

**PROPOSED REGULATION OF THE DIVISION OF MINERALS  
OF THE COMMISSION ON MINERAL RESOURCES**

**LCB File No. R011-14**

January 16, 2014

EXPLANATION – Matter in *italics* is new; matter in brackets ~~omitted material~~ is material to be omitted.

AUTHORITY: §§1-19, NRS 522.119; §§5...xxx, NRS 522.040(3), NRS 522.090 and NRS 522.xxx. Section 20, NRS53A.090.

A REGULATION relating to oil and gas wells; establishing a system to manage hydraulic fracturing; establishing certain requirements and procedures for water quality sampling; establishing procedures for obtaining a waiver from the division from the requirement that...; making various other changes concerning...; and providing other matters properly relating thereto.

**Section 1.** Chapter 522 of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 17, inclusive, of this regulation.

**Sec. 2.** *“AVAILABLE WATER SOURCE” means a water source for which the water well owner, owner of a spring, or a land owner, as applicable, has given consent for sampling and testing and has consented to having the sample data obtained made available to the public, including without limitation, being posted on the division’s web page on the Internet or its successor.*

**Sec. 3.** *“WATER SOURCE” means water wells or springs that are regulated by the Nevada Division of Water Resources of the State Department of Conservation and Natural Resources.*

Sec. 4. *“Hydraulic fracturing” means the process of pumping a fluid into or under the surface of the ground to create fractures in the rock to facilitate the production or recovery of oil or gas...has the meaning ascribed to it in NRS 522.119(3) (b).*

Sec. 5. *“Division of Environmental Protection” means the Division of Environmental Protection of the State Department of Conservation and Natural Resources.*

Sec. 6. *“Area of Review” means the land area within a minimum of a 1 mile radius from the proposed well-bore or surface projection of the zone proposed for hydraulic fracturing.*

Sec. 7. *“Start date” means the date when an oil or gas well or a well drilled for exploratory purposes is first spudded or drilled.*

Sec. 8. *“Completion date” means the date when an operator has been permitted to move the drilling rig off of the well location.*

Sec. 9. **GROUNDWATER BASELINE SAMPLING AND MONITORING**

a. *Applicability and effective date.*

*This section applies to all oil or gas wells or wells drilled for exploratory purposes where the operator intends to use the process of hydraulic fracturing, for which an Application for Permit to Drill (Form 2) or a sundry notice (Form 4) for re-entry is submitted on or after the effective date of this section.*

b. *Sampling locations.*

*Initial baseline samples and subsequent monitoring samples shall be collected from all Available Water Sources, up to a maximum of four (4), within a one (1) mile radius of a*

*proposed oil or gas well or well drilled for exploratory purposes. If more than four (4) available Water Sources are present within a one (1) mile radius of a proposed oil or gas well or well drilled for exploratory purposes, the operator shall select the four sampling locations based on the following criteria:*

*(1) Proximity. Available Water Sources closest to the proposed oil or gas well or well drilled for exploratory purposes are preferred.*

*(2) Orientation of sampling locations. To extent groundwater flow direction is known or can reasonably be inferred, sample locations from both down-gradient and up-gradient are preferred over cross-gradient locations. Where groundwater flow direction is uncertain, sample locations should be chosen in a radial pattern from a proposed oil or gas well or well drilled for exploratory purposes.*

*(3) Where multiple defined Water Sources are present, sampling the deepest is preferred.*

*(4) Condition of Water Source. An operator is not required to sample Water Sources that are determined by the Administrator to be improperly maintained, nonoperational, or have other physical impediments to sampling that would not allow for a representative sample to be safely collected or would require specialized sampling equipment (e.g. non-functioning wells, geothermal wells or intermittent springs).*

*c. Inability to locate an Available Water Source.*

*Before any well is spudded or drilled for oil or gas, an operator may request an exception from the requirements of this Section by filing a Sundry Notice (Form 4) for the Administrator's review and approval if:*

*(1) No Available Water Sources are located within one (1) mile of a proposed oil or gas well or a well drilled for exploratory purposes;*

