

17 (1) plugged and abandoned; and

18 (2) reported as abandoned in accordance with regulations of the  
19 commission.

20 (b) The commission shall annually determine the regulatory cost charge to be  
21 paid under this section. The regulatory cost charge to be paid by a person for a state  
22 fiscal year must be based on the total volume during the most recent calendar year for  
23 the wells described in (a) of this section of which the person was the operator on the  
24 first day of the fiscal year as a percentage of the total volume during the same calendar  
25 year for all wells described in (a) of this section. In this subsection, "total volume"  
26 means the sum of the volume of all geothermal resources produced from a well and all  
27 fluids and substances injected or otherwise artificially introduced into the well.

28 (c) The commission shall determine the regulatory cost charges levied under  
29 this section so that the total amount to be collected approximately equals the  
30 appropriations made for the operating costs of the commission that have been incurred  
31 under this chapter for the fiscal year.

1 (d) The commission shall collect the regulatory cost charges imposed under  
2 this section. The Department of Administration shall identify the amount of  
3 appropriations made for the operating costs of the commission under this chapter that  
4 lapse into the general fund each year. The legislature may appropriate an amount that  
5 is at least equal to the lapsed amount to the commission for its operating costs under  
6 this chapter for the next fiscal year. If the legislature makes an appropriation to the  
7 commission under this subsection that is equal to or greater than the lapsed amount,  
8 the commission shall reduce the total regulatory cost charge collected for that fiscal  
9 year by a comparable amount.

10 (e) The commission may adopt regulations relating to the investigation of the  
11 accuracy of reported information and for collecting required payments under this  
12 section.

13 \* **Sec. 17.** AS 41.06.060 is repealed and reenacted to read:

14 **Sec. 41.06.060. Definitions.** In this chapter, unless the context otherwise  
15 requires,

16 (1) "commercial use" means the sale of heat or power to a third party;

17 (2) "commission" means the Alaska Oil and Gas Conservation  
18 Commission created under AS 31.05.005;

19 (3) "correlative rights" means the right of an owner of each property in  
20 a geothermal system to produce without waste the owner's just and equitable share of  
21 the geothermal resources in the geothermal system; a just and reasonable share is an  
22 amount, so far as can be practically determined and so far as can be practically  
23 produced without waste, that is substantially in proportion to the quantity of  
24 recoverable geothermal resources under the owner's property relative to the total  
25 recoverable geothermal resources in the geothermal system;

26 (4) "geothermal fluid" means liquids and steam at temperatures greater  
27 than 120 degrees Celsius or any commercial use of liquids and steam naturally present  
28 in a geothermal system at temperatures less than 120 degrees Celsius;

29 (5) "geothermal resources"

30 (A) means the natural heat of the earth at temperatures greater  
31 than 120 degrees Celsius, or any use of that heat for commercial purposes,

1 measured at the point where the highest-temperature resources encountered  
2 enter or contact a well or other resource extraction device or any commercial  
3 use of the natural heat of the earth;

4 (B) includes

5 (i) the energy, including pressure, in whatever form  
6 present in, resulting from, created by, or that may be extracted from  
7 that natural heat;

8 (ii) the material medium, including steam and other  
9 gases, hot water, and hot brines constituting the geothermal fluid  
10 naturally present, as well as substances artificially introduced to serve  
11 as a heat transfer medium; and

12 (iii) all dissolved or entrained minerals and gases that  
13 may be obtained from the material medium, but excluding hydrocarbon  
14 substances and helium;

15 (6) "geothermal system" means a stratum, pool, reservoir, or other  
16 geologic formation containing geothermal resources;

17 (7) "operator" means a person drilling, maintaining, operating,  
18 producing, or in control of a well;

19 (8) "owner" means the person who has the right to drill into or produce  
20 from a geothermal system and to appropriate the geothermal resources produced from  
21 a geothermal system for that person and others;

22 (9) "waste" means, in addition to its ordinary meaning, physical waste,  
23 and includes an inefficient, excessive, or improper production, use, or dissipation of  
24 geothermal resources, including

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

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

30 (10) "well" means a well drilled, converted, or reactivated for the  
31 discovery, testing, production, or subsurface injection of geothermal resources.

1 \* **Sec. 18.** AS 41.06.030(d) and 41.06.040(e) are repealed.

2 \* **Sec. 19.** The uncodified law of the State of Alaska is amended by adding a new section to  
3 read:

4 APPLICABILITY; AMENDMENT OF EXISTING LEASES. (a) Section 2 of this  
5 Act applies to a lease for a geothermal resource or the renewal of a lease for a geothermal  
6 resource entered into on or after the effective date of sec. 2 of this Act.

7 (b) The commissioner of natural resources shall offer the royalty rates in  
8 AS 38.05.181(g), as amended by sec. 2 of this Act, as an amendment to a lease or a renewal  
9 of a lease entered into before the effective date of sec. 2 of this Act.

10 \* **Sec. 20.** The uncodified law of the State of Alaska is amended by adding a new section to  
11 read:

12 TRANSITION: REGULATIONS. (a) To the extent the regulations are not  
13 inconsistent with the language and purposes of this Act, regulations relating to geothermal  
14 wells adopted by the Department of Natural Resources under AS 41.06 before July 1, 2010,  
15 remain in effect as valid regulations implementing this Act. The Alaska Oil and Gas  
16 Conservation Commission may administer and enforce regulations previously adopted under  
17 AS 41.06 relating to geothermal wells until the Alaska Oil and Gas Conservation Commission  
18 adopts regulations in accordance with this Act.

19 (b) The Alaska Oil and Gas Conservation Commission may immediately proceed to  
20 adopt regulations necessary to implement the changes made by this Act. The regulations take  
21 effect under AS 44.62 (Administrative Procedure Act), but not before July 1, 2010.

22 \* **Sec. 21.** The uncodified law of the State of Alaska is amended by adding a new section to  
23 read:

24 REVISOR'S INSTRUCTIONS. The revisor of statutes is instructed to change the  
25 catch line of AS 41.06.030 from "Reservoir management" to "Unitization."

26 \* **Sec. 22.** Section 20 of this Act takes effect immediately under AS 01.10.070(c).

27 \* **Sec. 23.** Except as provided in sec. 22 of this Act, this Act takes effect July 1, 2010.