Chapter 522

1981 REPLACEMENT PART

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Geothermal Resources

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GENERAL PROVISIONS

522.005 Definitions. As used in this chapter, unless the context requires otherwise

(1) "Board" means the governing board of the State Department of Geology and Mineral Industries

(2) "By-product" means any mineral or minerals, exclusive of helium or of oil, hydrocarbon gas or other hydrocarbon substances, which are found in solution or in association with geothermal resources and which have a value of less than 75 percent of the value of the geothermal resource or are not, because of quantity, quality, or technical difficulties in extraction and production, of sufficient value to warrant extraction and production by themselves

(3) "Completed geothermal well" means a well producing geothermal resources for which the operator has received the department's written assurance that the manner of drilling of and producing geothermal resources from the well are satisfactory

(4) "Cooperative agreement" means an agreement or plan of development and operation for the production or utilization of geothermal resources in which separate ownership units independently operate without allocation of production

(5) "Correlative rights" means the right of each owner in a geothermal area to obtain that owner's just and equitable share of the underlying geothermal resource, or an economic equivalent of that share of the resource, produced in a manner and in an amount that does not injure the reservoir to the detriment of others

(6) "Department" means the State Department of Geology and Mineral Industries

(7) "Drilling" includes drilling, redrilling and deepening of a geothermal well

(8) "Enhanced recovery" means the increased recovery from a reservoir achieved by artificial means or by the application of energy extrinsic to the reservoir The artificial means include, but are not limited to, reinjection of hot brine, fluid or water into a reservoir

(9) "Geothermal area" means any parcel of land that is, or reasonably appears to be, underlaid by geothermal resources

(10) "Geothermal reinjection well" means any well or converted well constructed to dispose of geothermal fluids derived from geothermal resources into an underground reservoir

(11) "Geothermal resources" means the natural heat of the earth, the energy, in whatever form, below the surface of the earth present in, resulting from, or created by, or which may be extracted from, the natural heat, and all minerals in solution or other products obtained from naturally heated fluids, brines, associated gases, and steam, in whatever form, found below the surface of the earth, exclusive of helium or of oil, hydrocarbon gas or other hydrocarbon substances, but including, specifically

(a) All products of geothermal processes, embracing indigenous steam, hot water and hot brines,

(b) Steam and other gases, hot water and hot brines resulting from water, gas, or other fluids artificially introduced into geothermal formations,

(c) Heat or other associated energy found in geothermal formations, and

(d) Any by-product derived from them

(12) "Geothermal well" includes any excavation made for producing geothermal resources and any geothermal reinjection well as defined in subsection (10) of this section

(13) "Land" means both surface and mineral rights

(14) "Operator" means the person

(a) Who possesses the legal right to drill a geothermal well,

(b) Who has obtained a drilling permit pursuant to ORS 522 135, or

(c) Who possesses the legal right to operate a completed geothermal well as defined in subsection (3) of this section or who has been granted the authority to operate the well by that person

(15) "Prospect well" includes any well drilled as a geophysical test well, seismic shot hole, mineral exploration drilling, core drilling or temperature gradient test well, less than 2,000 feet in depth, and drilled in prospecting for geothermal resources "Prospect well" does not include a geothermal well as defined in subsection (12) of this section

(16) "Reservoir" means an aquifer or combination of aquifers or zones containing a common geothermal or ground water resource "Reservoir" includes, but is not limited to, a hot dry rock conductive system

(17) "Royalty interest" means a right or interest in geothermal resources produced from land or in the proceeds of the first sale of those resources

(18) "Unit agreement" means an agreement or plan of development and operation developed

under the provisions of ORS 273 775, 308 370, 522 015, 522 405 to 522 545, 522 815, 522 990 and this section for the production or use of geothermal resources in separately owned interests as a single consolidated unit and which provides for the allocation of costs and benefits

(19) "Unit area" means the area described in a unit agreement which constitutes the land subject to development under the agreement

(20) "Unit operator" means the person designated in the unit agreement to manage and conduct the operation involving unitized land

(21) "Unit production" means all geothermal resources produced from a unit area from the effective date of a unit agreement approved by the board under ORS 522 405

(22) "Waste" means any physical waste, including, but not limited to, underground waste resulting from the inefficient, excessive or improper use or dissipation of reservoir energy or resulting from the location, spacing, drilling, equipping, operation or production of a geothermal resource well in such a manner that reduces or tends to reduce the ultimate economic recovery of the geothermal resources within a reservoir, and surface waste resulting from the inefficient storage of geothermal resources and the location, spacing, drilling, equipping, operation or production of a geothermal resource well in such a manner that causes or tends to cause the unnecessary or excessive surface loss or destruction of geothermal resources released from a reservoir

(23) "Working interest" means an interest in geothermal resources or in land containing them which is held under a lease, operating agreement, fee title or otherwise and under which, except as otherwise provided in a unit or cooperative agreement, the owner of the interest has the right to explore for, develop, produce or utilize the resources "Working interest" does not include a right delegated to a unit operator as such by a unit agreement [1975 c 552 §3 1979 c 163 §1, 1981 c 588 §3, 1981 c 694 §4]

522 010 [1971 c 776 §2, 1973 c 388 §1 repealed by 1975 c 552 §55]

522.015 Policy. (1) The Legislative Assembly hereby finds and declares that

(a) The people of the State of Oregon have a direct and primary interest in the development of geothermal resources situated in this state

(b) The State of Oregon, through the State Department of Geology and Mineral Industries, shall control the drilling, redrilling and deepening of wells for the discovery and production of geothermal resources so that such wells will be constructed, operated, maintained and abandoned in the manner necessary to safeguard the life, health, property and welfare of the people of this state, to safeguard the air, water and other natural resources of this state, and to encourage the maximum economic recovery of geothermal resources therefrom.