*(2) The only Available Water Sources are determined to be unsuitable pursuant to subpart b.5, above. An operator seeking an exception on this ground shall document the condition of the Available Water Sources it has deemed unsuitable; or*

*(3) The owners of all Available Water Sources suitable for testing under this Section refuse to grant access despite an operator's reasonable good faith efforts to obtain consent to conduct sampling. An operator seeking an exception on this ground shall document the efforts used to obtain access from the owners of suitable Water Sources.*

*d. Timing of sampling.*

*(1) Initial sampling shall be conducted within 12 months before any well is hydraulically fractured, and*

*(2) Subsequent monitoring: One subsequent sampling event shall be conducted at the initial sample locations between six (6) and twelve (12) months, and a second subsequent sampling event shall be conducted between sixty (60) and seventy-two (72) months following the hydraulic fracturing of an oil or gas well or a well drilled for exploratory purposes. If a well is drilled and produces hydrocarbons for a period of less than 60 months and is abandoned, the second subsequent sampling shall be conducted at the time the well is plugged. Wells that are drilled and abandoned without ever producing hydrocarbons are exempt from the second subsequent monitoring sampling under this subpart d.*

*(3) Previously sampled Available Water Sources. In lieu of conducting the initial sampling required pursuant to subsection d. (1) or the second subsequent sampling event required pursuant to subsection d. (2), an Operator may rely on water sampling analytical results obtained from an Available Water Source within the sampling area provided:*

*A. The previous water sample was obtained within the 12 months preceding the initial sampling event required pursuant to subsection d.(1) or the second subsequent sampling event required pursuant to subsection d.(2); and*

*B. the sampling procedures, including the constituents sampled for, and the analytical procedures used for the previous water sample were substantially similar to those required pursuant to subparts e.(1) and (2), below. An operator may not rely solely on previous water sampling analytical results obtained pursuant to the subsequent sampling requirements of subsection d.(2), above, to satisfy the initial sampling requirement of subsection d.(1); and*

*C. the Administrator timely received the analytical data from the previous sampling event.*

*(4) The Administrator may require additional sampling if changes in water quality are identified during subsequent monitoring.*

*e. Sampling procedures and analysis.*

*(1) Sampling and analysis shall be conducted in conformance with an accepted industry standard as described in NAC Chapter 445A. Sampling and analysis conducted in conformance with NAC Chapter 445A shall be deemed to satisfy the requirements of this subsection. Upon request, an operator shall provide its sampling protocol to the Administrator.*

*(2) The initial baseline and subsequent sampling described in this section shall include total dissolved solids (TDS), dissolved gases (methane, ethane, propane), alkalinity (total bicarbonate and carbonate as CaCO<sub>3</sub>), major anions (bromide, chloride, fluoride, sulfate), major cations (calcium, magnesium, potassium, sodium), total petroleum*

*hydrocarbons (TPH) and BTEX compounds (benzene, toluene, ethylbenzene and xylenes). The location of the sampled Water Sources shall be described by public land survey as defined in NAC 534.185 and county assessor's parcel number and must include global positioning coordinates as set forth in NAC 534.340(2)(b)(2).*

*(3) If free gas or a dissolved methane concentration greater than 1.0 milligram per liter (mg/l) is detected in a water sample, gas compositional analysis and stable isotope analysis of the methane (carbon and hydrogen – 12C, 13C, 1H and 2H) shall be performed to determine gas type. The operator shall notify the Administrator and the owner of the water well immediately if:*

*A. the test results indicated thermogenic or a mixture of thermogenic and biogenic gas;*

*B. the methane concentration increases by more than 5.0 mg/l between sampling periods; or*

*C. the methane concentration is detected at or above 10 mg/l.*

*(4) The operator shall notify the Administrator immediately if BTEX compounds or TPH are detected in a water sample.*

*f. Sampling Results.*

*Copies of all final laboratory analytical results shall be provided to the Administrator and the Water Source owner as soon as the laboratory results are available and before any hydraulic fracturing process is initiated. The analytical results, the surveyed sample Water Source locations, and the field observations shall be submitted to the Administrator in an electronic data deliverable format, and will be made available for public inspection by the division.*