(2) It is the policy of the Legislative Assembly that this chapter be administered

(a) To prevent damage to and waste of geothermal resources,

(b) To prevent interference with or damage to waters used or to be used for beneficial purposes that may result from improper drilling, operation, maintenance or abandonment of geothermal or prospect wells,

(c) To supervise the drilling, operation, maintenance and abandonment of geothermal or prospect wells in a manner permitting the operator to utilize all methods known to the industry for the purpose of increasing the ultimate economic recovery of geothermal resources, that are suitable, and consistent with protection of the air, water and other natural resources of the state, and

(d) To provide for the development, management and production of geothermal resources in a manner that minimizes state involvement, enhances resource recovery, prevents waste, maximizes economic development and protects correlative rights of the resource owners [Formerly 522 050, 1981 c 588 §4]

522.019 Injection of geothermal fluids; department rules; water pollution control facilities permit. (1)(a) In order to accomplish the policy of ORS 522 015 all geothermal fluids derived from geothermal resources shall be reinjected into the same reservoir from which withdrawn unless it is determined by the department that these policies and the public interest require other disposal of the fluids

(b) Subject to the determination in paragraph (a) of this subsection, injection into other reservoirs or disposal by other means may be allowed by the department in specific instances where it is shown that such action is consistent with the policies cited in this section Disposal by other means may include any secondary use of geothermal fluid after the primary use of such fluid for electrical power generation or for other direct application of the heat or other associated energy contained in such fluids or for by-product extraction Secondary uses may include, but shall not be limited to, use of condensate resulting from electrical power plant operations for plant-

cooling purposes, or use of such geothermal fluid for agricultural, commercial or industrial purposes

(2) The State Department of Geology and Mineral Industries shall adopt rules which govern the disposal by reinjection or other means of geothermal fluids derived from geothermal resources from wells of 250 or more degrees Fahrenheit bottom hole temperature or wells 2,000 or more feet deep The rules shall include standards whereby contamination may be determined, construction standards for reinjection wells, testing procedures for identifying aquifers, standards and procedures for determining whether adjacent aquifers are being degraded by the reinjection process, guidelines for conservation of the resource, criteria for evaluating reservoirs or zones for geothermal fluid disposal and requirements for prior approval of all geothermal fluid reinjection proposals

(3) A water pollution control facilities permit shall be obtained from the Department of Environmental Quality under ORS 468 740 before reinjection is commenced. The Department of Environmental Quality may, by agreement with the State Department of Geology and Mineral Industries, waive this requirement for reinjection into the reservoir from which the fluid came where adequate standards and tests have been adopted to insure the fluid and its residues are uncontaminated [1979 c 163 §4, 1979 c 547 §1]

522 020 [1971 c 776 §32, repealed by 1975 c 552 §55]

522.025 Application. (1) The provisions of this chapter relating to the location and drilling of any well for the production of geothermal resources do not apply to any wells producing geothermal resources on July 1, 1975, or wells, other than prospect wells, drilled to a depth no greater than 2,000 feet where

(a) The geothermal fluids produced are of less than 250 degrees Fahrenheit bottom hole temperature, or

(b) Such fluids have been appropriated pursuant to ORS 537 505 to 537 795

(2) The provisions of this chapter relating to regulation of production of geothermal resources from a geothermal reservoir apply only to wells with a bottom hole temperature of at least 250 degrees Fahrenheit

(3) If the bottom hole temperature of a well that was initially at least 250 degrees Fahrenheit falls below 250 degrees Fahrenheit, the State Geologist and the Water Resources Director, after consulting with the well owner, shall determine the agency with regulatory responsibility for that specific well This determination shall be documented in writing and shall supersede a determination made under subsection (1) or (2) of this section [1975 c 552 §4, 1981 c 589 §1]

522.035 Ownership rights. Ownership rights to geothermal resources shall be in the owner of the surface property underlain by the geothermal resources unless such rights have been otherwise reserved or conveyed However, nothing in this section shall divest the people or the state of any rights, title or interest they may have in geothermal resources [1975 c 552 §21]

522.045 Abandoned well; jurisdiction. Any well drilled under authority of this chapter from which usable geothermal resources cannot be derived, or the owner or operator has no intention of deriving usable geothermal resources, shall be plugged and abandoned as provided in this chapter or, upon the operator's written application to the department and with the concurrence and approval of the Water Resources Director, jurisdiction over the well may be transferred to the Water Resources Director and, in such case, the well shall no longer be subject to the provisions of this chapter but shall be subject to any applicable laws and rules relating to wells drilled for appropriation and use of ground waters If an application is made to transfer jurisdiction, a copy of all logs, records, histories and descriptions shall be provided to the Water Resources Director by the applicant [1975 c 552 §4e]

522 050 [1971 c 776 §1, 1975 c 552 §1, renumbered 522 015]

PROSPECT WELLS

522.055 Permit; application; fee. (1) No person shall engage in drilling a prospect well without first obtaining a permit issued under the authority of the State Geologist and without complying with the conditions of such permit

(2) An application to drill prospect wells shall contain such information as the department may require, and shall be accompanied by a fee set by the department but not to exceed $200 to cover all prospect wells included within the application [1975 c 552 §4a]

522.060 [1971 c 776 §34, repealed by 1975 c 552 §55]

522.065 Circulation of application to state agencies; suggested conditions to permit; time limit for permit action. (1) Upon receipt of an application to drill prospect wells, the State Geologist shall circulate copies of the application to the Water Resources Director, the Director of the Department of Environmental

Quality, the Director of the Department of Land Conservation and Development, and the Director of the Division of State Lands

(2) Any public agency desiring to suggest conditions under which a permit should be granted shall provide such information to the department within 15 days of receipt of the copy of the application

(3) Except as provided in ORS 522 075, within 30 days of receipt of an application to drill prospect wells, the State Geologist shall grant a permit to drill, subject to such conditions as the State Geologist may impose Included among the conditions shall be provision for the proper and safe abandonment of each prospect well [1975 c 552 §4b]

522 070 [1971 c 776 §7 repealed by 1975 c 552 §55]

522.075 Bond or security; execution; cancellation; waiver. (1) No permit for prospect wells shall be granted until the applicant has filed with the department a bond or security deposit in the sum of not less than $5,000 for each hole to be drilled or a blanket bond in the amount of $25,000 for all prospect wells which are included within the application and to be drilled by the applicant

(2) The bond or deposit shall be conditioned upon compliance with the requirements of this chapter, rules adopted and orders issued pursuant thereto, which shall secure the state against all losses, charges and expenses incurred by it in obtaining such compliance

(3) The bond provided for in subsection (1) of this section shall be executed by the applicant, as principal, and shall meet such conditions as the board by rule may establish

(4) With the consent of the board, any bond submitted as required by this section may be terminated and canceled and the surety be relieved of all obligations thereunder However, the board shall not consent to the termination and cancellation of any bond until the prospect wells described by such bond have been properly and safely abandoned pursuant to the abandonment plan required by the permit or another valid bond for the prospect wells has been submitted and approved by the board

(5) For those applications concerning prospect wells on federal lands, the board may waive the requirements of subsections (1) to (4) of this section upon receipt of suitable proof of compliance by the applicant with federal bond requirements which would, in the opinion of the board, be unnecessarily duplicated by the requirements of this section [1975 c 552 §4c, 1977 c 87 §1, 1979 c 163 §2]

522.085 Report certifying completion of abandonment plan. Upon completion of all drilling and testing undertaken pursuant to an application to drill prospect wells, the applicant shall file with the State Geologist a report certifying the completion of the abandonment plan required by the permit [1975 c 552 §4d]

522 110 [1971 c 776 §11, 1973 c 388 §2 repealed by 1975 c 552 §55]

GEOTHERMAL WELLS

522.115 Permit; application; fee. (1) No person shall engage in the drilling or operating of any geothermal well without first obtaining a permit issued under the authority of the State Geologist, and without complying with the conditions of such permit

(2) An application for a permit shall contain

(a) The location and elevation of the floor of the proposed derrick

(b) The number or other designation approved by the department by which the well shall be known

(c) The applicant's estimate of the depths to be drilled

(d) The nature and character of the geothermal resource sought

(e) Such other information as the board by rule may require

(3) An application shall be accompanied by a nonrefundable fee of $100.

(4) All fees collected by the department under this section shall be deposited with the State Treasurer and are continuously appropriated to the department for the administration of chapter 552, Oregon Laws 1975 [1975 c 552 §5, 1977 c 87 §2]

Note The Legislative Counsel has not pursuant to 173 160, undertaken to substitute specific ORS references for the words "this Act" in 522 115 or 522 135 Chapter 552, Oregon Laws 1975, enacted into law and amended the ORS sections which may be found by referring to the 1975 Comparative Section Table located in volume 6A of Oregon Revised Statutes

522.120 [1971 c 776 §§12, 13, 1973 c 388 §3, repealed by 1975 c 552 §55]

522.125 Circulation of application to state agencies; suggested conditions to permit. (1) Upon receipt of an application for a permit to drill or operate a geothermal well, the department shall circulate copies of the application to the Water Resources Director, the State Fish and Wildlife Director, the Director of the Department of Environmental Quality, the Administrator of the Parks and Recreation Divi-

sion, the Director of the Department of Land Conservation and Development, the Director of the Department of Energy, the Director of the Division of State Lands and the governing body of the county and the geothermal heating district in which the well will be located

(2) Any public agency desiring to suggest conditions under which a permit should be granted shall provide such information to the department within 30 days of receipt of the copy of the application [1975 c 552 §6, 1981 c 694 §5]

522 130 [1971 c 776 §14 repealed by 1975 c 552 §55]

522.135 Permit; time limit for action; grounds for issuance; conditions; construction of permit. (1) Within 45 days after receipt of the application, the State Geologist shall by order issue, deny, suspend, modify, revoke or not renew a permit pursuant to this chapter and ORS 183 310 to 183 550 except that appeal of any order issued pursuant to this section shall be made to the governing board of the State Department of Geology and Mineral Industries before any appeal under ORS 183 480 is allowed

(2) The State Geologist may issue the permit if, after receipt of comments from the agencies referred to in ORS 522 125, the State Geologist determines that issuance thereof would be consistent with the purposes set forth in ORS 468 280, 468 710 and 537 525, rules adopted pursuant to ORS 468 725, and the purposes of this chapter

(3) If the State Geologist issues a permit pursuant to this section, the State Geologist shall impose such conditions as the State Geologist considers necessary to carry out the purposes set forth in ORS 468 280, 468 710 and 537.525, rules adopted pursuant to ORS 468 725, and the purposes of this chapter The State Geologist shall include in the permit a statement that issuance thereof does not relieve any person from any obligation to obtain a permit under ORS 468.725 or 468 730

(4) The State Geologist shall incorporate into the permit requirements

(a) Any conditions made by the Water Resources Director necessary to comply with the purposes set forth in ORS 537 525, and

(b) Any conditions made by the Department of Environmental Quality necessary to comply with the purposes set forth in ORS 468 280 and 468 710

(5) A drilling, redrilling or deepening operation must begin within 180 days after the date of permit issuance or the permit shall expire However, the State Geologist may extend the permit for a reasonable period not to exceed 180 days beyond the initial 180-day period

(6) Nothing in chapter 552, Oregon Laws 1975, shall be construed to excuse an operator of a geothermal well from complying with the provisions of the Federal Water Pollution Control Act amendments of 1972 (Public Law 92-500) or ORS 468 730 or to dilute the authority of the Department of Environmental Quality to issue National Pollution Discharge Elimination Systems Permits [1975 c 552 §7, 1981 c 694 §6]