**Sec. 10. *ADDITIONAL REQUIREMENTS FOR A WELL THAT IS INTENDED FOR HYDRAULIC FRACTURING – APPLICATION TO DRILL***

*a. In addition to the requirements in this section for the application to drill an oil or gas well, the operator must submit the following pertinent data, using publically available information from within the Area of Review. The division may require a larger AOR, or the collection of additional data, based on population density, residential locations, surface water locations, and other concerns.*

- 1) A report that includes information regarding the Water Source permit number and owner of record currently on file with the Nevada Division of Water Resources of the State Department of Conservation and Natural Resources,*
- 2) The well depth and diameter of water well casing, the static water level below land surface or flow rate if any, the amount of the water right appropriation, and the location of each Water Source within the Area of Review described by public land survey as defined in NAC 534.185, the county assessor's parcel number and global positioning coordinates as set forth in NAC 534.340(2)(b)(2).*
- 3) Maps and cross-sections, utilizing publically available information, denoting surface and subsurface geology including location of known or suspected faults.*
- 4) A map showing the location of all known Water Sources within the Area of Review, the overall project area or lease holdings, the Area of Review boundaries, land ownership and applicable Assessor Parcel Numbers, and*
- 5) The source and estimated volume of water required for each well hydraulic fracturing process shall be identified and provided to the Division.*

**Sec. 11. *ADDITIONAL REQUIREMENTS FOR ALL OIL OR GAS WELLS AND WELLS DRILLED FOR EXPLORATORY PURPOSES***

- a. *A complete copy of the approved drilling permit must be at the well location during the drilling of the well, and during the completion or plugging of the well.*
- b. *The operator shall inform the division by telephone or email at least 24 hours before any well is spudded for oil or gas or for exploratory purposes.*
- c. *The operator shall inform the division by telephone or email at least 24 hours before installing or cementing casing, or before any blow out prevention equipment (BOPE) tests or formation tests.*
- d. *The casing used in any oil or gas well or wells drilled for exploratory purposes must meet the minimum specifications of the American Petroleum Institute Specification (API) Spec 5CT “Specification for Casing and Tubing, Ninth Edition” or its successor, or as may be approved by the Administrator of the Division.*
- e. *The operator shall use the American Petroleum Institute (API) Specification 10A “Specification for Cements and Materials for Well Cementing, Twenty Fourth Edition”, or its successor, (Type A or similar Portland cement) for the cementing of all casing strings, or as may be approved by the Administrator of the Division.*
- f. *The operator shall store and contain all materials on the well location in a safe and orderly manner. Unintended releases or spills must be managed in accordance with the requirements of the Nevada Division of Environmental Protection.*
- g. *The operator shall contain all liquids that are returned to the surface and discharged from the wellbore in accordance with the requirements of the Nevada Division of Environmental Protection. A reserve pit for drilling fluids must not later be used for the discharge of well bore fluids during the testing of the well without prior approval.*



**Sec. 12. *ADDITIONAL REQUIREMENTS FOR CONSTRUCTING A WELL THAT IS INTENDED FOR HYDRAULIC FRACTURING – INTERMEDIATE CASING***

- a. In addition to the requirements in NAC 522.265, the first intermediate casing shall be installed from the desired depth to the ground surface.*

**Sec. 13. *ADDITIONAL REQUIREMENTS FOR CONSTRUCTING A WELL THAT IS INTENDED FOR HYDRAULIC FRACTURING – PRODUCTION CASING***

- a. The annular space outside the production casing string shall be cemented to a minimum of 500 feet above the uppermost zone of potential hydrocarbon interest.*

**Sec. 14. *ADDITIONAL REQUIREMENTS BEFORE INITIATING ANY HYDRAULIC FRACTURING PROCESS***

- a. The operator shall notify the private land owner(s), or lessors, of the land where the well is located, of a future hydraulic fracturing process at least 14 days in advance of any such operation.*
- b. The operator shall certify the cement bond log results on the intermediate casing, production casing, and production liner (if any). The certification must be by affidavit, signed by a competent person designated by the operator, and must state that the cement bond log confirms that the different strata are sealed and isolated with casing and cement, as intended in NAC 522.260.*
- c. The operator must insure that the any chemicals proposed to be used in a hydraulic fracturing process are only those chemicals listed on the division's web page. A sundry notice (Form 4) must be submitted to the division for approval at least 30 days before hydraulic fracturing if there are any chemicals proposed to be used that are not listed.*