Note See note under 522 115

522 140 [1971 c 776 §6 1973 c 388 §4 repealed by 1975 c 552 §55]

522.145 Bond or security; execution; cancellation; waiver. (1) Except as waived by rule of the board, no permit shall be granted until

(a) The applicant has filed with the department a bond or security deposit in the sum of $10,000 for each well to be drilled, or

(b) The applicant to drill more than one geothermal well has filed with the department a bond or security deposit in the sum of $50,000 for all wells to be drilled

(2) The bond or deposit shall be conditioned upon compliance with the requirements of this chapter, rules adopted and orders issued pursuant thereto, which shall secure the state against all losses, charges and expenses incurred by it in obtaining such compliance

(3) The bonds provided for in subsection (1) of this section shall be executed by the applicant, as principal, and shall meet such conditions as the board by rule may establish

(4) With the consent of the board, any bond submitted as required by this section may be terminated and canceled and the surety be relieved of all obligations thereunder However, the board shall not consent to the termination and cancellation of any bond until the geothermal well described by such bond has been

(a) Lawfully abandoned as a dry hole, or

(b) Properly completed, has ceased production and been lawfully abandoned

(5) For those applications concerning geothermal wells on federal lands, the board may waive the requirements of subsections (1) to (4) of this section upon receipt of suitable proof of compliance by the applicant with federal bond requirements which would, in the opinion of the board, be unnecessarily duplicated by the requirements of this section [1975 c 552 §8, 1977 c 87 §3, 1981 c 694 §7]

522 150 [1971 c 776 §8, repealed by 1975 c 552 §55]

522.155 Liability for failure to protect ground water; standards for protection of

ground and surface water. (1) In addition to any other liability of the operator of a geothermal well, the operator shall be liable to any person or public agency that sustains damages from failure of the operator to comply with a condition in a permit requiring the operator to provide for the protection of ground water in the area affected by the well

(2) The board shall adopt by rule standards for blowout prevention, equipment and casing design and removal, and any other procedures necessary to shut out detrimental substances from strata containing ground or surface water usable for beneficial purposes [1975 c 552 §9]

522.160 [1971 c 776 §18, repealed by 1975 c 552 §55]

522.165 Location, number or designation change; alteration of casing. (1) The location, number or designation specified for any geothermal well in a permit issued pursuant to ORS 522 135 shall not be changed without first obtaining written consent from the department

(2) No operator shall alter in any manner the casing of a geothermal well without notifying the department and obtaining its approval [1975 c 552 §10]

522 170 [1971 c 776 §5, repealed by 1975 c 552 §55]

522.175 Abandonment; proceedings against operator for unlawful abandonment. (1) No person shall abandon a geothermal well without first obtaining approval of the department

(2) A geothermal well shall be considered lawfully abandoned when the operator has conformed to ORS 522 245 and to rules adopted by the board designed to

(a) Protect underground and surface water usable for beneficial purposes from pollution resulting from infiltration or addition of any deleterious substance,

(b) Prevent the escape of all fluids to the surface;

(c) Close the surface aperture of the well, and

(d) Remove all surface equipment except that necessary to maintain permanent closure of the well

(3) When the operator has violated subsection (1) or (2) of this section or ORS 522 225, or when the department has issued a written disapproval of abandonment, the board may proceed against the operator and surety of the operator as provided for in ORS 522 145 and may bring suit pursuant to ORS 522 810 [1975 c 552 §11, 1981 c 694 §8]

522 180 [1971 c 776 §19, repealed by 1975 c 552 §55]

522 185 [1975 c 552 §13, repealed by 1981 c 694 §12]

522 190 [1971 c 776 §20, repealed by 1975 c 552 §55]

522.195 Monthly production statement. Except as excluded by rule adopted by the board, the operator of any completed geothermal well shall file with the department a monthly statement of the geothermal resources production from such well during the preceding calendar month [1975 c 552 §14]

522 200 [1971 c 776 §28, repealed by 1975 c 552 §55]

522.205 Transfer or purchase of well; notice; application; fee; notice by landowner of transfer or purchase. (1) Except as excluded from the provisions of this section by rule of the board, any prospective operator of a geothermal well shall notify the department in such form as the department may direct of the purchase, assignment, transfer, conveyance or exchange of such well within 15 days of the purchase and shall accompany such notice with an application for transfer of the permit for the particular well The fee for transfer of a permit is $25

(2) Any buyer of land on which a geothermal well is located shall notify the department of the purchase, assignment, transfer, conveyance or exchange of the land upon which such well is situated within 15 days of such purchase [1975 c 552 §15]

522 210 [1971 c 776 §31, repealed by 1975 c 552 §55]

522.215 Suspension of drilling or operation; application; terms; extension; presumption of abandonment; unlawful abandonment; notice; proceedings against operator. (1) No operator shall suspend drilling or operation of a geothermal well without obtaining permission from the department

(2) The department may authorize an operator to suspend for a specific period operations or remove equipment from an uncompleted geothermal well upon such terms as the department may specify, upon written application of the operator and an affidavit showing good cause therefor

(3) Within a period of six months from the ending date specified for such suspension, the operator may make written application for an extension of suspension, and file it with an affidavit showing good cause for such an extension Upon a finding that the extension is merited, the board may extend the suspension for an additional specific period

(4) If, after suspension, operations are not resumed by the operator within six months from the ending date specified for the suspension or

extension thereof, an intention to abandon and unlawful abandonment shall be presumed

(5) Whenever an operator whose operations have been suspended fails to comply with such terms as the department may specify in its authorization, the geothermal well shall be presumed unlawfully abandoned A well shall also be deemed unlawfully abandoned, if, without notice to the department, any drilling or producing equipment is removed

(6) An unlawful abandonment shall be declared by order of the board, and written notice thereof shall be mailed by registered mail both to such operator at the last-known post-office address of the operator, to the registered agent of the operator, if any, and to the operator's sureties

(7) After declaration of unlawful abandonment, the board may proceed against the operator and the surety of the operator as provided for in ORS 522 145 and may bring suit pursuant to ORS 522 810 [1975 c 552 §16, 1981 c 694 §9]

522 220 [1971 c 776 §21, repealed by 1975 c 552 §55]

522.225 Notice of intent to abandon. (1) Before commencing any operation to abandon a geothermal well, the operator shall give notice to the department of the intention to abandon the well and the date upon which the work of abandonment will begin

(2) Such notice shall be given at least 24 hours before the commencement of abandonment operations and shall indicate

(a) The condition of the well,

(b) The proposed method of the abandonment operation, and

(c) Any additional information that may be required by the department [1975 c 552 §17]

522 230 [1971 c 776 §23, repealed by 1975 c 552 §55]

522.235 Conditions precedent to abandonment. Before the proposed date upon which the work of abandonment will begin, the department shall furnish the operator with

(1) Approval to commence the abandonment operation,

(2) Conditional approval to commence the abandonment operation, stating what specific work or tests will be necessary before approval of the abandonment operation will be given, or

(3) A report stating what specific information is required to be furnished by the operator to the department before the department may take action upon the proposed abandonment operation [1975 c 552 §18]

522 240 [1971 c 776 §9, repealed by 1975 c 552 §55]

522.245 Department approval of abandonment; report by operator; effect of failure to comply; proceedings against operator. (1) A representative of the department may be present during any abandonment operation If the representative determines that the abandonment is satisfactory, the representative shall approve the abandonment of the well

(2) Within 30 days after the completion of abandonment of any geothermal well, the operator of the well shall make a written report of all work done with respect to the abandonment Within 10 days after the receipt of such report, the department shall furnish the operator with a written final approval of abandonment, or a written disapproval of abandonment setting forth the conditions upon which the disapproval is based

(3) Failure to abandon in accordance with the approved method of abandonment, failure to submit to the department any notice or report required by this chapter, or failure to furnish the department with any required information shall constitute sufficient grounds for disapproval of the abandonment of such well

(4) When the department has issued a written disapproval of abandonment, the board may proceed against the operator and the surety of the operator as provided for in ORS 522 145 or may bring suit pursuant to ORS 522 810 [1975 c 552 §19, 1981 c 694 §10]

522 250 [1971 c 776 §10, repealed by 1975 c 552 §55]

522.255 Resolution of conflicts between geothermal and water uses. If interference between an existing geothermal well permitted under this chapter and an existing water appropriation permitted under ORS chapter 537 is found by either the State Geologist or the Water Resources Director, the State Geologist and the Water Resources Director shall work cooperatively to resolve the conflict and develop a cooperative management program for the area In determining what action should be taken, they shall consider the following goals

(1) Achieving the most beneficial use of the water and heat resources,

(2) Allowing all existing users of the resources to continue to use those resources to the greatest extent possible, and

(3) Insuring that the public interest in efficient use of water and heat resources is protected [1981 c 589 §8]

522 260 [1971 c 776 §30, repealed by 1975 c 552 §55]

ADMINISTRATION

522.275 Administration by State Geologist. Subject to policy direction by the board,

the State Geologist shall administer this chapter, the rules and orders made pursuant thereto, and supervise the department in carrying out the provisions of this chapter [1975 c 552 §23]

522.305 Rules. In accordance with applicable provisions of ORS 183 310 to 183 550, the board may make reasonable rules necessary for the administration of this chapter [1975 c 552 §22]

522 310 [1971 c 776 §24, repealed by 1975 c 552 §55]

522.315 Final order of department; delivery to operator. Whenever the department gives any written direction concerning any geothermal well and the operator requests in writing that a final order for purposes of ORS 183 310 to 183 550 be made, the department shall, within 15 days after receipt of the notice, deliver such final written order to the operator [1975 c 552 §24]

522 320 [1971 c 776 §§25, 26, repealed by 1975 c 552 §55]

522.325 Compliance with final order; appeal. (1) The operator of any geothermal well shall within 15 days from the date of the service of any order, either comply with the order or file with the department a written statement that the order is not acceptable, and the reasons therefor, and the statement shall constitute an appeal from such order to the board

(2) Any final written order of the board may be appealed in the manner provided in ORS 183 310 to 183 550 for appeals from final orders in contested cases. [1975 c 552 §25]

522 330 [1971 c 776 §27, repealed by 1975 c 552 §55]

WELL RECORDS

522.355 Records of well; contents; drill cutting and core samples. (1) The operator of any geothermal well shall keep, or cause to be kept, a careful and accurate log, core record and history of the drilling of the well

(2) The log referred to in subsection (1) of this section shall show the character and depth of each formation encountered in the drilling of the well, the amount, size and weight of casing used, and the location, depth and temperature of water-bearing strata, including the temperature, chemical composition and other chemical and physical characteristics of fluid encountered from time to time, so far as determined

(3) The core record referred to in subsection (1) of this section shall show the depth, character and fluid content of cores obtained, so far as determined from the study and analysis thereof

(4) The history referred to in subsection (1) of this section shall show the location and amount of sidetracked casings, tools or other material, the depth and quantity of cement in cement plugs, the shots of dynamite or other explosives used, the results of production and other tests during drilling operations, and completion data

(5) The log referred to in subsections (1) and (2) of this section shall be kept in the local office of the operator and, together with the tour reports of the operator, shall be subject, during business hours, to inspection by the board, or department