- d. The operator must file a sundry notice (Form 4) and report for division approval that describes all specific aspects of the proposed hydraulic fracturing process at least 14 days before any such operation. The report shall include the following: (1) the number of stages to be utilized, (2) the measured depth/ true vertical depth below land surface to each stage, (3) the length of each stage, (4) all intervals to be perforated in measured depth/true vertical depth below land surface, (5) the number and diameter of perforations per foot and (6) the estimated hydraulic pressures to be utilized.*
- e. The operator shall monitor and record all pressures, including annular pressures, during the hydraulic fracturing process. The maximum hydraulic pressure must not exceed the burst rating of any casing exposed to that pressure. A lower maximum hydraulic pressure may be required if deemed necessary by the division.*
- f. The operator shall immediately stop the hydraulic fracturing process and notify the division if any change in annular pressure exceeds 10 percent. The operator must provide the division with all recorded hydraulic fracturing pressures immediately following each stage of the hydraulic fracturing process.*
- g. The operator shall contain all liquids that are returned to the surface and discharged from the wellbore at the conclusion of each stage of the hydraulic fracturing process in enclosed steel tanks, or in accordance with the requirements of the Nevada Division of Environmental Protection. The method and location for final disposal of the returned liquids must be approved by the division before removal from the well location.*
- h. The operator shall report the amount and type of chemicals that were used in the hydraulic fracturing process to [www.fracfocus.org](http://www.fracfocus.org) or its successor within 60 days of the hydraulic fracturing process for public disclosure.*

**Sec. 15. NAC 522.260 is hereby amended to read as follows:**

NAC 522.260 Strata sealed off from other strata.

1. During the drilling of any oil or gas well *or a well drilled for exploratory purposes*, all strata bearing oil, gas or water above the producing horizon must be sealed or separated in order to prevent their contents from passing into other strata.

2. All fresh waters and waters of value or possible value for domestic, commercial or stock purposes must be confined to their respective strata and be adequately protected by methods approved by the division. Precautions must be taken in drilling and abandoning wells to guard against any loss of any fresh water from the strata in which it occurs, and the contamination of any fresh water by objectionable water or any oil or gas.

3. The operator of any well must shut off and exclude all water from any oil-or gas-bearing stratum to the satisfaction of the division.

[Div. of Mineral Res., § 212 eff. 12-20-79]—(NAC A by Dep't of Minerals, 7-22-87)

**Sec. 16. NAC 522.265 is hereby amended to read as follows:**

NAC 522.265 Wells drilled with rotary tools. Unless a special provision requires otherwise, the following applies to all wells drilled with rotary tools:

*1. Conductor casing shall be installed and the annulus outside the casing shall be cemented to surface with cement, cement grout or concrete grout.*

~~2. [1.] [Suitable and safe surface casing must be used in all wells for proper anchorage. In all wells being drilled, surface and other protection casing must be run to sufficient depth to afford safe control of any pressures which might be encountered and must be sufficiently tested therefor.]~~ Surface casing *shall be installed to a minimum depth of 500 feet below surface* ~~[must be set into an impervious formation]~~ and *the annulus outside the casing shall* be cemented with

sufficient cement to circulate to the top of the hole. *The Administrator may require additional cementing of the surface casing if deemed necessary to comply with the intent of NAC 522.260. If cement does not circulate, the distance to the top of the cement must be measured in the annular space and reported to the division. Any remedial cementing operation or “top job” of the open annular space must be completed before drilling ahead or initiating tests.*