(6) The operator of any geothermal well shall, in addition to furnishing the log, records, and tests required by this section, collect representative drill cuttings The operator shall additionally, in the event cores are taken, collect representative core samples The drill cuttings and core samples shall be filed with the department promptly upon completion or upon its written request, and upon the abandonment or upon suspension of operations for a period of at least six months [1975 c 552 §26, 1977 c 87 §4]

522.365 Filing record with department; exemption from disclosure. (1) Each operator of any geothermal well or the designated agent of the operator shall file with the department a copy of the log, history and core record, or any portion thereof, promptly upon completion, or upon the written request of the department at any time after the commencement of the work of drilling any geothermal well, and upon the abandonment or upon suspension of operations for a period of at least six months

(2) For a period of four years after the receipt of any log, history, core record, or any portion thereof, such record shall be exempt from disclosure as a trade secret pursuant to ORS 192 501 unless the operator gives approval to release the data [1975 c 552 §27]

UNITIZATION OF GEOTHERMAL RESOURCE AREA

522.405 Unitization; development of unit agreement. (1) When two or more separately owned tracts of land are within an area under which a reservoir is located or reasonably believed to be located, or when there are separately owned interests in all or part of such an area, the board, upon its own motion may or upon the application of an interested person or state or local governmental governing body, special district or agency, shall review the need for unitization of the area The board by rule or order may

require the development of a unit agreement for the geothermal resource area if it finds

(a) Unitized management, operation and development of the geothermal resources in a reservoir is necessary to increase the ultimate recovery of the resources,

(b) The application of unitized methods of operation will prevent waste and aid efficient production and utilization of the resource, or

(c) Unitization and the unitized method of operation are in the public interest and reasonably necessary to protect the correlative rights of owners

(2) When the board requires the development of a unit agreement under this section, it shall encourage the development of a voluntary agreement between the affected parties In the absence of a voluntary agreement, the board shall itself develop or cause to be developed a unit agreement that satisfies the provisions of ORS 273 775, 308 370, 522 005, 522 015, 522 405 to 522 545, 522 815 and 522 990 In adopting a rule or entering an order for a unit agreement, the board shall consider any plant dedicated area agreement in effect and shall not contravene or interfere with that agreement unless it finds that a term or condition of that agreement violates the policies stated in ORS 522 015 The board shall require the development of the resource in accordance with a proposed unit agreement if it finds that the agreement conforms with the provisions of ORS 273 775, 308 370, 522 005, 522 015, 522 405 to 522 545, 522 815 and 522 990

(3) The development of a unit agreement under subsections (1) and (2) of this section shall be conducted as a rulemaking proceeding in accordance with ORS 183 310 to 183 550 unless an interested party requests that it be conducted as a contested case in accordance with ORS 183 310 to 183 550 In either event, notice shall be given in accordance with the applicable provisions of ORS 183 310 to 183 550

(4) As used in this section, "plant dedicated area agreement" means a contractual relationship in geothermal energy development between a geothermal resource owner and a customer which makes a specific surface area and related resource base available exclusively to that customer [1981 c 588 §8]

522 410 [1971 c 776 §3, repealed by 1975 c 552 §55]

522.415 Unit operation plan. A voluntary or board-sponsored unit agreement developed in response to a rule adopted or an order issued under ORS 522 405 shall provide a unit operation plan that includes

(1) A description of the geothermal reservoir and the overlaying land to be operated as a unit

(2) A statement of the nature of the operations contemplated

(3) A provision for credits and charges to be made in the adjustment among the owners in a unit area for their respective investments in geothermal wells, prospect wells, machinery, materials and equipment used in the unit operation

(4) The division of interest or a formula for apportionment of unit production among the separately owned tracts within the unit area which reasonably permits a person or state or local governing body, special district or agency otherwise entitled to share in or benefit by production from a tract to receive an equitable and reasonable share of the unit production or other benefit An equitable and reasonable share of unit production is measured by the proportion the value of the separately owned tract for geothermal resources recovery bears to the value of the unit for that purpose, taking acreage into account

(5) Provisions which state how the costs will be paid, how unit production is to be measured and when, how and by whom unit production is to be allocated The provision shall provide that unit production due to an owner who does not pay that owner's share of the cost of unit operation or that owner's interest may be sold and the proceeds applied to the cost

(6) A provision, if necessary, for making financing available to any person or state or local governing body, special district or agency that wishes to obtain financing The provision shall allow a reasonable interest charge for the service payable out of that respective share of production

(7) A provision for the supervision and conduct of the unit operation Each person or state or local governing body, special district or agency shall have a vote on the provision with a weight corresponding to the percentage of the cost of unit operation chargeable against that respective interest

(8) The time when the unit operation shall begin and the manner and circumstances under which the unit operation shall terminate

(9) Provisions, if necessary, for the protection of preexisting water users within the unit area and for administration of future water development from the reservoir covered by the unit agreement [1981 c 588 §9]

522 420 [1971 c 776 §35, repealed by 1975 c 552 §55]

522.425 Provisions in rule or order requiring unit operation. Any board rule or order providing for the unit operation of a geothermal resource area may include provisions for

(1) Division of a reservoir into zones,

(2) Establishment of spacing units, including a description of their location, size and shape,

(3) The integration of separately owned tracts or interests within a spacing unit, the development and operation of the spacing unit and the sharing of production,

(4) The protection of existing and future beneficial uses of water,

(5) Maintenance of the renewability of geothermal resources and any other natural resources, and

(6) Any additional provisions the board considers necessary for carrying out the provisions of this chapter or for protection of the public health, safety and welfare [1981 c 588 §10]

522 430 [1971 c 776 §36, repealed by 1973 c 388 §8]

522.435 Rule, order to supersede previous board action. Any rule adopted or order entered under ORS 522 405 shall supersede any right or privilege previously granted by the board to the same person or state or local governing body, special district or agency with respect to the reservoir. [1981 c 588 §11]

522 440 [1971 c 776 §38, repealed by 1973 c 388 §8]

522.445 Condition to effectiveness of unitization plan and unit agreement. (1) No board rule or order which creates a unit and prescribes a unitization plan and no applicable unit agreement shall be effective unless the plan of unit operation required by the board under ORS 522 405 has been approved in writing by

(a) The operators who will be required to pay under the board's rule or order at least 75 percent of the unit operation costs, and

(b) The persons or state or local governing body, special district or agency that, at the time of the board rule or order, own record legal title to 75 percent of the royalties payable with respect to the geothermal resource produced from the unit area

(2) If the royalty owners who own the required percentage interest in the unit area and the operators have not approved the unitization plan within six months of the date on which the rule or order creating the unit is adopted or entered, that rule or order shall become ineffective and shall be considered to have been repealed or revoked by the board [1981 c 588 §12]

522 450 [1971 c 776 §37, repealed by 1973 c 388 §8]

522.455 Rehearing on rule or order; judicial review. (1) Any person or state or local governing body, special district or agency with an interest in geothermal resources within an area to be designated as a unit that is adversely affected by any rule or order of the board may apply to the board for a rehearing within 30 days after the adoption of the rule or entry of the order The board shall decide within 45 days after the filing date of the rule or order whether to grant a rehearing If granted, the rehearing shall be held without undue delay Failure to act within the 45-day period constitutes approval of the rehearing request

(2) Any person or state or local governing body, special district or agency that holds a working interest in geothermal resources in a designated or proposed unit area that is adversely affected by any rule promulgated or order entered by the board may obtain judicial review of the rule or order pursuant to ORS 183 310 to 183 550 [1981 c 588 §13]

522 460 [1971 c 776 §4, repealed by 1975 c 552 §55]

522.465 Appointment of unit operator. As part of a proposed rule or order designating a unit area and approving a unitization plan or as part of a unit agreement, the working interest owners under the agreement, within the time specified by the board, shall appoint the unit operator If the working interest owners do not make the appointment within the specified time, the board shall appoint the unit operator [1981 c 588 §14]

522 470 [1971 c 776 §22, 1973 c 388 §5, repealed by 1975 c 552 §55]

522.475 Board review of disputes over unit operation; appeal. (1) Any disagreement with respect to the unit operation between persons or between persons and state or local governing bodies, special districts or agencies owning any interest in the geothermal resources in a unit area, or between persons or state and local governing bodies, special districts or agencies owning an interest in geothermal resources in a unit area and a unit operator, including a dispute over replacement of a unit operator, may be submitted to the board for its review and decision

(2) The board decision under this section may be appealed to the Court of Appeals The appeal must be filed within 60 days of the date of the board's decision [1981 c 588 §15]

522 480 [1971 c 776 §33, 1973 c 388 §6, repealed by 1975 c 552 §55]

522.485 Amendment of unitization plan. Subject to the same conditions and limita-

tions provided with respect to the creation of a unit, the following may occur

(1) A unit area may be enlarged to include adjoining portions of the same geothermal resource area, including another unit area, and a new unit created for the unitized management, operation and development of the enlarged unit area, or

(2) The unitization plan may be otherwise amended, including, but not limited to, an amendment reducing unit area size [1981 c 588 §16]

522.495 Presumptions regarding conduct of operation. Any operation on any portion of the unit area, including, but not limited to, the drilling or operation of a well, is considered for all purposes the conduct of the same operation on the whole unit area The portion of unit production allocated to a separately owned tract in a unit area is considered for all purposes to actually have been produced from a well drilled upon that tract An operation conducted pursuant to a board rule adopted or order issued under ORS 522 405 constitutes a fulfillment of all express or implied obligations under each lease or contract covering lands in the unit area [1981 c 588 §17]

522.505 Unauthorized operation in unit area prohibited; exemption. (1) The operation of a geothermal well in a unit area by anyone other than by a person or state or local governing body, special district or agency acting under the unit's authority shall be unlawful That operation is prohibited from the effective date of the board rule or order creating the unit and prescribing the unitization plan or the unit agreement, except in the manner and to the extent provided in the unitization plan or agreement

(2) The provisions of ORS 273 775, 308 370, 522 005, 522 015, 522 405 to 522 545, 522 815 and 522 990 shall not affect the ability of a ground water user to exercise a water right that existed before the initiation of a unit agreement [1981 c 588 §18]

522 510 [1971 c 776 §15, 1973 c 794 §24, repealed by 1975 c 552 §55]

522.515 When agreement or plan held not to violate state securities or trade law. (1) A unit agreement or unitization plan under a board rule adopted or order issued pursuant to ORS 522 405 shall not be held or construed to violate ORS chapter 59 or any state statute relating to trusts, monopolies or contracts and combinations in restraint of trade if the board has made a finding that the agreement is in the public interest for the protection of correlative rights and is necessary to enhance recovery of geothermal resources or to prevent waste

(2) Any voluntary unit agreement or plan for unitization between owners, holders of working interests and holders of royalty interests for the exploration, development and operation of a unit area shall not be held or construed to violate ORS chapter 59 or any state statute relating to trusts, monopolies or contracts and combinations in restraint of trade if the agreement is approved by the board as being in the public interest for the protection of correlative rights and necessary to enhance recovery of geothermal resources or to prevent waste

(3) A voluntary agreement may be submitted to the board for approval as being in the public interest for the protection of correlative rights and necessary to enhance recovery of geothermal resources or to prevent waste Board approval constitutes a complete defense to any proceeding charging violation of ORS chapter 59 or of any state statute relating to trusts or monopolies on account of operations conducted pursuant to the agreement

(4) The failure to submit a voluntary agreement for board approval does not constitute evidence that the agreement or operation violates ORS chapter 59 or any state statute relating to trusts or monopolies [1981 c 588 §19]

522 520 [1971 c 776 §17, 1973 c 794 §25, repealed by 1975 c 552 §55]