- a. A report illustrating the pressure/rate/density curves related to the cementing of the surface casing must be submitted to the division at the completion of the cementing procedure.*
- b. A cement bond log (CBL) covering the surface casing from its casing shoe to the surface may be required by the Administrator in the event of a significant loss of cement during the cementing of the surface casing. ~~the annulus outside the casing must be cemented before drilling plug or initiating tests.~~*
- c. A surface casing pressure test shall be conducted before drilling out the surface casing shoe. The casing must be pressured to a minimum of 1,500 psig for a minimum of 30 minutes. If, at the end of 30 minutes, the pressure shows a drop of 10% or more from the original test pressure, the casing shall be condemned until the leak is corrected. A pressure test demonstrating less than a 10% pressure drop after 30 minutes constitutes confirmation that the condition has been corrected. The operator shall notify the division of a failed test. In the event of a pressure test failure, drilling operations may not re-commence until the Administrator approves a remediation plan, the operator successfully implements the plan, and the operator conducts a successful pressure test.*

*d. A Formation Integrity Test (FIT) must be conducted when the surface casing shoe is drilled out. The results of the FIT must be submitted to the division at the conclusion of the test.*

~~3. [2.] [On all strings of casing below surface pipe, sufficient cement must be used to fill the annular volume behind the casing for]~~ *In the event an intermediate or production casing or an intermediate or production liner is installed or is necessary due to hole conditions, the annular space behind the casing or liner must be cemented for a minimum distance of 500 feet above the bottom of the casing, or 500 feet above any identified hydrocarbon bearing zone of interest, whichever is shallower. The division may require additional cementing of the casing if deemed necessary.* A cement plug or shoe must not be drilled until a minimum compressive strength of 300 pounds per square inch at bottom hole conditions has been attained according to the manufacturer's tables of cement strength for the particular cement mix being used.

*a. If an intermediate liner is utilized, a minimum of 100 feet of overlap between the surface casing shoe and the top of the liner is required. The operator shall utilize enough excess cement when cementing the intermediate liner to insure that the top of the cement is at least 25 feet above the top of the liner.*

*b. If cement calculations were not included in a previously approved cementing program these calculations must be submitted to the division for approval before the cementing procedure.*

*c. A report illustrating pressure/rate/density curves related to the cementing of the intermediate casing must be submitted to the division at the completion of the cementing procedure.*

- d. An intermediate casing or liner pressure test shall be conducted before drilling out of the bottom of the intermediate casing or liner. The intermediate casing or liner must be pressured to a minimum of 1,500 psig for a minimum of 30 minutes.*
- e. The operator shall test the casing at a pump pressure in pounds per square inch (psi) calculated by multiplying the length of the true vertical depth in feet of the casing string by a factor of 0.5 psi per foot. The maximum test pressure required, however, unless otherwise ordered by the Administrator, need not exceed 1,500 psi. If, at the end of 30 minutes, the pressure shows a drop of 10% or more from the original test pressure, the casing shall be condemned until the leak is corrected. A pressure test demonstrating less than a 10% pressure drop after 30 minutes constitutes confirmation that the condition has been corrected. The operator shall notify the division of a failed test. In the event of a pressure test failure, completion operations may not re-commence until the Administrator approves a remediation plan, the operator successfully implements the plan, and the operator conducts a successful pressure test. The casing pressure test curve must be submitted to the division at the conclusion of the test.*
- f. A cement bond log (CBL) covering the intermediate casing from the bottom of the casing shoe to above the calculated top of cement prior to drilling out of the casing shoe. In the event a CBL does not show the needed clarity of cement occupying the annular space, the Administrator may require an ultrasonic cement bond log to be conducted. The CBL log and ultrasonic cement bond log if required, may be conducted at any time prior to the production casing being installed. Digital copies of the cement*

*bond log(s) and integrated interpretive log(s), must be provided to the division as soon as a digital versions are available.*

- g. A Formation Integrity Test (FIT) must be conducted when the intermediate casing shoe is drilled out. The results of the FIT must be submitted to the division at the conclusion of the test.*
- h. In the event a production liner is hung from either the intermediate or production casing, a minimum of 100 feet of overlap between the intermediate or production casing shoe and the top of the liner is required. The operator shall utilize enough excess cement when cementing the production liner to insure that the top of the cement is at least 25 feet above the top of the liner.*
- i. If cement calculations were not included in a previously approved cementing program these calculations are to be submitted to the division before the cementing procedure. The cementing procedure may not be initiated without the approval of the Administrator.*
- j. A report illustrating pressure/rate/density curves related to the cementing of the production casing or liner are to be submitted to the Division at the completion of the cementing procedure.*
- k. A production casing or liner pressure test must be conducted before drilling out of the bottom of the casing or liner. The production casing or liner must be pressured to a minimum of 3,000 psig for a minimum of 30 minutes. The procedure shall be as described in sub paragraph e of this section. The casing pressure test curve must be submitted to the division at the conclusion of the test.*

- l. The operator shall test the casing in the manner set forth in subparagraph e. If, at the end of 30 minutes, the pressure shows a drop of 10% or more from the original test pressure, the casing shall be condemned until the leak is corrected. A pressure test demonstrating less than a 10% pressure drop after 30 minutes constitutes confirmation that the condition has been corrected. The operator shall notify the division of a failed test. In the event of a pressure test failure, completion operations may not recommence until the Administrator approves a remediation plan, the operator successfully implements the plan, and the operator conducts a successful pressure test.*
- m. A cement bond log (CBL) covering the production casing from the bottom of the casing shoe to above the calculated top of cement prior to drilling out of the casing shoe. In the event a CBL does not show the needed clarity of cement occupying the annular space, the Administrator may also require an ultrasonic cement bond log to be conducted. The CBL log and ultrasonic cement bond log if required, may be conducted at any time prior to the well completion. Digital copies of the cement bond log(s) and integrated interpretive log(s), must be provided to the division as soon as a digital versions are available.*
- n. A Formation Integrity Test (FIT) must be conducted if the production casing shoe is drilled out. The results of the FIT must be submitted to the Division at the conclusion of the test.*

4. ~~B.1~~ After cementing the surface casing, each well being drilled must be equipped with adequate blowout preventers. The use of blowout *prevention* equipment must be in accordance with good established oil field practice. The control equipment must include casing outlet valves



with adequate provisions for ~~fluid kill~~ *mud kill* and bleed-off lines of ~~proper~~ *appropriate* size and working pressure. All equipment must be in good operating condition at all times.

**(The following is modified after NAC 534A.270 Prevention of blowout; testing of casing and equipment for prevention of blowout.)**

- a. All necessary precautions must be taken to keep wells under control and operating safely at all times. Well control and well head assemblies used in any oil or gas well or wells drilled for exploratory purposes must meet the minimum specifications of the American Petroleum Institute Specification (API) Recommended Practice 53 or its successor, or as may be approved by the Division.*
- b. Equipment for the prevention of a blowout, capable of shutting in the well during any operation, must be installed on the surface casing and maintained ready for use at all times. This equipment must be made of steel and have a rating for pressure of at least 3000 psig or equal to the maximum anticipated pressure at the wellhead.*
- c. Immediately after installation, the casing and equipment for the prevention of a blowout must be tested under pressure. These tests must be witnessed or otherwise assured by the Division or an authorized representative before the shoe is drilled out of the casing. The Division must be given reasonable notice of any such test.*
- d. Pressure curves for the prevention of blowout equipment (BOPE) must be submitted to the Division at the conclusion of the test.*

**Sec. 17. NAC 522.270 is hereby repealed:**

~~[NAC 522.270 Wells drilled with cable tools. The following applies to all wells drilled with cable tools:~~

~~—1. Before drilling begins, adequate slush pits must be constructed.~~

~~—2. Surface casing must be set in the same manner as described in NAC 522.265. Surface casing must be tested by bailing or pressure test to ensure a shutoff before drilling proceeds below the casing point.~~

~~—3. The use of blowout equipment must be in accordance with good established oil field practice. After cementing the surface casing, a well being drilled must be equipped with adequate blowout preventers. All equipment must be in good operating condition at all times.~~

~~—Div. of Mineral Res., § 211, eff. 12-20-79]~~

**Sec. 18. NAC 522.342 is hereby amended to read as follows:**

NAC 522.342 Administrative fee. (NRS 522.150)

*1.* The amount of the administrative fee that a producer or purchaser of oil or natural gas must pay pursuant to subsection 2 of NRS 522.150 is ~~10 cents~~ *20 cents* per barrel of oil or per 50,000 cubic feet of natural gas, as appropriate.