522.525 Land subject to board authority; federal lands. Board authority applies to all private, municipal, state and federal land in the state which is subject to the state's regulatory authority When land subject to federal jurisdiction is committed to a unit agreement or cooperative agreement the board may suspend the operation of this chapter or any provision of this chapter if

(1) The unit operation is regulated by the United States, and

(2) The unit agreement prevents waste and encourages maximum economic development of the resource [1981 c 588 §20]

522 530 [1971 c 776 §16, repealed by 1973 c 794 §34]

522.535 Fees. (1) The board shall establish reasonable fees by rule pursuant to ORS 183 310 to 183 550 for the purpose of the development and administration of a unit agreement to be paid by all persons or state or local governing bodies, special districts or agencies with a royalty interest in that unitized development The fee schedule shall recognize the reduced workload involved in review of a voluntary unit agreement that complies with this chapter

(2) When a person or state or local governing body, special district or agency with a royalty interest fails to pay a fee imposed by the board under ORS 522 545 or this section, the board may require that the fee be paid from the proceeds of the sale of the unit production attributable to that interest [1981 c 588 §21]

522 540 [1971 c 776 §29, repealed by 1973 c 794 §34]

522.545 Rulemaking authority. The board may make, in compliance with ORS 183 310 to 183 550, rules and orders for the following purposes

(1) To review and enforce voluntary unit agreements governing production of geothermal resources in a manner that is consistent with the provisions of this chapter

(2) To provide application forms and procedures to enable a person to request the board to initiate a unit agreement

(3) To develop and enforce, when necessary, unit agreements satisfying the requirements of this chapter

(4) To settle disagreements between the parties to a unit agreement over unit operation

(5) To change the boundaries of a unit area

(6) To prevent the drilling and operation of geothermal wells and the production of geothermal resources in a manner that causes injury to neighboring leaseholds or property

(7) To levy fees on any operator, person, state or local governing body, special district or agency that holds a royalty interest in a unit area to cover reasonable costs associated with the development and administration of a unit agreement [1981 c 588 §22]

ENFORCEMENT

522.810 Suits to enjoin violations. Whenever it appears that any person is violating or threatening to violate any provision of this chapter or any rule or order of the board made thereunder, or is threatening to or committing waste, the board may bring suit against such person in the circuit court of any county where the violation or waste occurs or is threatened, to restrain such person from continuing such violation or waste In any such suit, the court shall have jurisdiction to grant to the board, without bond or other undertaking, such temporary restraining orders or final prohibitory and mandatory injunctions as the facts may warrant, including any such orders restraining the movement, disposition or waste of geothermal resources [1971 c 776 §41 1973 c 388 §7, 1975 c 552 §29]

522.815 Rules by board; scope; adoption; notice. (1) In accordance with the rulemaking provisions of ORS 183 310 to 183 550, the board may adopt rules necessary to conserve geothermal resources or other natural resources, or to protect the environment, the correlative rights of any person having an ownership interest in the affected land or resource, or beneficial uses of water, or to accomplish the efficient and economical development of a geothermal reservoir The rules shall include a description of the geothermal reservoir and the overlying land and may also include provisions for the following

(a) Division of a geothermal reservoir into zones,

(b) Establishment of spacing units including a description of the location, size and shape of such spacing units,

(c) The integration of separately owned tracts or interests within a spacing unit for the development and operation of the spacing unit and the sharing of production therefrom,

(d) The protection of existing and future beneficial uses of water,

(e) Maintaining the renewability of geothermal resources and any other natural resources, and

(f) Any additional provisions the board deems necessary for carrying out the provisions of this chapter or for protecting the public health, safety and welfare

(2) Any rule adopted under this section may in the board's discretion supersede any right or privilege previously granted by or previously entered by the board with respect to such reservoir and may be amended in accordance with the rulemaking provisions of ORS 183 310 to 183 550 as appears necessary to the board to further the policy stated in ORS 522 015

(3) Any proceeding under this section shall be conducted as a rulemaking proceeding in accordance with ORS 183 310 to 183 550 unless an interested party requests that it be conducted as a contested case in accordance with ORS 183 310 to 183 550 In either event, notice shall be given in accordance with the requirements of ORS chapter 183. Notice shall always be given to the following persons

(a) Any operator who has a drilling permit issued pursuant to ORS 522 135 or has a legal right to operate a completed geothermal well in the geothermal reservoir, and

(b) Any person who has an ownership interest in the geothermal reservoir [1975 c 552 §43, 1981 c 588 §5, 1981 c 694 §11]

PROHIBITED ACTS

522.910 Aiding in violations prohibited. No person shall knowingly aid or abet any other person in the violation of any provision of this chapter or of any rule or order of the board made thereunder [1971 c 776 §40 1975 c 552 §30]

522.915 False entries, omissions, destruction or removal of records or reports. No person shall

(1) Make or cause to be made any false entry or statement in a report, record, log, account or other writing required by this chapter or any rule adopted pursuant thereto,

(2) Omit or cause to be omitted from any such report, record, log, account or writing, full, true and correct entries as required by this chapter or any rule or order adopted pursuant thereto,

(3) Destroy, mutilate, alter or falsify any such report, record, log, account or writing; or

(4) Remove from this state the original copy of any such report, record, log, account or writing before an abandonment has been approved pursuant to ORS 522 245 (2) [1975 c 552 §28]

522 920 [1971 c 776 §39, repealed by 1975 c 552 §55]

PENALTIES

522.990 Penalties. Violation of any provision of this chapter or of any rule or order of the board made thereunder, excluding ORS 522 405 to 522 545 and any rule promulgated thereunder, is punishable, upon conviction, by a fine of not more than $2,500 or by imprisonment in the county jail for not more than six months, or both [1971 c 776 §42, 1975 c 552 §31, 1981 c 588 §6]