*2. Administrative fees shall be paid on or before the last day of each month and shall include a fee proportional to the amount of oil or natural gas produced in that month.*

**Sec. 19. NAC 522.343 is hereby repealed:**

~~[NAC 522.343 Reduced administrative fee for new production. (NRS 522.040, 522.150)~~

~~—1. Notwithstanding the provisions of NAC 522.342, the amount of the administrative fee that a producer or purchaser of oil or natural gas must pay pursuant to subsection 2 of NRS 522.150 for new production is one-half cent per barrel of oil or per 50,000 cubic feet of natural gas, as appropriate, and in accordance with the provisions of this section.~~

~~—2. Upon the filing of Form 5, the well completion report, pursuant to NAC 522.510, the division shall determine whether the production from the well that is the subject of the report~~

~~qualifies as new production. If the division determines that the production from the well qualifies as new production, the producer or purchaser is entitled to pay the administrative fee required by subsection 2 of NRS 522.150 for that new production at the reduced rate prescribed in subsection 1 for 12 consecutive calendar months, beginning on the put-on production date reported in Form 5 for that well. At the end of the 12-month period, the producer or purchaser must pay the administrative fee required by NRS 522.150 for further production from the well in the amount prescribed in NAC 522.342.~~

~~—3. A producer or purchaser may, pursuant to NRS 522.110, challenge a determination made by the division pursuant to subsection 2.~~

~~—4. As used in this section, “new production” means production from a new or existing well that is completed in a new interval, as determined by the division.~~

~~—(Added to NAC by Comm’n on Mineral Resources by R165-99, eff. 1-27-2000)~~

~~Reviser’s Note:~~

~~—The regulation of the commission on mineral resources filed with the secretary of state on January 27, 2000 (LCB File No. R165-99), the source of NAC 522.343 (section 1 of the regulation), contains the following provision not included in NAC:~~

~~—“Sec. 2. If the commission on mineral resources repeals section 1 of this regulation [NAC 522.343], a producer or purchaser of oil or natural gas who, on the date that section is repealed, is paying the administrative fee required by subsection 2 of NRS 522.150 at the reduced rate set forth in that section, is entitled to continue paying the administrative fee at the reduced rate until the end of the 12-month period for which the reduced rate applies.”]~~

## **Proposed Changes to Geothermal Resource Regulation in Chapter 534A**

**Sec. 20. NAC 534A270 is hereby amended to read as follows:**

NAC 534A.270 Prevention of blowout; testing of casing and equipment for prevention of blowout. (NRS 513.063, 534A.090)

1. All necessary precautions must be taken to keep wells under control and operating safely at all times. *Well control and well head assemblies used in any geothermal well must meet the minimum specifications of the American Petroleum Institute Specification (API) Recommended Practice 53 or its successor, or as may be approved by the division.*

2. Equipment for the prevention of a blowout, capable of shutting in the well during any operation, must be installed on the surface casing and maintained ready for use at all times. This equipment must be made of steel and have a rating for pressure *of at least 3000 psig or* equal to the maximum anticipated pressure at the wellhead. Equipment for the prevention of a blowout is required on any well where temperatures may exceed 250°F.

3. Immediately after installation, the casing and equipment for the prevention of a blowout must be tested under pressure. These tests must be witnessed *or otherwise assured* by the Division *or an authorized representative* before the guide shoe is drilled out of the casing. The Division must be given reasonable notice of any such test. ~~If necessary, conductor pipe must be equipped with annular blowout equipment which is hydraulically activated from a remote control station.~~

4. *Pressure curves for the prevention of blowout equipment (BOPE) must be submitted to the Division at the conclusion of the test.* ~~The use of any equipment for the prevention of a blowout must be in accordance with established good practices of the oil field.~~